

UNIVERSITÀ DEGLI STUDI DI PADOVA

DEPARTMENT OF POLITICAL SCIENCE, LAW,
AND INTERNATIONAL STUDIES

**Master's degree in
Human Rights and Multi-Level Governance**



**ACCEPTANCE OR RESIGNATION? SURVEILLANCE
TECHNOLOGIES IN CHINA BETWEEN THE SOCIAL
CREDIT SYSTEM AND COVID-19**

Supervisor: Prof. SARA PENNICINO

Co-Supervisor: Prof. CLAUDIA ASTARITA

Candidate: NICOLO' FARINELLA

Matriculation No. 2053008

A.Y. 2023/2024

To those who have always been there.

To those who have always supported me even when I thought I couldn't make it.

To those who believed in me from the beginning.

And until the end.

To those who for six long years were the only alarm clock I could hear.

To my Aunt Rita and my grandparents, Giacomo and Marisa.

ACKNOWLEDGMENT

Writing this thesis has been one of the hardest, but at the same time formative experiences of my life. The closing of a journey that has been one of training, development, and self-reflection for me until the very end. During the journey, I was fortunate to have many people by my side to whom I am grateful:

My thesis supervisor, Prof. Sara Pennicino for always supporting my ideas, helping me understand the direction in which to go, and for being a guide who was always available to answer my questions and assist me with my problems during the writing of this thesis.

My thesis co-supervisor, Prof. Claudia Astarita for being an inexhaustible source of ideas and for constantly overseeing my work with a watchful eye. Her love for Asia and its intricate dynamics is what inspired me in the first place to write this thesis. I thank her from the bottom of my heart.

To my father for being a stern guide who was able to keep me grounded but also maintain that concreteness and pragmatism that has always helped me along my journey.

To my mom who, thanks to her light-heartedness, cheerfulness, and unwavering optimism, has instead always pushed me to dream and challenge fate. And thanks also for putting up with me throughout this long journey.

To my sisters for always supporting me and, by teasing me a little, making me realize that sometimes you can even stop being serious and have fun. This achievement I also dedicate to you.

To Giannina for putting up with me during all these months with unwavering patience, for always showering me with love, and for being my most trusted advisor for any doubts or uncertainties that surrounded this thesis. I love you.

To my roommates for being exceptional friends who I will never forget and who have always been able to give me serenity and laughter.

And all of my other family members and all of my friends for always being present to embrace me with their love and support.

LIST OF ACRONYMS.....	1
INTRODUCTION.....	2
CHAPTER I: THE CHINESE MODEL OF E-GOVERNANCE.....	8
1.1 The Difficulty in Defining E-Governance.....	8
<i>1.1.1. Bringing ICTs and Governance Together.....</i>	<i>12</i>
<i>1.1.2 Differentiating E-Governance and E-Government.....</i>	<i>15</i>
<i>1.1.3 How E-Governance Changes the Social Contract.....</i>	<i>17</i>
1.2 How E-Governance is Applied in China.....	20
<i>1.2.1 E-Governance as a Solution to Many Chinese Problems.....</i>	<i>23</i>
<i>1.2.2 The Implementation Problems of E-Governance.....</i>	<i>29</i>
<i>1.2.3 The Chinese Legislative Framework on Privacy and Data Protection.....</i>	<i>32</i>
CHAPTER II: THE SOCIAL CREDIT SYSTEM.....	37
2.1 History and Evolution of the SCS.....	39
<i>2.1.1 The beginning as an economic tool.....</i>	<i>40</i>
<i>2.1.2 Expanding the Reach of the SCS: The 2014 Planning Outline.....</i>	<i>43</i>
<i>2.1.3 The Current Status of the SCS.....</i>	<i>46</i>
2.2 The Coercive Arm of the Social Credit System: The Joint Reward and Punishment System.....	48
<i>2.2.1 Redlisting and Blacklisting.....</i>	<i>49</i>
<i>2.2.2 Making Sense of the SCS's Sanctions.....</i>	<i>53</i>
<i>2.2.3 Critiques and limitations of the SCS's sanctions.....</i>	<i>56</i>
2.3 The Importance of Local Experimentation: The SCS Pilot Cities.....	61
<i>2.3.1 Credit Cities as a Form of Adaptive Governance.....</i>	<i>63</i>
<i>2.3.2 The Social Credit System in Rongcheng.....</i>	<i>64</i>
<i>2.3.3 Honest Shanghai App.....</i>	<i>66</i>
2.4 Morality Under the Social Credit System.....	67

2.4.1	<i>The Social Credit System as a Cure to Moral Decay</i>	68
2.4.2	<i>The Legitimacy Enhancing Function of Morality</i>	72
2.4.3	<i>The Realization of an “Exemplary Society”</i>	75
CHAPTER III: INTERPLAY OF COVID-19, THE SCS, AND THE A4 REVOLUTION IN CHINA		76
3.1	China's Response to COVID-19: Phases and Policy Shifts.....	79
3.1.1	<i>The Different Phases of China’s COVID-19 Response</i>	80
3.1.2	<i>An Aggressive Containment Strategy</i>	83
3.1.3	<i>Application of Big Data Technology in the War Against COVID-19</i>	87
3.2	The QR Health Code to Contrast COVID-19.....	90
3.2.1	<i>Emergence of the QR Health Code During the Pandemic</i>	91
3.2.2	<i>Issues, Criticisms and Abuses of the QR Health Code App</i>	95
3.3	The Social Credit System: An Adaptive Tool for Crisis Management.....	103
3.3.1	<i>The SCS as an Economic Relief Instrument</i>	104
3.3.2	<i>The SCS as a Tool for Enforcing Covid Regulations</i>	107
3.3.3	<i>The SCS as a Propaganda and Behavioural Instrument</i>	109
3.4	Protests in China: The "Zero-COVID" Policy and the A4 Movement.....	111
3.4.1	<i>Why did the CCP Refuse to Abandon the Zero-COVID Policy?</i>	112
3.4.2	<i>Policy Change After the A4 Movement</i>	116
3.4.3	<i>The Legacy of the Zero-COVID Policy on Digital Governance Technologies</i>	120
CHAPTER IV: UNDERSTANDING THE HIGH LEVELS OF APPROVAL TOWARD THE SCS		122
4.1	Theoretical Framework.....	125
4.1.1	<i>Privacy Calculus, Privacy Paradox and Privacy-Security Trade-Off</i>	126
4.1.2	<i>Technology Acceptance: TAMs and UTAUT</i>	128

4.2 Analysing and Explaining Public Support of SCS.....	130
4.2.1 <i>What is the SCS Approval Level?</i>	131
4.2.2 <i>Political and Social Trust: Who’s Got the Data?</i>	134
4.2.3 <i>Balancing Security and Privacy: Safety, Social Stability, Policy Target, and Saliency of the Threat</i>	138
4.2.4 <i>The Role of Media Framing, Information Control and Experience in Shaping SCS’s Acceptance</i>	142
4.3 Societal Factors Influencing SCS Approval.....	146
4.3.1 <i>The Guardian Model of Governance</i>	148
4.3.2 <i>The Cultural Importance of Technology</i>	151
4.3.3 <i>The Chinese Communitarian Tradition</i>	154
4.4 Why did the HCAs “fall” while the SCS is still standing?	158
4.4.1 <i>Comparing Factors Influencing Public Opinion Between HCAs and SCSs</i>	159
4.4.2 <i>Comparing the SCS and the HCAs</i>	162
4.4.3 <i>Where is it that HCAs have failed?</i>	165
CONCLUSION	170
BIBLIOGRAPHY	173

LIST OF ACRONYMS

CNSC	Central National Security Commission
CDC	Center for Disease Control
CASS	Chinese Academy of Social Sciences
CCP	Chinese Communist Party
C2G	Citizens to Governments
C2C	Citizen to Citizen
CCTV	Closed-Circuit Television
CTAs	Contact Tracing Apps
DSL	Data Security Law
EHR	Electronic Health Records
EMRs	Electronic Medical Records
FICO	Fair, Isaac and Company
GDPR	General Data Protection Regulation
G2C	Government to Citizen
HCA	Health Code App
IPPPR	Independent Panel for Pandemic Preparedness and Response
MOU	Memorandum of Understanding
NCISP	National Credit Information Sharing Platform
NDRC	National Development and Reform Commission
PBoC	People's Bank of China
PRC	People's Republic of China
PII	Personally Identifiable Information
PIPL	Personal Information Protection Law
SMEs	Small and Medium-sized Enterprises

SCS	Social Credit System
SPC	Supreme People's Court
TAM	Technology Acceptance Models
UTAUT	Unified Theory of Acceptance and Use of Technology
WHO	World Health Organization

INTRODUCTION

The continuous and unstoppable advance of technology and the digital transformation of society are two of the most defining dynamics of this era. Information and Communication Technologies (ICTs) now show their full disruptive potential, permanently altering the ways in which states, organizations and civil society operate and interact. ICTs generate a continuous and ever-expanding stream of data that can be harvested, aggregated, and cross-referenced for analysis, uncovering previously undetected patterns.¹

This is the main characteristic of big data, a term that has become ubiquitous in our daily lives, bringing with it the promise to solve some of the world's most challenging problems to the usage of vast datasets.² As emphasized by Favaretto et al., we are still lacking a formal definition of big data, which is often perceived as a concept that evolves culturally.³ However, as delving the multi-layered nature of big data falls beyond the scope of this thesis, I will intend big data as a substantial body of information that cannot be comprehended when utilized in small amounts only.⁴ Only thorough specific algorithmic and computational processes Big Data can be employed to address relevant research questions.⁵

The possibilities brought upon by big data are boundless, ranging from the development of smarter hospitals that can identify in real time patient's health's risks through the predictive analysis of Electronic Health Records (EHR) to the design of smarter cities improving different sectors of urban living.⁶ More significantly, the use of Big Data offers the possibility to profile individuals, calculate risks, and monitor and predict behaviours.⁷ An important questions to ask is what happens when the potential of big data and ICTs

¹ Ulbricht and Von Grafenstein, «Big Data».; Chen and Cheung, «The Transparent Self Under Big Data Profiling».

² Favaretto et al., «What Is Your Definition of Big Data? »

³ Ibid

⁴ Mahdavi Damghani, « "Data-Driven Models & Mathematical Finance: Apposition or Opposition?" », 21.

⁵ Favaretto et al., «What Is Your Definition of Big Data? »

⁶ Mertz, «Saving Lives and Money with Smarter Hospitals».; Hashem et al., «The Role of Big Data in Smart City», 748–58.

⁷ Ulbricht and Von Grafenstein, «Big Data».; Chen and Cheung, «The Transparent Self Under Big Data Profiling».

are harvested by governments. A potential risk is that the state would be capable of capture and monitor the totality of citizen's life.

The sphere in which this impact holds the greatest transformative potential is unquestionably that of governance. Governance forms the very core of every society, organization and institution worldwide. Governance encapsulates the process of forming and enforcing decisions within a given society or organization. Mark Bevir, one of the world's leading experts on Governance, identifies it as the process of interaction through laws, social norms, social and political power, or language as structured in communication of a society organized on a social system.⁸ This process has been redefined and shaped by the growing usage of ICTs and Big Data, leading to the emergence of the concept of e-governance. Such an evolution indicates how technological advancements have modified both the internal government operations and the relationship between government, citizens, and businesses.⁹

In this landscape, China emerges as the country where, more than any other, this profound transformation becomes evident, leading to the development of new governance mechanisms and new modes of social organization. In China, the integration of digital tools and systems into governance mechanisms has been swift and far-reaching and has taken on one of its most interesting, controversial and comprehensive incarnations in the Social Credit System (SCS).

Designed as a mechanism to assess and influence the behaviour of both citizens and businesses, the SCS has attracted attention both domestically and internationally because of its implications for privacy, individual freedoms, and potential for abuse. Such developments seem to strengthen the perception of China as an "IT-backed authoritarianism" in which an all-encompassing data set is used by the central government to conduct ubiquitous mass surveillance, social management, and repression.¹⁰ It must be emphasized that this perception of SCS as an expression of Chinese authoritarianism is often attributable to a Western interpretation of this instrument that does not adequately

⁸ Bevir, Mark. *Governance: A Very Short Introduction*. Oxford University Press, 2012.

⁹ Bannister and Connolly, «Defining e-Governance»,

¹⁰ Meissner and Wübbecke, «It-Backed Authoritarianism».

take into account both the current state of SCS development and the social factors that justify this instrument.

However, whether presented as an Orwellian mechanism of control or as a panacea for solving many of the problems plaguing the Chinese Communist Party (CCP) such as the lack of effective judicial enforcement mechanisms, the rampant corruption, and the perceived loss of moral values within the society, the academic community has paid scant attention to a crucial question essential for understanding the dynamics involved in such mechanisms. That question refers to the degree of acceptance of the SCS and the factors that influence the public's attitude toward it.

Based on several analytical researches on the degree of public acceptance of the SCS in China, of which those of Genia Kostka are the most detailed and comprehensive, this mechanism of digital governance seems to enjoy an astoundingly high level of approval with limited criticisms on the potential invasive nature of such an instrument.¹¹ Beyond the potential repressive uses of this tool, the SCS has numerous flaws that make both the little critical domestic debate and such high and widespread support all the more surprising. Even taking into account the limitation to the expression of dissent existing in a non-democratic regime such as China, this result seems puzzling for several reasons.

First of all, the debate around the implementation of the Social Credit System is not considered a sensitive political issue, however, the debate seems extraordinarily low-key considering how the many implications this tool has for Chinese society. It is easy to find several criticisms and doubts on the SCS expressed by politicians, journalist, and citizens.¹² Obviously, these criticisms are expressed in a way that is unmistakably Chinese in nature. It is not the party's intention to implement such a measure that is criticised but the eventual flaws that the SCS presents.¹³

¹¹ Kostka, «China's Social Credit Systems and Public Opinion»; Kostka and Antoine, «Fostering Model Citizenship»; Kostka and Habich-Sobiegalla, «In Times of Crisis»; Xu, Kostka, and Cao, «Information Control and Public Support for Social Credit Systems in China».

¹² Luo, «会不会导致失信人被“游街示众”？会不会搞成道德档案？有关社会信用立法的问答 (Will it cause dishonest people to be “paraded through the streets”? Will it become a moral file? Questions and answers about social credit legislation) », available at https://www.shobserver.com/detail/53298.html?tt_group_id=6420863860818968833.

¹³ Ibid.

Secondly, other initiatives in which the full potential of the Chinese digital governance was unleashed were far less publicly supported. An important example is the CCP handling of Covid. The Chinese government effectively tackled the Covid-19 pandemic by extensively utilizing ICTs and, also, the infrastructures made available by the SCS. One of the most notorious initiative was the creation of a Health QR Code assigned to citizens according to their risk of contagion.¹⁴ Depending on the colour of the code, either green, yellow, or red, citizens were subjected to different restrictions. This initiative and all the other governmental initiatives to tackle the pandemic were later encompassed in the so called “Dynamic Zero Covid Policy” that sparked the “A4 Revolution” protest movement.

This wave of protests, although far off from becoming a revolution, was the first real nationwide public expression of dissent since the events of Tiananmen Square.¹⁵ About the object of this thesis, these protests matter for two essential reasons. First, the A4 Revolution demonstrates how the Chinese population has not, as advanced by some scholars, become so insensitive by digital control and monitoring mechanisms to the point that it does not feel the weight of the restrictions imposed on them.¹⁶ Second, the A4 Revolution offers itself as an extremely relevant case study for comparing the public's approach to SCS. Taking into consideration the similarities between the two mechanisms, and considering how the strategies implemented during the covid encapsulated many of the apparatuses built for the SCS, what explains such a different response from Chinese citizens? Obviously, Covid, by its very nature, presents itself as an emergency whose proportion, as well as the magnitude of the measures taken, transcends that of the problems that the SCS attempts to solve. However, I believe that ascribing the broad public support to this mere difference in scale is the result of an overly superficial approach to the problem and denotes a poor understanding of the social and cultural processes that characterize the connection between government and citizen in the Chinese political context.

¹⁴ Liu and Zhao, «Privacy Lost», 743–56.

¹⁵ Chan, «Unwritten Endings», 57–66.; Dale, «China's “white Paper” Protest Movement Echoes Freedom Struggles across Asia and the World».

¹⁶ Knight and Creemers, «Going Viral».

Following these considerations, this thesis will devote itself in its entirety to answering a question that, underneath its simple formulation, hides a labyrinthine maze of social, political, cultural and historical motivations that explain the reason behind China's extremely high public approval of SCSs. The first step in answering this question is to understand how the introduction of ICTs have profoundly changed governance by transforming it into e-governance and how e-governance has matured within the Chinese context. In fact, the Social Credit System is nothing more than that, a measure that can be ascribed to the domain of e-governance. Therefore, understanding what e-governance is and, more importantly, how e-governance is understood by the CCP is essential to understanding the very essence of the Social Credit System.

For this reason, the first chapter will be devoted to introducing e-governance, defining it, and understanding its possibilities and limitations. In fact, there is often much confusion between governance and government, and furthermore, the concrete definition of what is and what is not e-governance often remains fuzzy in the literature.¹⁷ Moreover, in the face of academic theorizing that often sees e-governance as a means through which to increase transparency and legitimacy within democratic governments, I will go on to address the specific conformation that e-governance takes in the contention of an authoritarian regime such as China's.

In the second chapter, I will present SCS in great detail, explaining its history, theoretical evolution, uses and critical issues. This discussion will go on to highlight the social implications that SCS presents as well as the moral significance with which this instrument is clothed. The sources used will include government documents that allow clarification of the design of the SCS, detailed analyses about the operation of this tool produced within the academic debate, as well as articles written by major Chinese newspapers that allow capturing the current state of the debate about the SCS.

The third chapter will focus on presenting the Chinese government's approach to the COVID-19 pandemic by going on to highlight its phases and the use made of big data. In this context, the functioning and implications of the health QR code will be presented, as well as the use made of the SCS during the pandemic. The example of the health QR code is relevant as it has many elements of contact with the SCS. However, unlike the SCS,

¹⁷ Bannister and Connolly, «Defining e-Governance», 4.

the health QR code adopted in China has been subject to strong criticism that took the form of the A4 Movement which resulted in its gradual abandonment. This point presents itself as essential to understanding the limits of the Chinese population's approval of digital governance technologies.

Finally, the fourth and final chapter of this thesis will go on to investigate the factors that influence support toward SCS and, more generally, digital technologies. Beginning with an analysis of current research on public endorsement of SCS, this chapter will differentiate between individual and societal factors that determine endorsement. The former refer to trust in government, perceptions of the risks associated with this technology, and the role played by media framing of the SCS. The latter, on the other hand, refer to the Chinese cultural view that adopts a guardian governance model, a precise imaginary of sociotechnical progress, and a specific communal tradition influenced by Confucianism. Finally, the SCS will be related to the "failure" of the healthcare QR code in order to understand in what ways the SCS proved superior.

This thesis is primarily grounded in a qualitative research approach, utilizing abduction to bridge theories and findings, aimed at addressing a specific research question. Through this approach, my objective is to offer fresh insights into the phenomenon of Social Credit Systems by leveraging existing materials and research. The selection of SCS as the subject for analysis in terms of public opinion stems from its unique duality: it serves both as a novel mechanism for addressing social issues and as a tool for social control.

The composition of this thesis benefited from a systematic literature review, extensive research, and the clarification of key concepts related to e-governance, the SCS, and the Chinese approach to COVID-19. Given the nature of the research subject, a quantitative approach might have been relevant, but it was unfeasible due to limited resources and the language barrier, making face-to-face interviews challenging. Nonetheless, a qualitative thesis offers advantages: it enables research to proceed regardless of the researcher's geographic location, and by applying source triangulation, it permits the incorporation of diverse, sometimes conflicting perspectives to gain a comprehensive understanding of the studied phenomenon. Moreover, to ensure the most aseptic and bias-free analysis, I made extensive use of Chinese sources in the writing of this thesis. These, comprising government documents, newspaper articles, academic research, and comments by

Chinese citizens were selected to avoid a treatment of topics that might appear biased. In addition, the extensive use of Chinese sources makes it possible to take advantage of important primary resources to look closely at how certain measures, such as the SCS and health apps, were designed by government authorities and perceived by Chinese citizens.

CHAPTER I: THE CHINESE MODEL OF E-GOVERNANCE

1.1 The Difficulty in Defining E-Governance

Over the past two decades, rapid technological advancements have demonstrated their disruptive potential across various domains of human knowledge. Accompanied by the pervasive emergence of ICTs, this development has led to the trend of prefixing the letter "e" to terms such as government, democracy, politics, and business.¹⁸ However, a pertinent question often arises regarding whether this prefix signifies a genuine desire to underscore the transformative impact of ICTs in these domains. There exists a notable disparity between integrating ICTs into a process without fundamentally altering it and employing computerization to bring about actual change or improvement in the process itself. In light of this, comprehending what e-governance entails must commence with a clear understanding of governance. Only through this lens can we effectively highlight the influence of ICTs in these processes and grasp their transformative potential.

Returning to Bevir's definition of governance, it is framed as an interactive process wherein the state, civil society, and businesses converge and interact through laws, political or social power, and social norms.¹⁹ Fukuyama, on the other hand, defines governance as "a government's ability to make and enforce rules, and to deliver services, regardless of whether that government is democratic or not".²⁰ This latter definition augments Bevir's perspective by introducing a crucial aspect. Governance, as such, is not contingent upon the democratic nature of the governing regime. The quality of governance diverges from the objectives that governance seeks to accomplish.²¹ Governance is essentially the performance of agents responsible for implementing the will of principals, rather than the normative foundations of that will.

¹⁸ Ibid.

¹⁹ Bevir, Mark. *Governance: A Very Short Introduction*. Oxford University Press, 2012.

²⁰ Fukuyama, «What Is Governance? », 3–4.

²¹ Ibid.

Emphasizing this facet of governance is essential for analysing the Chinese context. Imposing excessively rigid regulatory aspects could limit our ability to evaluate governance in non-democratic settings. An autocratic regime may, in fact, exhibit highly efficient governance, just as a fully democratic one may grapple with deficiencies that undermine its governance effectiveness.²² Simultaneously, crafting a definition of governance, and subsequently, e-governance, devoid of structural elements and stripped of normative value poses a significant challenge. Governance, which, in its structural dimension, pertains to processes and how they are enacted, invariably encompasses normative aspects like impartiality, transparency, or accountability, contingent upon the goals being pursued. As Bannister and Connolly assert: “The concept of value-related or normative governance reflects the principles underlying the political system and its public values, which may vary across different polities.”²³

Governance in China, if understood as a process, is fully in line with Bevir's definition. However, there are some important differences. Firstly, the structure of governance in China is dominated by the CCP without the classical division of powers between executive, legislative and judicial present in Western governance structures.²⁴ The prominence of the CCP in governance processes leads to greater centralisation in terms

²² In this thesis, the term "autocracy" and the label "authoritarian" regime will be used interchangeably to talk about the Chinese government. However, a clarification needs to be made about the concept of autocracy and how it applies to China. An authoritarian regime is defined as a form of government characterized by strong central power and limited political freedoms granted to citizens. The main difference between this and an autocracy is to be found in the distribution of power, which in the latter goes to be centralized in the hands of a single, all-powerful individual while in authoritarian regimes it may be distributed among multiple entities. In relation to China, Fu Zhengyuan points out that autocracy is an important distinguishing feature of the Chinese political tradition, which, beginning in imperial China, extends to the period following the Communist turn in 1949. This autocratic tradition is developed through five elements: the use of ideology as an instrument of political control; the exercise of state power over every aspect of the individual's life; the instrumental use of law by the ruler; the subjugation of the individual to the state; and the concentration of power in the hands of a few. These elements are widely found in China. Moreover, the recent re-election of Xi Jinping for a third five-year term as head of the CCP goes to accentuate that element of concentration of power in the hands of the individual that is the main distinguishing feature between autocracy and authoritarian regime. This, coupled with other distinguishing features of an autocracy such as a more results-oriented leadership a greater openness to criticism as a means of adjusting the course of implemented policies, allow us to identify China as an autocracy. See Fu, *Autocratic tradition and Chinese politics*, Rizvi, "Autocratic Leadership Vs Authoritarian Leadership," Frantz, "Autocracy," Bader, "China, Autocratic Patron? ", Croissant, *Comparing Autocracies in the Early Twenty-First Century*, and Fasulo and Morselli, "Dealing with an Autocratic China».

²³ Bannister and Connolly, «Defining e-Governance», 8.

²⁴ Yu, «国家治理的中国特色和普遍趋势 (Chinese Characteristics and General Trends in National Governance) », 1–19; Yu, «治理和善治引論 (Introduction to Governance and Good Governance) »; Zhou, *The Logic of Governance in China*.

of decision-making processes, which are often characterised by a top-down approach in which the democratic inter-party competition observable in Western countries does not occur.²⁵ Moreover, the legal and regulatory framework is influenced by the socialist principles that animate Chinese governance. This element is emphasised in numerous official documents of the Central Committee of the Communist Party of China and by Xi Jinping himself.²⁶ The development of governance is intrinsically linked to the realisation of a socialist system with Chinese characteristics. Finally, the Chinese governance model is characterised by the following six features:

1. Multi-actor governance structure dominated by party organisations: although multiple actors contribute to the decision-making process, it is in any case dominated by the influence of the CCP.
2. Incremental reform approach based on 'path dependence': The Chinese governance system is gradually modified in relation to existing institutional and historical structures and practices. Therefore, no radical or abrupt changes in governance processes take place.
3. Reforms are conditioned by pilot experiments: new governance and policy measures are not immediately implemented on a large scale but are previously tested in specific regions or contexts. This allows information to be stored through practical experience, enabling policies to be adjusted accordingly.

²⁵ Ibid.

²⁶ Zemin, «中国共产党历次全国代表大会数据库 (Jiang Zemin's report at the 15th National Congress of the Communist Party of China)»; Xi, «习近平：决胜全面建成小康社会 夺取新时代中国特色社会主义伟大胜利 在中国共产党第十九次全国代表大会上的报告 最新报道 中国政府网 (Xi Jinping: Win decisively to build a moderately prosperous society in all respects and strive for the great victory of socialism with Chinese characteristics for a new era - Report at the 19th National Congress of the Communist Party of China)»; Central Committee of the Communist Party of China, «中共中央关于全面深化改革若干重大问题的决定 (Decision of the Central Committee of the Communist Party of China on Several Major Issues Concerning Comprehensively Deepening Reform)»; Central Committee of the Communist Party of China, «中共中央关于全面推进依法治国若干重大问题的决定_中央有关文件_中国政府网 (Decision of the Central Committee of the Communist Party of China on Several Major Issues Concerning Comprehensively Promoting the Rule of Law)»; Central Committee of the Communist Party of China, «中共中央关于坚持和完善中国特色社会主义制度 推进国家治理体系和治理能力现代化若干重大问题的决定_中央有关文件_中国政府网 (Decision of the Central Committee of the Communist Party of China on several major issues regarding upholding and improving the socialist system with Chinese characteristics and advancing the modernization of the national governance system and governance capabilities)».

4. Guiding reforms through examples and models: closely related to the previous point, governance reforms are guided by practical examples and successful practices that serve as role models.
5. Overriding importance placed on social stability: social stability is the main objective of any governance strategy implemented in China.
6. Integrated vertical and horizontal power structures: This refers to a governance system that combines both vertical (hierarchical) and horizontal (collaborative) power structures, allowing for coordinated decision-making and implementation across different levels and sectors of governance.²⁷

Hence, it is imperative, starting from the definition of governance outlined here, to elucidate its transformation into e-governance, delineate the structural components of e-governance, and ultimately, comprehend the normative essence e-governance assumes within the Chinese context.

Moving forward, E-Governance is one such term whose definition remains somewhat ambiguous in the literature. Dawes defines it as follows: “E-governance comprises the use of information and communication technologies (ICTs) to support public services, government administration, democratic processes, and relationships among citizens, civil society, the private sector, and the state.”²⁸ This definition exhibits some of the aforementioned shortcomings. Dawes attributes a mere supportive role to ICTs, failing to highlight their transformative impact on the governance process itself. Moreover, this definition conflates elements specific to e-governance with those residing in the concept of e-government. The distinction between these two concepts is not a mere academic subtlety but a crucial differentiation to establish e-governance as a distinct discipline. Notably, this definition seems to imply a direct correlation between the adoption of an e-governance model and the support of democratic processes. If this were the case, the applicability of the category of e-governance to mechanisms implemented in China would stand on a rather shaky foundation.

²⁷ Yu, «国家治理的中国特色和普遍趋势 (Chinese Characteristics and General Trends in National Governance) », 1–19; Zhou, *The Logic of Governance in China*.

²⁸ Dawes, Sharon S. “The Evolution and Continuing Challenges of E-Governance”.

The Chinese debate, on the other hand, frames e-governance in slightly different terms that do not necessarily emphasize the link between democratization and e-governance. While recognizing how e-governance changes the interactions among the actors involved in these processes, where Western scholars see the comparative advantage offered by technology as the driving force behind the creation and maintenance of new pluralistic interactions, Chinese scholars believe that the driving force for the formation of interactions comes from the continuous process of learning and interaction of participating actors through technology.²⁹ E-governance is thus derived from the innovative potential of the technology itself.³⁰ In this view, ICTs increase the efficiency of public services and the provision of public goods but, at the same time, the use of technology changes the interactions between individuals by creating more decentralized systems in which the boundaries of traditional governance dissolve.³¹ For Chinese scholars, e-governance is thus a model in which technology changes the balance between social actors by improving services and the provision of public goods.

Given the preceding discussion, the subsequent subsections will first elucidate how ICTs enter governance, transforming it into E-Governance, and the advantages it offers. Following that, I will explicate the often-overlooked distinction between e-governance and e-government in the literature. Lastly, we will underscore how e-governance reshapes the social contract binding the state and society.

1.1.1 Bringing ICTs and Governance Together

In academic literature, various definitions of e-governance exist, each emphasizing specific characteristics. Oakley defines it as: “A technology mediated service that facilitates a transformation in the relationship between government and citizen”³² This definition aptly underscores the transformative nature of ICTs concerning the

²⁹ Guan, Xue, and Zhao, «技术赋能的治理创新：基于中国环境领域的实践案例 (Technology-Enabled governance innovation: an empirical study of China’s environmental action) », 58–65; Yang and Wu, «电子治理的概念特征价值定位与发展趋向 (Conceptual characteristics, value positioning and development trends of e-governance) ».

³⁰ Xia, Yang, and Zhang, «科技引领发展 创新赢得未来 (Technology leads development, innovation wins the future) ».

³¹ Zhang and Xiang, «网络空间中的政策问题建构 (The Construction of Policy Issues in Cyberspace Construction) ».

³² Oakley, «What is e-governance? », 5–6.

government-citizen relationship, implying a profound change with a strong transformative impact. Concerning the innovation component within the use of ICTs in governance, Hacklin et al. distinguish between incremental innovation and disruptive innovations.³³ The former pertains to gradual improvements to existing products, while the latter involves introducing entirely new products or processes that replace pre-existing ones.³⁴

In his definition, Williamson highlights another crucial aspect of e-governance. He states, “Digital governance involves moving services to new digital formats that will allow governments to continually collect huge reservoirs of data about citizens’ everyday activities, interactions, and transactions—data that can be extracted, analysed, and used as insights to shape services—while encouraging citizens to become responsible participants in the co-production and delivery of these digital services.”³⁵ This definition illustrates that it's precisely the massive data accumulation facilitated by ICTs that transforms interactions among the state, citizens, and businesses. Data analysis shapes the services offered, allowing the state to define its governance based on previously unavailable information in which citizens actively participate.

Palvia and Sharma define e-governance as “...concerned with internally focused use of ICT to manage organizational resources and administer policies and procedures”.³⁶ This definition underscores another key feature linking ICTs and governance models, namely the capacity, enabled by the technologies employed, to more efficiently manage organizational resources. adopting an e-governance model offers benefits to the state, categorized by Livia, Giovanni et al. into three groups:³⁷

- Efficiency and Productivity gains and/or cost-savings
- Effectiveness and quality improvements
- Transparency, accountability, trust and legitimacy

³³ Hacklin, Raurich, and Marxt, «IMPLICATIONS OF TECHNOLOGICAL CONVERGENCE ON INNOVATION TRAJECTORIES».

³⁴ Liva et al., «Exploring Digital Government Transformation», 505.

³⁵ Idzi and Gomes, «Digital Governance», 429; Williamson, «Political Computational Thinking», 40.

³⁶ Palvia et al., «E-Government and E-Governance», 3

³⁷ Liva et al., «Exploring Digital Government Transformation»

By adopting an e-governance model, governments can reduce the costs associated with public administration and deliver services more efficiently. Furthermore, by leveraging the vast amount of data made available by ICTs, they can develop tools, services, and policies that are more targeted and context-specific. For instance, the use of advanced analytics based on AI and big data empowers policymakers to pre-emptively test certain policy solutions.³⁸

Regarding the third highlighted category, the real impact remains a subject of debate. Often, discussions about increased transparency, legitimacy, and accountability due to digital governance models seem to conceal an almost positivist conception of technology as a tool for democratic improvement. In this regard, De Vries et al., through a systematic literature review on innovation in the public sector, note how innovation is often treated as a value in itself, and the transformative effects of ICTs are approached from a purely theoretical and normative perspective.³⁹ Our definition must, on the precedent set by Fukuyama, try to avoid such aprioristic normative assessment in order to be applicable to the Chinese context.

From the elements identified in these definitions, we can conclude that for e-governance to be acknowledged as such, ICTs must either alter existing governance structures or create entirely new ones that would have been impossible without ICTs.⁴⁰ It's not solely the emergence of new technologies and their use in governance processes that defines e-governance, but rather the fact that these technologies fundamentally reshape the foundation of pre-existing governance models.⁴¹ ICTs must influence and transform stakeholders, their relationships, and the established processes.⁴² Furthermore, innovations introduced by ICTs may, according to Liva, Giovanni et al. relate to internal processes, administrative procedures, services offered, or the ways in which certain issue are addressed.⁴³ For example, transitioning from a system that, within the context of granting a building permit, automates the decision-making process through ICTs by

³⁸ Liva et al., «Exploring Digital Government Transformation» 507; Pencheva, Esteve, and Mikhaylov, «Big Data and AI – A Transformational Shift for Government», 24–44.

³⁹ De Vries, Bekkers, and Tummers, «INNOVATION IN THE PUBLIC SECTOR», 146–66.

⁴⁰ Bannister and Connolly, «Defining e-Governance», 11

⁴¹ Ibid.

⁴² Ibid.

⁴³ Liva et al., «Exploring Digital Government Transformation», 502-09

computerizing the entire process. In this scenario, the previous system is removed from human action and supervision, generating a tangible change in governance.

Hence, these digital technologies enable a transition from analog governance models to automated governance models.⁴⁴ Hanisch et al. define analog governance as: “instances when governance is pre-dominantly based on centralized control structures, bilateral task coordination, bureaucratic incentives, and actor-based relational trust”.⁴⁵ Here, centralization of control implies a top-down authority system, requiring multiple actors to divide tasks, and incentives for implementing governance measures depend on how well-aligned the involved actors are with those goals. In contrast, digital governance is established as automated governance through decentralized, cybernetically automated control placed in algorithmic foundations ensuring omnilateral coordination.⁴⁶ This control guarantees strict behavioural enforcement autonomously, thus obviating the need for actor specialization or a rigid decision structure. Importantly, it should be noted that this shift between the two models presented should be understood typologically, as intermediate combinations may exist. Different combinations of control, coordination, incentives, and trust within each polity will determine specific e-governance models.⁴⁷ These structural elements of e-governance will be, depending on the specific regime and its objective, shaped and endowed with a specific normative meaning.

1.1.2 Differentiating E-Governance and E-Government

Up to this point, e-governance has been delineated as a multifaceted process involving relationships among various stakeholders, while also being characterized as a transformative tool with distinct advantages for the state, with ICTs at its core. It is imperative now to elucidate the nuanced distinction between e-governance and e-government. These two terms are frequently used interchangeably in academic literature, leading to a degree of conceptual ambiguity.

⁴⁴ Hanisch et al., «Digital Governance», 4–5; Strich et al., «What Do I Do in a World of Artificial Intelligence? », 304–24.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Ibid.

Some scholars, such as Howard or Bannister and Walsh, consider e-government to be a subset of the broader concept encapsulated by e-governance.⁴⁸ In this view, e-governance is constituted as a broader concept that, as stated earlier, encompasses the use of ICTs in institutional organization, decision-making, and the relationship between government and society. Instead, e-governance represents that portion of e-governance that deals more specifically with the delivery of public services through the use of ICTs. In this perspective, e-governance emerges as a comprehensive notion encompassing the multifaceted application of ICTs in institutional organization, decision-making processes, and the government-society interface. Conversely, e-government represents the narrower facet of e-governance, focusing specifically on the delivery of public services through the prism of ICTs. Expanding on this nuanced distinction, Sheridan and Riley further narrow the scope of e-government to the development of online services, excluding the intricate networks and multifaceted relationships that intertwine government and society within the broader context of e-governance.⁴⁹ Within this purview, tangible manifestations of e-government encompass online services available to citizens, such as e-tax, e-transportation, or e-health.⁵⁰ E-government, therefore, can be viewed as an institutional approach predominantly concerned with the electronic delivery of all public-sector services.⁵¹

In contrast, e-governance is a procedural approach that is constituted as essential to the provision of digital services. It includes all the steps necessary to provide the services made available by e-government to the public. Moreover, where e-government is a unidirectional communication protocol from the state understood as the actor of governance to the public, e-governance presents a bidirectional communication in which it is not only the state that provides a service but it is also the citizens who contribute in the delineation of government practices and policies.⁵²

This distinction holds paramount importance as it underscores the transformative potential of technology that transcends the confines of administrative efficiency. While

⁴⁸ Howard, «E-Government across the globe»; Bannister and Connolly, «Defining e-Governance», 11; Grigalashvili, «E-government and E-governance», 183–96.

⁴⁹ Sheridan et al., «Comparing E-Government Vs. e-Governance».

⁵⁰ Grigalashvili, «E-government and E-governance», 183–96.

⁵¹ Idzi and Gomes, «Digital Governance», 436; Khosrow-Pour, *Practicing E-Government*.

⁵² Ibid

e-government predominantly focuses on streamlining government processes, e-governance propels innovation by redefining the dynamics of government-citizen interaction and, depending on the political regime, fostering active or passive citizen participation in decision-making processes.

1.1.3 How E-Governance Changes the Social Contract

Interpreting e-governance as a radical shift in state-society interactions facilitated by ICTs, where the citizen is no longer merely a passive recipient of public services but an integral participant, raises questions about its impact on the social contract.⁵³ According to Enlightenment political philosophy, the social contract constitutes an implicit agreement among members of a society aimed at ensuring social development and welfare.⁵⁴ The stable preservation of the principles underlying the social contract is crucial for maintaining equilibrium between society and government. This social contract, according to the doctrine, represents an individual's consent to cede a portion of their freedom in exchange for the protection of their remaining liberties and the preservation of social order.⁵⁵

The social contract in China has historically been based on the government's provision of two key elements, economic development and social stability.⁵⁶ It is on these premises that the legitimacy of the state is based. In exchange for these two elements, citizens offer their political compliance. Unlike the liberal tradition, the social contract in China does not start from the assumption about the so-called "state of nature" but from the existence of family-tribal ties existing in society.⁵⁷ This familiar paradigm also translates into the political realm in which the ruler is constituted as a paternalistic guide possessing the "mandate of heaven," or the moral right to reign.⁵⁸ The massive use of ICTs, coupled with

⁵³ The adoption of ICTs makes governance processes more dynamic and able to involve the population directly. This happens because the digital space creates a zone in which the citizen, through his actions, is called upon to adopt behaviours that condition access to public goods. At the same time, the individual's actions provide data that are processed to adapt the policies implemented.

⁵⁴ Rousseau, *The Social Contract*; Hobbes: *Leviathan*

⁵⁵ Friend, Celeste, «Social Contract Theory | Internet Encyclopedia of Philosophy».

⁵⁶ Ho, *Thirsty Cities*.

⁵⁷ Gore, «Heritage, CCP Traditions & Liberalism».

⁵⁸ Ho, *Thirsty Cities*; Gore, «Heritage, CCP Traditions & Liberalism».

the socio-economic transformations sweeping through Chinese society, imply a shift in these balances resulting in a redefinition of the fundamentals of the social contract.⁵⁹

In the digital governance era, as Linders suggests, co-production is categorized into Citizens to Governments (C2G), Government to Citizen (G2C), and Citizen to Citizen (C2C).⁶⁰ Consequently, a new understanding of the social contract emerges within these three categories.

In the Citizens to Government (C2G) category, the government derives its primary source from the citizens, fostering cooperation between society and the state to enhance effectiveness and responsiveness. This category witnesses an upsurge in popular participation and a fresh comprehension of the possibilities of governance. Citizens can actively participate in decision-making through avenues such as "e-participation" and "e-rulemaking."⁶¹ These methods eliminate spatial and temporal constraints, promoting productive and interactive dialogues among stakeholders.⁶² Moreover, through crowdsourcing and co-delivery processes, governments can harness citizen expertise to devise innovative solutions to problems.⁶³ Additionally, citizen-government collaboration extends to the emergence of platforms that enable the government to gain a deeper understanding of specific situations. Notably, Shneiderman et al. highlight the impact of such collaborations in crime prevention through community engagement with law enforcement.⁶⁴ Platforms like SeeClickFix, for instance, enable citizens to report issues such as potholes or crimes online, offering tools to monitor government progress and enhance transparency and accountability.⁶⁵

In the Government to Citizen (G2C) category, the state employs digital service platforms as sources of information to influence the public and encourage specific behaviours and outcomes.⁶⁶ This process leverages the increasing availability of digitized information, allowing governments to inform citizens in their decision-making processes. For

⁵⁹ Huang, «Opinion | Xi Broke the Social Contract That Helped China Prosper».

⁶⁰ Linders, «From E-Government to We-Government», 446–54.

⁶¹ Ibid; Idzi and Gomes, «Digital Governance», 436

⁶² Carlitz and Gunn, «Online Rulemaking», 389–98.

⁶³ Linders, «From E-Government to We-Government», 446–54.

⁶⁴ Sopan, Rey, and Shneiderman, «The Dynamics of Web-Based Community Safety Groups».

⁶⁵ «SeeClickFix». SeeClickFix.Com, <https://seeclickfix.com>.

⁶⁶ Linders, «From E-Government to We-Government», 446–50; Idzi and Gomes, «Digital Governance», 436

example, by providing information about health risks or crime levels, governments can employ "nudging" strategies to encourage socially positive decisions or "shaming" to discourage certain behaviors.⁶⁷⁶⁸ Through these process, the government become "a stronger part of the social ecosystem"⁶⁹ through the dissemination and analysis of digitized data. All of this is made possible by growth in terms of data management, data dissemination, and data analysis. While this approach can enhance government transparency and empower citizens, it also raises concerns about expanding tools for social control, potentially promoting certain behaviours in line with the state's vision of morality and order.

In the Citizen to Citizen (C2C) category, the government adopts a "do-it-yourself" model, with digital platforms and information offering citizens new tools for self-organization.⁷⁰ In this model, the significance of formal institutions such as political parties diminishes, and lower information and coordination costs enabled by ICTs empower citizen groups to make collective decisions independently. This allows citizens to perform functions traditionally attributed to the state. For instance, in China, where government enforcement of the rule of law may be inadequate, citizens often use social media to conduct "flesh searches" to identify criminals, corrupt officials, or locate missing children.⁷¹ In C2C, government plays no active role. Data analytics and mobile connectivity are harnessed to compensate for government shortcomings or even counter government actions. In the Chinese context, digital platforms and social media often serve as outlets for citizens to raise awareness about scandals, such as the tainted milk scandal, or compile lists of children who perished in environmental disasters like the Sichuan Earthquake.⁷² Such initiatives shed light on government failures often tarnished in authoritarian contexts such as China's, thus forcing the government into action. Such initiatives spotlight government failures, often prevalent in authoritarian contexts like China, pressuring the government to take action.

⁶⁷ Ibid

⁶⁸ David Cameron: The next age of government

⁶⁹ O'Reilly, «Government As a Platform».

⁷⁰ Linders, «From E-Government to We-Government», 446–54; Idzi and Gomes, «Digital Governance», 436

⁷¹ Wang et al., «A Study of the Human Flesh Search Engine», 45–53; Hatton, «China's Internet Vigilantes and the "Human Flesh Search Engine" ».

⁷² Zheng and Wu, «Information Technology, Public Space, and Collective Action in China», 507–36.

Having now provided conceptual clarity regarding e-governance and elucidated its modification of the social contract, we can proceed to examine what e-governance looks like in China and explore its normative aspects, which have hitherto been intentionally omitted.

1.2 How E-Governance is Applied in China

The picture drawn so far of what e-governance is highlights a system of technologically mediated interactions between the state, citizens and business. This brings benefits in terms of efficiency, resource management, transparency, accountability and effectiveness. These benefits have often been interpreted from an overly narrow perspective in the academic literature on e-governance, and this points to several shortcomings.

Firstly, much of the contemporary e-governance literature tends to adopt a technology-centric view of the gradual integration of ICTs into governance processes.⁷³ This perspective simplifies the complex causal relationships that underlie e-governance phenomena, often overlooking the broader political, social, cultural, and economic factors that shape its implementation.

Secondly, existing studies predominantly concentrate on the supply of participatory technologies by governments. They frequently disregard the extent of citizen adoption, the quality of their utilization, and the tangible impact of these technologies on public participation and social dynamics.⁷⁴

Finally, the most significant limitation within the current discourse is the inherent link between e-governance and democracy, largely stemming from Western-driven development literature.⁷⁵ This association has inadvertently led to an oversight of its applicability in authoritarian contexts. E-governance studies often frame their analysis within democratic models, effectively ignoring the nuances of different political regimes. Sometimes, the rise of ICTs has even been interpreted as the emergence of an existential threat to authoritarian regimes around the world.

⁷³ Salem, «Open Governance in Authoritarian States», 99.

⁷⁴ Ibid.

⁷⁵ Przeworski et al, *Democracy and development*; Diamond, *The spirit of democracy*.

Such a view has come to take hold particularly in the wake of the events that marked the Arab Spring of early 2010.⁷⁶ Experiences such as the Egyptian "Facebook Revolution," the Syrian "YouTube Uprising," and the Iranian "Twitter Uprising" helped solidify such an interpretation.⁷⁷ ICTs were seen as "liberating technologies" capable of eradicating authoritarian regimes through the free flow of information and the collective mobilization they promoted.⁷⁸ In this view, the integration of ICTs into the models of governance adopted by states was going to be constituted as a step toward greater democracy, greater transparency of governmental processes, and greater ability of citizens to participate in decision-making. However, the increasing adoption of ICTs in governance by authoritarian states casts doubt on such an interpretation leading to talk of ICTs as "liberating technology" rather than "repressive technology" capable of strengthening authoritarian governance.⁷⁹

In the case of China, the adoption of e-governance models serves to strengthen authoritarian features rather than fostering democratization. China leverages ICTs in governance to address several pressing concerns: the need to increase compliance with the law, regulations, and social norms; the risk of economic and social instability; and the maintenance of political control and party credibility.⁸⁰ The adoption of specific initiatives attributable to e-governance by the CCP do not have as their ultimate goal the empowerment of citizens or attracting more foreign investment.⁸¹ In fact, both the initiatives adopted and the regulations in terms of data security and privacy are focused on strengthening national security and maintaining regime stability.⁸² Ensuring stability and order, improving the quality of surveillance and data collection, the elimination of corruption, and the re-legitimization of the Party are the real ultimate goal of Chinese e-governance.

⁷⁶ Zeng, «Artificial Intelligence and China's Authoritarian Governance», 1444.

⁷⁷ Eltahawy, «Facebook, YouTube and Twitter are the new tools of protest in the Arab world».

⁷⁸ Larry Diamond, «Liberation Technology», 69–83; Zeng, «Artificial Intelligence and China's Authoritarian Governance», 1444.

⁷⁹ Zeng, «Artificial Intelligence and China's Authoritarian Governance», 1445; Zeng, «China's Date with Big Data», 1443–62; Rød and Weidmann, «Empowering Activists or Autocrats? », 338–51.

⁸⁰ Meissner and Wübbeke, «It-Backed Authoritarianism: Information Technology Enhances Central Authority and Control Capacity under Xi Jinping», 52–56.

⁸¹ Kluver, «The Architecture of Control», 80–88.

⁸² He and Fay, «Digital Governance in China: Data, AI and Emerging Technologies, and Digital Trade», 1–12.

Many scholars, such as Meissner and Wübbecke, Qiang, and Scharre, have identified the Chinese approach as "digital authoritarianism."⁸³ This term refers to the use of digital technology by authoritarian regimes to surveil, repress, and manipulate both domestic and foreign populations.⁸⁴ The Chinese government perceives technological advancement as vital for asserting national greatness and countering the influence of Western liberal democracies.⁸⁵ This belief has driven initiatives such as the "Golden Shield Project," "Skynet Project," "Sharp Eyes Project," the "Digital Silk Road," and, more recently, the Social Credit System.⁸⁶ Under President Xi Jinping's leadership, China has intensified censorship, propaganda, and AI-driven population-wide surveillance, making it a "data state" and strengthening the digital authoritarian feature of the country.^{87,88} In this model of governance, the transformation of human experience into data and the control of this data enables the effective exercise of political power while at the same time manipulating and controlling the social behaviour of citizens.⁸⁹ This occurs through an extremely subtle process in which mechanisms such as the SCS alter social behaviours through the provision of benefits that make this phenomenon less noticeable.⁹⁰

The upcoming sections will provide a detailed analysis of the Chinese e-governance model, starting with the goals China aims to achieve through its "data state." A comprehensive understanding of these objectives is crucial for contextualizing the Social Credit System and assessing factors influencing public opinion. Subsequently, this analysis will examine the challenges that impede the full realization of this governance model, emphasizing the existing gap between aspirations and feasibility. Finally, the text

⁸³ Tang, «China Must Be a World Leader in Science and Tech or Risk Being ‘Strangled’»; Kuo and Liu, «Self-strengthening: the pursuit of Western technology», 491–492; Huang, «地缘政治的复兴与大国间的技术竞争 (The Revival of Geopolitics and Technological Competition among Great Powers) »; Meissner and Wübbecke, «It-Backed Authoritarianism: Information Technology Enhances Central Authority and Control Capacity under Xi Jinping», 52–56; Qiang, «Chinese Digital Authoritarianism and Its Global Impact», 1–6.

⁸⁴ Polyakova and Meserole, *Exporting digital authoritarianism: The Russian and Chinese models.*; Qiang, «Chinese Digital Authoritarianism and Its Global Impact», 1–6.

⁸⁵ Wright, «*Artificial Intelligence’s Three Bundles of Challenges for the Global Order.*»; Zeng, «Artificial Intelligence and China’s Authoritarian Governance», 1445; Zeng, «China’s Date with Big Data», 1443–62; Kluver, «The Architecture of Control», 80–88

⁸⁶ Qiang, «Chinese Digital Authoritarianism and Its Global Impact», 1–6.

⁸⁷ Ibid.

⁸⁸ Cheung and Chen, «From Datafication to Data State», 1137–71.

⁸⁹ Kostka and Antoine, «Fostering Model Citizenship».

⁹⁰ Ibid.

will introduce the legislative framework on privacy and data protection within which Chinese e-governance initiatives operate.

1.2.1 E-Governance as a Solution to Many Chinese Problems

Since the initiation of reform programs in the 1970s, China has experienced remarkable economic, political, and social progress. This unprecedented material prosperity has generated expectations of efficiency that constitute a strong element of pressure on the work of the Chinese Communist Party, especially within an international scenario characterised by geopolitical and economic instability. Paradoxically, it is the extraordinary performance shown by China so far that is at the root of many of the challenges facing the CCP.⁹¹ Notably, the rapid transformation of Chinese society has led to the dismantling of previous control mechanisms without the replacement of new bureaucratic mechanisms to ensure stability.⁹² Rising unemployment, increasing crime rates, and high-profile scandals related to food safety and emergency management have fuelled public discontent, compelling the government to demonstrate its competence.

Moreover, the rapid economic growth has not been accompanied by a redefinition of governmental and social relationships. These tensions, shaped by the Chinese regime's peculiar characteristics, cannot be resolved through a rule-of-law approach, as China does not function under the principles of democratic rule of law. In contrast, China is better characterized as a "rule by law" system.⁹³ Under this model, the CCP stands above the law, manipulating it as a means to pursue its objectives.⁹⁴ This approach exacerbates the enforcement challenges within the legal system, undermining both the government's legitimacy and its credibility in the eyes of its citizens.⁹⁵

⁹¹ Kluver, «The Architecture of Control», 78

⁹² Ibid.

⁹³ Chin, « 'Rule of Law' or 'Rule by Law'? »

⁹⁴ Scharre, «The Dangers of the Global Spread of China's Digital Authoritarianism», 2.

⁹⁵ In China, the rule by law model means that law is used instrumentally by the government as a means to advance its policies. This creates a scenario in which the legal system is formed not as a counterweight to state power but as an expression of state power itself. The problem is that such a system lacks the necessary autonomy to operate effectively, creating a vacuum in terms of enforcement. In this way, the legal system loses its legitimacy in front of the individual citizen who judges its operation as inefficient and, at the same time, since the operation of the legal system is seen as an expression of the central government, the credibility the latter enjoys is affected. This structure creates the need to seek extra-legal solutions to the enforcement problem by giving systems like the SCS their *raison d'être*. The role of law in China and its connection to government legitimacy has been the subject of numerous studies by authors such as Lin, Trevaskes, Alford, Turner, Orts, Ng, etc. This will be further explored in chapter two where

E-governance mechanisms offer the CCP significant advantages in addressing three core challenges: the lack of a robust legislative checks and balances system, the need to maintain social stability and party legitimacy, and issues related to information management.⁹⁶ These three challenges are intrinsically interconnected, and the vast volume of data made available through information and communication technologies presents a promising solution.

Regarding the first challenge, China's system follows a "rule by law" framework and lacks the rule of law's mechanisms to limit government actions or the presence of an independent judiciary. This reflects a traditionalist approach dating back to the imperial age that saw law as an expression of power rather than a limitation on power itself. Checks and balances were to be found in other areas such as ritual, the moral virtues of Confucianism and the bureaucracy itself.⁹⁷ However, these checks and balances have come to an end as China's transformation has progressed. Another defining aspect of contemporary Chinese law is how it does not see citizens as individual right holders but the rights they have are guaranteed directly by the state.⁹⁸ In such an environment, it is difficult not only to enforce the law on citizens but even more difficult to exercise it on internal Party members whose violations go to damage the legitimacy that the Party itself enjoys in the eyes of the people.⁹⁹ The use of ICTs allows the state to automate rule enforcement, efficiently manage available resources, and mitigate inherent flaws in the Chinese "rule by law" system. For example, in the case of the SCS, the allocation of punishments according to violations of the law is in fact done on an algorithmic basis, and this allows it to bypass internal flaws in the Chinese rule by law system. This concept will be explored further in the next chapter.

it will be intertwined with the SCS. See Lin and Trevaskes, «Law–Morality Ideology in the Xi Jinping Era»; Alford, «Chinese Law: History, Principles & Reforms »; Habermas, «How is legitimacy made possible via legality? »; Krygier, «The Rule of Law and State Legitimacy», 106–36; Tyler and Jackson, «Popular Legitimacy and the Exercise of Legal Authority», 78–95; Turner, Feinerman, and Guy, *The Limits of the Rule of Law in China*; Orts, «The Rule of Law in China»; Ng, «Is China a “Rule-by-Law” Regime? »

⁹⁶ Scharre, «The Dangers of the Global Spread of China’s Digital Authoritarianism», 2.

⁹⁷ Fukuyama, «Reflections on Chinese Governance», 379–86.

⁹⁸ Ibid.; Orts, «The Rule of Law in China»; Ng, «Is China a “Rule-by-Law” Regime? »

⁹⁹ Ye, «How the CCP Is Stalling China’s Legal System»; Lin and Trevaskes, «Law–Morality Ideology in the Xi Jinping Era»; Turner, Feinerman, and Guy, *The Limits of the Rule of Law in China*

Furthermore, the CCP's pursuit of social stability and legitimacy is significantly aided by e-governance initiatives. The lack of a strong legislative apparatus has driven the CCP to invest heavily in digital technologies, strengthening its societal control and promoting social stability.¹⁰⁰ The use of "big data" technology makes it possible to strengthen what Jinghan Zeng refers to as "social management capacity."¹⁰¹ As the Chinese State Council's New Generation AI Development Plan states:

"AI technologies can accurately sense, forecast, and provide early warning of major situations for infrastructure facilities and social security operations; grasp group cognition and psychological changes in a timely manner; and take the initiative in decision-making and reactions-which will significantly elevate the capability and level of social governance, playing an irreplaceable role in effectively maintaining social stability."¹⁰²

The use of ICTs in governance processes allows the Chinese state not only to make up for the shortcomings of the legislative system but also to operate social control through the enhancement of the security sector and surveillance capabilities. The importance of maintaining social stability should be interpreted as influencing the legitimacy of the party itself. In this regard, Deng Xiaoping himself, paramount leader of the People's Republic of China (PRC) from December 1978 to November 1989 and widely regarded as the architect of modern China, recognized stability as the primary necessity for China.¹⁰³

Economic growth and ideology are other important factors that drive the adoption of e-governance. Economically, as China's GDP growth normalizes and transitions toward higher productivity-based growth becomes a necessity to ensure economic stability, the extensive integration of ICTs offers solutions as long as it can provide industrial automation, better resource allocation and productivity enhancing innovations.¹⁰⁴ With

¹⁰⁰ Yu and Xia, «E-Justice Evaluation Factors», 658–70; Zheng, «China's Grand Design of People's Smart Courts», 561–82.

¹⁰¹ Fukuyama, «Reflections on Chinese Governance», 379–86.; Zeng, «China's Date with Big Data», 1443–62.

¹⁰² Zeng, «China's Date with Big Data», 1443–62.; Webster et al., «Full Translation: China's "New Generation Artificial Intelligence Development Plan" (2017) »

¹⁰³ Zeng, «Artificial Intelligence and China's Authoritarian Governance», 1441–59.; Faison, «DENG XIAOPING IS DEAD AT 92; ARCHITECT OF MODERN CHINA».

¹⁰⁴ Fukuyama, «Reflections on Chinese Governance», 379–86.; Zeng, «China's Date with Big Data», 1443–62; Zeng, «Artificial Intelligence and China's Authoritarian Governance», 1441–59

regard to the ideological aspect, the algorithmic basis on which ICTs operate within governance processes is presented by the CCP as operating according to the principles of socialism with Chinese characteristics and the same time advancing the goals set for by the socialist ideology.¹⁰⁵ Therefore, ICTs in China aid to a certain extent in resolving the apparent contradiction between a semi-capitalist economy and a socialist society. In addition, the adoption of an ever-increasing number of quasi-capitalist reforms has also created a series of increasingly obvious economic inequalities. This contradiction makes it possible to understand why, since 2012, Xi's leadership has pushed ideologically on Marxism-Leninism to safeguard the party's ideological legitimacy.¹⁰⁶ The massive use of ICTs, big data and AI can, in this sense, go a long way toward solving the problems of low productivity and efficiency in the programmed economy by going on to ensure a reduction in socio-economic inequality and greater welfare for society.

E-governance mechanisms also address information management issues, an essential component of autocratic rule. Information management opens up new possibilities in terms of the exercise of political power.¹⁰⁷ Such information management serves numerous objectives of regimes such as operating online censorship and repression, collecting citizen preferences, monitoring local officials, shaping public opinion through misinformation, and identifying and suppressing protesters and political opponents.¹⁰⁸

In terms of information flow, we can distinguish between vertical information flow and horizontal information flow. In the context of authoritarian regimes, the latter refers to the ability of citizens to come, through ICTs, to learn about their respective anti-regime sentiments, with a view to coordinating retaliatory actions. The former, on the other hand,

¹⁰⁵ Science and Technology Daily, «新时代科技创新工作的根本遵循和行动指南——深入学习习近平总书记关于科技创新的重要论述 - 深入学习贯彻习近平新时代中国特色社会主义思想主题教育 - 广西壮族自治区科学技术厅网站 (The fundamental compliance and action guide for scientific and technological innovation work in the new era - in-depth study of General Secretary Xi Jinping's important exposition on scientific and technological innovation)»; Beijing Research Center for Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, «新时代马克思主义科技观的创新发展--理论-人民网 (The innovative development of the Marxist view of science and technology in the new era)».

¹⁰⁶ Zeng, «Artificial Intelligence and China's Authoritarian Governance», 1457; Central Committee of the Communist Party of China, «Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform of the Cultural System and Promoting the Great Development and Prosperity of Socialist Culture».

¹⁰⁷ Lynch, «After Egypt», 301–10.

¹⁰⁸ Xu, «To Repress or to Co-opt? », 309–25.

refers to the flow of information from the periphery to the central government for the purpose of acting about social discontents and monitoring local officials.¹⁰⁹ This emerges as a key motivation behind massive adoption of ICTs and e-governance mechanisms by the CCP as authoritarian regimes are inherently uninformed. On the one hand, the repressive nature of an autocratic regime means that there are difficulties in obtaining accurate information about any internal anti-regime sentiments within the population; on the other hand, monitoring the conduct of local politicians and bureaucrats is extremely complicated in regimes, such as China's where power, is highly decentralized.¹¹⁰ Legibility, that is, the breadth and depth of a state's knowledge of its citizens and their activities, thus goes to constitute itself as a primary necessity of the capabilities of the state apparatus.¹¹¹

In terms of internal monitoring, the Chinese system can be seen as a model of "fragmented authoritarianism".¹¹² Despite what it may seem, the Chinese regime is not presented as unified and highly centralized but is vertically decentralized through the allocation of powers and responsibilities to different levels of government from the centre to provinces, cities and villages, and horizontally decentralized through the distribution of powers among different government agencies.¹¹³ As a result, operating constant monitoring of so many officials through traditional means is nearly impossible for the central government. At the same time, the inherently flawed Chinese legal system make prosecuting officials accused of corruption a slow and inefficient process.¹¹⁴ This has given room for rampant corruption that is one of the main factors attacking the legitimacy of the CCP to date. Most Chinese believe that the majority of government officials are corrupt, and this is eroding confidence in the government's efforts to eradicate corruption.¹¹⁵ Cases involving embezzlement, misappropriation, false reporting, and extortion appear to be commonplace with 36,000 corruption cases in the first half of 2023 alone.¹¹⁶ Moreover,

¹⁰⁹ Huang, Boranbay-Akan, and Huang, «Media, Protest Diffusion, and Authoritarian Resilience», 23–42.; Lorentzen, «China's Strategic Censorship», 402–14.; Miller, «Elections, Information, and Policy Responsiveness in Autocratic Regimes», 691–727.

¹¹⁰ Kuran, «Now out of Never», 7–48.

¹¹¹ Chen and Greitens, «Information Capacity and Social Order», 497.

¹¹² Zeng, «Artificial Intelligence and China's Authoritarian Governance», 1448.

¹¹³ Ibid.

¹¹⁴ Dong and Torgler, «Causes of Corruption»; Wedeman, «The Dynamics and Trajectory of Corruption in Contemporary China», 21–48.

¹¹⁵ Kluver, «The Architecture of Control», 80.;

¹¹⁶ Tekin, Esra, «China records over 36,000 corruption-related cases in 1st half of 2023».

according to surveys conducted by the Central Party School between 1999 and 2004, respondents place corruption as the first or second most pressing social problem.¹¹⁷ In this context, the use of e-governance mechanisms ensures greater control over government officials, making corruption more difficult to carry out, more punishable, and giving the government an image of greater transparency.

The Chinese information problem is also related to social stability and management. In fact, through the integration of data offered by e-governance models, greater repression is made possible. From the perspective of repression, the use of e-governance models also offers a significant advantage in terms of resource management. In this regard, Xu Xu states how authoritarian control involves a choice between repression or co-optation strategies.¹¹⁸ The choice between these two different strategies is dictated first and foremost by the amount of information the regime turns out to possess. Repression can present itself as indiscriminate or selective. In the former case, the costs to the regime, economically, politically and socially, increase significantly. Indeed, indiscriminate repression can lead to lower economic productivity, cleavages among the regime's elites, the application of international sanctions, and the outbreak of mass mobilizations.¹¹⁹ In terms of co-optation, this turns out to be costly when it is presented as targeted while as more efficient when nonexclusive.¹²⁰ In addition, co-optation strategies turn out to be less costly when the regime turns out to be able to guarantee a low level of mobilization and provide for social stability and economic growth.¹²¹

As seen, these two elements are challenged in the current Chinese regime, making targeted repression a better alternative. Therefore, the adoption of targeted repression strategies that, through the vast availability of information made possible by the massive use of ICTs, come across as less visible and low-intensity turns out to be a strategy that can be integrated into e-governance mechanisms such as the SCS by offering the regime to reduce the political and social costs usually associated with repression.¹²²

¹¹⁷ Pei, Minxin. «Corruption Threatens China's Future».

¹¹⁸ Xu, «To Repress or to Co-opt? », 309–25.

¹¹⁹ Ibid. 312

¹²⁰ Ibid.

¹²¹ Ibid.

¹²² Ibid. 323

In conclusion, the adoption of e-governance models caters to the unique needs of the Chinese government in maintaining social stability, controlling corruption, achieving economic growth, and managing information. This aligns with the core objectives of the CCP and demonstrates how e-governance becomes an integral part of China's evolving governance model.

1.2.2 The Implementation Problems of E-Governance

Despite the benefits highlighted earlier arising from the adoption of e-governance, we must now analyse the challenges these measures create in terms of implementation. Adopting e-governance measures poses significant technical, political, and human challenges.

Starting with the technical aspects, certainly China presents technologically advanced means capable of collecting information on a large scale. However, it would be erroneous to equate information collection and information capacity.¹²³ The fragmentation of information directly affects the feasibility of exploiting this information for governance. Given China's designation as a "fragmented authoritarianism," one of the primary obstacles to realizing an efficient e-governance model is the issue of local information sharing and management.¹²⁴¹²⁵

The bureaucratic structure in China features vertically overlapping departments known as "tiao" and horizontal local authorities referred to as "kuai".¹²⁶ The kuai are responsible for maintaining stability and their performance serves as an indicator for the potential promotion of officers, while the tiao exercise control over coercive power. Bureaucratic fragmentation creates challenges concerning information access and the lack of appropriate information sharing mechanisms, leading to what is known as the "information island" problem indicating a situation where data are isolated or segmented in a specific system and are not easily accessible or integrated into other data sources or

¹²³ Chen and Greitens, «Information Capacity and Social Order», 500

¹²⁴ Ibid.

¹²⁵ Ibid.

¹²⁶ Cao and Wang, «统体制的内在矛盾与条块关系 (The Inherent Contradictions of Authoritarian Regime and the Tiao-kuai Relationship in China) », 77–110.

systems.¹²⁷ This problem can only be resolved through appropriate data integration strategies.

However, these strategies themselves present numerous difficulties. Integrating data from various government levels poses a significant technological challenge, and China's capability to accomplish this remains in question.¹²⁸ Early efforts to address this issue date back to the Hu-Wen era, and are now accelerating under Xi Jinping's leadership.¹²⁹ Initiatives such as the creation in 2014 of the Central National Security Commission (CNSC) (zhongyang guojia anquan weiyuanhui, CNSC) focused on "comprehensive national security (zongti guojia anquanguan)."¹³⁰ The goal of the CNSC is to reduce information fragmentation and improve intelligence sharing and coordination at the policy level. In the same vein, under Xi, the People's Armed Police was reorganized in 2018 and the National Intelligence Law was passed for the purpose of unifying and centralizing fragmented intelligence systems and information.¹³¹ Such initiatives demonstrate an essential element for the successful creation of e-governance initiatives—that is, the presence of a strong political will to create the conditions and infrastructure necessary for the problems underlying implementation to be solved.

Another issue concerning e-governance implementation involves not only the quantity but also the quality of accumulated data. Due to vertical and horizontal fragmentation, different departments have varying resources, impacting data quality. In some areas, data accumulation relies on rudimentary means, creating barriers to interoperability and interdepartmental integration.¹³²

¹²⁷ Chen and Greitens, «Information Capacity and Social Order», 497–523.

¹²⁸ Meissner and Wübbecke, «It-Backed Authoritarianism: Information Technology Enhances Central Authority and Control Capacity under Xi Jinping», 53.

¹²⁹ CCP Central Committee and State Council, «国资委发布推广全国企业管理现代化创新成果通知 (The State-owned Assets Supervision and Administration Commission issued a notice to promote the innovative achievements of modern enterprise management across the country.) ».

¹³⁰ Xinhua News Agency, «中央国家安全委员会第一次会议召开 习近平发表重要讲话滚动_新闻_中国政府网 (The first meeting of the Central National Security Commission was held and Xi Jinping delivered an important speech) ».; People's Daily, «加快推进国家安全体系和能力现代化 以新安全格局保障新发展格局--新闻报道-中国共产党新闻网 (Accelerate the modernization of national security systems and capabilities to ensure a new development pattern with a new security pattern) ».

¹³¹ Zhao, «Command of Armed Police Force to be unified».

¹³² Dai, «Toward a Reputation State», 1–53.

Resolving the Information Islands problem necessitates substantial investments in terms of both infrastructure and human capital. Staff members must embrace e-governance, which can be challenging. As stated by a district officer of the Office of Comprehensive Social Management, "some cadres are not responsive and able to adapt to institutional changes".¹³³ Second, there is a need for staff employed in e-governance processes to have the analytical skills necessary to make sense of the data collected.¹³⁴

Data integration also introduces political challenges. It alters the distribution of power when data integrates from provincial or ministerial levels to the central government, leading to reluctance among various bureaucratic and political actors to share information that could affect their influence and power.¹³⁵ In a context where information is power and political competition in the internal party dynamics is high, this problems seems extremely difficult to address.

Finally, the last set of constraints in e-governance implementation to consider lie in the levels of citizen awareness, levels of literacy about the implemented systems, and digital illiteracy in China. A successful e-governance implementation must have the right level of citizen awareness. Government performance must be visible, especially when it comes to demonstrating its ability to solve previously mentioned problems such as corruption. To achieve this, appropriate capacity building programs need to be organized to increase citizen awareness of e-governance initiatives.¹³⁶ In terms of literacy, a major problem is the extreme eclecticism in terms of regional and local languages that China presents.¹³⁷ In terms of literacy, a major problem is the extreme eclecticism in terms of regional and local languages that China presents. Therefore, there is a need to provide appropriate interfaces using the different regional languages. Finally, in terms of digital skills in China there is a strong imbalance between rural and urbanized areas, and between young and old. These imbalances undermine both the ability of government apparatuses to collect adequate data and the ability of citizens to take full advantage of electronic services provided by the government.

¹³³ Chen and Greitens, «Information Capacity and Social Order», 512

¹³⁴ Ibid

¹³⁵ Meissner and Wübbecke, «It-Backed Authoritarianism: Information Technology Enhances Central Authority and Control Capacity under Xi Jinping», 53.

¹³⁶ El-Ebiary et al., «A Prognosis of Chinese E-Governance», 89.

¹³⁷ Ibid

1.2.3 The Chinese Legislative Framework on Privacy and Data Protection

The implementation of e-governance requires an appropriate legal infrastructure capable of supporting it. While taking into account the profound structural shortcomings of the Chinese rule by law model highlighted earlier, especially in terms of legislative enforcement, it must be acknowledged that the government has in recent years taken steps to create a legislative framework on which e-governance was able to set itself. In this regard, we can highlight two pillars on which Chinese e-governance stands: the Personal Information Protection Law (PIPL) and the Data Security Law (DSL).¹³⁸ This section will focus on presenting these two pieces of legislation, their contribution to Chinese e-governance and their shortcomings. This analysis is essential not only for the purpose of understanding the more general Chinese e-governance model but also for a full understanding of the Social Credit System on which the next chapter will focus.

The Personal Information Protection Law is launched in China on November 1, 2021. The PIPL marks a milestone in terms of personal information protection, ensuring the protection of individual rights and placing limitations on the ability of businesses to collect and use such data. The PIPL attempts to build a framework aimed at regulating information protection and digital security.¹³⁹ This piece of legislation, focused on personal information privacy, identifies personal information in Article 4 as any kind of information related to identified or identifiable persons except for information after anonymization processing.¹⁴⁰ Moreover, the protection of personal information goes not only to the collection but also to the storage, use and processing of personal information. The PIPL is not only directed to organizations and individuals who process personally identifiable information (PII) in China, but also those who process data of China citizens' PII outside of China.¹⁴¹

An important aspect of the PIPL is the limitations imposed on handlers, i.e., businesses, companies, or individuals who come into possession of personal information. This aspect is discussed in Chapter 5 of PIPL, which in Articles 51, 55, 56, and 58 respectively states

¹³⁸ Heeks, «Understanding E-Governance for Development»; He and Fay, «Digital Governance in China: Data, AI and Emerging Technologies, and Digital Trade», 1–2.

¹³⁹ You and Jin, «The Personal Information Protection Law in China».

¹⁴⁰ Ibid.

¹⁴¹ Deloitte China, «The China Personal Information Protection Law (PIPL)».

the obligation to manage personal information through secure techniques and to increase the awareness of its employees about data security requirements, to monitor the impact of protection about sensitive data, and the need for Big Tech Companies to establish efficient protection mechanisms subject to external monitoring about user data.¹⁴² This underscores the desire to make data management by nongovernmental handlers more transparent and subject to penalties for violations of the relevant regulations.

Finally, the PIPL, as highlighted in Chapter 6, highlights the duties of computerization and state cybersecurity departments in terms of technical support, security, and personal information system construction.¹⁴³ These provisions have a strong impact in terms of decision-making within an e-governance system such as China's that exploits sensitive personal information, location tracking, and facial recognition with a view to maintaining public safety. Biometric data of individuals, religious beliefs, health information, financial accounts, location tracking, and personal information of individuals under the age of 14 should be understood as sensitive information.

Relative to the rights granted to individuals, except where the law or administrative regulations state otherwise, the PIPL enshrines the right of individuals to know, decide, limit or oppose the use of their personal information.¹⁴⁴ Consent is in fact a pivotal concept of the PIPL. Consent goes to stand as the legal basis for the processing of personal information, and this consent must be provided by individuals freely, voluntarily, and explicitly according to Article 14.¹⁴⁵ In addition, according to Article 47, handlers are required to delete the data in their possession if the individual's consent is revoked. Another interesting aspect introduced by the PIPL is that of data portability, or the individual's right to securely obtain and reuse his or her personal data from one IT environment to another.¹⁴⁶

In conclusion, from what has been highlighted so far, the PIPL has many similarities with the European General Data Protection Regulation (GDPR) in terms of objectives pursued

¹⁴² Calzada, «Citizens' Data Privacy in China», 1136.

¹⁴³ Ibid.

¹⁴⁴ Bloomberg Law. «China's Personal Information Protection Law (PIPL)»

¹⁴⁵ Ibid

¹⁴⁶ Ibid.

and legal instruments.¹⁴⁷ However, it must be highlighted that although PIPL goes to express a greater focus in terms of data protection and privacy issues, it is part of the CCP's attempt to strengthen and extend its data sovereignty not only in its own jurisdiction but also in the global landscape.¹⁴⁸ This is evident if we go to consider how an important part of the PIPL is that relating to restrictions on the transfer of personal information. Before a transfer of data can take place, it is essential to have the consent of the data subject, to verify that the foreign recipient complies with data protection requirements that are no less stringent than those imposed by the PIPL, and, in cases where the nature of the data is particularly sensitive or its volume is high, the Cyberspace Administration of China is required to conduct a security review before the transfer is authorized.¹⁴⁹ Furthermore, we can note how PIPL appears to be more focused on accumulating data from businesses so that the government can potentially nurture and improve the SCS. This relationship emerges in particular when we look at the impact that PIPL has on automated decision making processes of which the SCS constitutes to date as one of the major expressions in the Chinese landscape. From this perspective, PIPL and the SCS can be interpreted as going to mutually reinforce the Chinese data governance model. Suffice it to say that any violation concerning the PIPL can be recorded immediately in the SCS.¹⁵⁰

The second pillar that needs to be mentioned is the Data Security Law adopted on June 10, 2021 at the 29th session of the Standing Committee of the 13th National People's Congress. The DSL consists of seven chapters and 55 articles covering data security mechanisms, and obligations and liabilities of both the state administration and data handlers.¹⁵¹ Under Article 21, the DSL establishes a hierarchical data classification mechanism that differentiates between ordinary data, "core data," generically defined as data affecting China's national and economic security, the welfare of Chinese citizens,

¹⁴⁷ He and Fay, «Digital Governance in China: Data, AI and Emerging Technologies, and Digital Trade», 3.

¹⁴⁸ Calzada, «Citizens' Data Privacy in China», 1132

¹⁴⁹ Junck et al., «China's New Data Security and Personal Information Protection Laws».

¹⁵⁰ Calzada, «Citizens' Data Privacy in China», 1137

¹⁵¹ Chen and Sun, «Understanding the Chinese Data Security Law», 209–21.; China Law Translate, «Data Security Law of the People's Republic of China», Article 21.

and significant public interests, and "important data."¹⁵² What is meant by "important data" is not clearly defined in the DSL.

The DSL imposes stringent requirements in terms of location and transfer for "core" and "important" data. Critical Information Infrastructure Operators (CIIOs), or those who handle information networks, infrastructure and natural resources, must ensure that data generated and held in China undergoes a security assessment before being transferred abroad.¹⁵³ Companies that violate these obligations enshrined in Article 31 of the DSL can be forced to suspend or terminate their operations, have their licenses or business permits revoked, and fined up to 10 million yuan.¹⁵⁴ As the data processed in the DSL goes to include personal information, the provisions in terms of data transfer of the DSL are complemented by those affirmed in the PIPL. This goes to further strengthen Chinese data sovereignty.

The area where the provisions of the DSL are most relevant are those in relation to data security to which the entire Chapter IV is devoted. In fact, one of the main focuses of this law is the possibility that Core Data, Important Data, and personal information may be stolen, purloined, destroyed, illegally used, or transferred abroad going to pose a risk to China's national security.¹⁵⁵ For these reasons, the DSL establishes and improves data security systems, remedial measures in case of data security failures, and monitoring, detection and notification systems aimed at both users and authorities. Particularly indicative about the need to safeguard and protect China's national security through DSL are the provisions contained in Article 36, which states:

"The competent authorities of the PRC are to handle foreign justice or law enforcement institution requests for the provision of data, according to relevant laws and treaties or agreements concluded or participated in by the PRC, or in accordance with the principle of equality and reciprocity. Domestic organizations and individuals must not provide data stored within the mainland territory of the PRC to the justice or law enforcement

¹⁵² Chen and Sun, «Understanding the Chinese Data Security Law», 209–21.; China Law Translate, «Data Security Law of the People's Republic of China», Article 21.; Junck et al., «China's New Data Security and Personal Information Protection Laws».

¹⁵³ Ibid

¹⁵⁴ Ibid

¹⁵⁵ Chen and Sun, «Understanding the Chinese Data Security Law», 217

institutions of foreign countries without the approval of the competent authorities of the PRC"¹⁵⁶

This article perfectly highlights what is the spirit of the DSL, which is to strengthen Chinese data sovereignty. The main problem however, which affects both DSL and PIPL, is that these laws lack implementing legislation making enforcement a particularly problematic process.¹⁵⁷ Especially in relation to DSL, the vague formalization of the law itself and the broad mandates for ministries in terms of classifying data to be categorized into one of the three mentioned categories open up a number of difficulties of both a technical and political nature.

The two pillars on which China's e-governance is based highlight certain trends that characterize China in terms of data management and data governance. First, data security is seen as intrinsically linked to Chinese national security. Rather than ensuring the privacy of citizens and the protection of their data, current legislation appears to be aimed at ensuring full government control of data and preventing handlers from disposing of collected data outside of the government's own control. Government entities remain free to collect citizens' information, and through the monitoring procedures imposed by the PIPL and the DSL, the government also secures greater control over the data collected by companies operating in China.

The outlining in the past few years of a legislative framework aimed at data protection is not to be understood as moved by a desire to guarantee Chinese citizens the right to privacy. Indeed, the right to privacy finds no explicit constitutional protection in China as well as the protections offered by civil law come across as extremely weak.¹⁵⁸ The need to develop a legislative framework for privacy and data protection appears to be more devoted to addressing the need to ensure greater state control in view of the ever-increasing development of ICTs and their integration into Chinese data-driven governance. This can also be seen in the Chinese constitution, which, although as already pointed out does not mention the right to privacy, does express support for technological development. In fact, Article 14 of the Chinese constitution states as:

¹⁵⁶ Data Security Law of the People's Republic of China, Article 36

¹⁵⁷ He and Fay, «Digital Governance in China: Data, AI and Emerging Technologies, and Digital Trade», 4.

¹⁵⁸ Feng, «The Future of China's Personal Data Protection Law», 62–82.

"The state shall continually raise labor productivity and improve economic performance to develop productive forces by increasing working people's motivation and level of technical skill, promoting advanced science and technology, improving the systems of economic management and enterprise operation and management, practicing different forms of socialist responsibility system and improving the organization of work."¹⁵⁹

In China's approach to data protection, there emerges a desire to strengthen legislative measures on data processing and data utilization, leaving out issues such as data ownership. In addition, with a view to maintaining national security, great attention is given to the issue of cross-border data flow over which the CCP, through the two laws presented, operates increasingly stringent control. These elements highlight the desire to maximize state use of data as invaluable economic, political and social resources.

CHAPTER II: THE SOCIAL CREDIT SYSTEM

The picture traced so far shows that China today faces many complex governance challenges. Here, the mass of ICTs has the potential to redefine Chinese governance by seemingly offering solutions to the problems plaguing the country in terms of legal, economic, social and political enforcement. In this landscape, China's Social Credit System stands as the latest incarnation and symbol of what e-governance in China represents.

The SCS has received considerable attention both inside and outside of China, being alternately presented as a monolithic tool going to make up the final piece in China's transformation into Orwellian Big Brother or as a panacea for all the country's ills. In reality, the SCS is far from being a centralised mechanism with well-defined features. Arsène better frames its nature by defining it as a chimera in order to highlight its patchwork and decentralised nature.¹⁶⁰ Some have also referred to this system as a 'basket case' in order to highlight its generalisation and application to a multiplicity of spheres outside those originally envisaged.¹⁶¹

Making clear sense of what the SCS is a daunting challenge due to both the often abstract and tangled Chinese government policy documents explaining its operation and

¹⁵⁹ The Constitution of the People's Republic of China, art 14 (《中華人民共和國憲法》, 第14條)

¹⁶⁰ Arsène, «China's Social Credit System».

¹⁶¹ Knight, «Basket Case».

implementation, and the limited availability of in-depth studies in English that go beyond the often apocalyptic as well as superficial journalistic accounts. Moreover, the few valid academic sources often approach SCS from such a variety of perspectives that it is difficult to understand its true nature. For instance, Creemers provides an interpretation of SCS as a new tool for propaganda, social management, and influencing public opinion.¹⁶² Similarly, Liang et. al place SCS in the context of a strengthening of state surveillance infrastructure.¹⁶³ Meissner observes both the effect of SCS as a tool to regulate the market with impacts on both domestic and foreign businesses and as a tool to implement mass surveillance and repression.¹⁶⁴ Instead, Ohlberg and, later, Liu capture the multifaceted nature of SCS by considering the different versions in which it appears and the mechanisms it employs through an account of the various pilot cities in which SCS has been adopted.¹⁶⁵ Cheng and Cheung examine the potential threats to privacy posed by SCS and analyse the relevant Chinese legislation.¹⁶⁶ Xin Dai, on the other hand, frames the SCS as a governance measure to solve multiple Chinese problems through the creation of what he calls a 'Reputation State'.¹⁶⁷

Although each of these contributions has enabled the understanding of different aspects characterising the SCS, none has so far captured its essence in a comprehensive manner. Moreover, it must be noted that the SCS is in continuous evolution, thus correctly identifying its essence through a single definition is in itself a big challenge. In this chapter I will therefore attempt to bring together these different analyses of the SCS in order to give a clear and comprehensible picture of it that can serve to explain why the Chinese public expresses such high approval of a system that, while offering multiple solutions, seems to have multiple flaws and dangers. The following chapter will first aim to reconstruct the history and evolution of the SCS. Subsequently, I will present in detail what constitutes the coercive arm of the SCS, namely the Joint Reward and Punishment Mechanism. This will be followed by an observation of the multiple forms that the SCS

¹⁶² Creemers, «Cyber China», 85–100.

¹⁶³ Liang et al., «Constructing a Data-Driven Society».

¹⁶⁴ Meissner, «China's Social Credit System | Merics»; Meissner and Wübbecke, «It-Backed Authoritarianism: Information Technology Enhances Central Authority and Control Capacity under Xi Jinping».

¹⁶⁵ Ohlberg, Ahmed, and Lang, «Central Planning, Local Experiments | Merics»; Liu, «Multiple Social Credit Systems in China».

¹⁶⁶ Cheung and Chen, «From Datafication to Data State».

¹⁶⁷ Dai, «Toward a Reputation State».

takes in the different pilot cities, depending on the geographical context in which it is implemented and the needs to which it responds. Finally, I will delve into the moral component intrinsic to the SCS. This last element is indeed of fundamental importance in explaining such a high level of public support for this system.

2.1 History and Evolution of the SCS

Originally conceived as a financial credit instrument to stimulate economic activities within the Chinese market, the SCS in its most recent incarnation takes the form of a highly decentralised governance instrument that aims to realise the abstract ideological goal of promoting trustworthiness and credibility (*chengxin*) within society.¹⁶⁸ This is promoted through the accumulation of data from citizens and businesses, and the implementation of various indicators and enforcement mechanisms to solve a wide range of social problems focused in four areas: governmental affairs, trade society and the judicial system.¹⁶⁹

The shift from a governance instrument with a clear scope to a system that aims to encompass a multiplicity of disparate areas appears more understandable if we focus on the meaning of social credit itself. Indeed, the term social credit is an inappropriate translation of the Chinese phrase '*shehui xinyong*', which has a marked moral connotation.¹⁷⁰ Credit in Chinese is not to be understood solely as a financial measure but as an expression of trustworthiness, integrity, courtesy, compliance and keeping promises.¹⁷¹ Accordingly, credit when placed in its social dimension is not only an instrument aimed at ensuring honesty in commercial and financial transactions but in all contexts in which social interactions unfold.

The SCS is therefore a complicated instrument to frame clearly because of the constant evolution that characterises it and the significance with which it has been endowed over the years. This evolution is not surprising if we consider how the Social Credit System has now been under development for more than twenty years. During this time, hundreds of policy documents have been produced outlining its operation, several laws have been

¹⁶⁸ Knight, «Technologies of Risk and Discipline in China's Social Credit System», 237; Knight, «Basket Case», 181.

¹⁶⁹ Arsène, «China's Social Credit System: A Chimera with Real Claws», 6.

¹⁷⁰ Dai, «Toward a Reputation State», 14.

¹⁷¹ Knight, «Basket Case»; Dai, «Toward a Reputation State», 14.

passed to give it validity in the Chinese legislative landscape, and several specific government departments have been created to monitor its proper development and implementation.

2.1.1 The Beginning as an Economic Tool

The history of the Social Credit System began in the 1980s and 1990s, during the so-called reform and opening-up period.¹⁷² In its initial conception, Social Credit was understood as an instrument aimed at providing financial credit, or *zhengxin*, to the nascent Chinese market.¹⁷³ China's growing economy needed to free up capital that could be used to pursue activities such as spending, investment and borrowing that could on the one hand continue to fuel economic growth and on the other encourage the population to participate in the country's fast-paced economic life.¹⁷⁴ However, economic growth brought with it the risks associated with capital itself. In an environment where corruption, fraud, labour exploitation, patent infringements, and piracy were rampant within the Chinese economic market, obtaining capital was not an easy process without being able to have assurances as to the intentions of the person to whom credit was given.¹⁷⁵ Moreover, the difficulty in obtaining capital and credit within a growing market led to the creation of a vast 'shadow banking' sector outside the strict control of the Chinese banking sector.¹⁷⁶ Against this backdrop, creating financial institutions that could establish the creditworthiness of their borrowers, and based on this, calculate the risk involved in lending money, became a priority for the Chinese government.

From this, China began to look to other economies to develop a credit scoring tool that would provide a measure of an individual or company's level of risk. The best example was the Fair, Isaac and Company (FICO), used in the United States since 1956, which expressed the level of risk on a scale of 300 to 850 based on five objective measures: payment history, amount owed, length of credit history, credit mix, and new credit.¹⁷⁷ The development of a credit industry in the United States had been at the heart of the American

¹⁷² Knight, «Technologies of Risk and Discipline in China's Social Credit System», 237.

¹⁷³ Ibid.

¹⁷⁴ Ibid.

¹⁷⁵ Woesler et al., «The Chinese Social Credit System. Origin, political design, exoskeletal morality and comparisons to Western systems», 7.

¹⁷⁶ Dai, «Toward a Reputation State», 15.

¹⁷⁷ Lee, «Beyond Big Brother», 15.

economic boom that paved the way for the country's Gilded Age.¹⁷⁸ The expansion of markets made it impossible to continue traditional credit systems based on family relationships or community membership; new means of establishing the risk associated with lending were needed. The credit score was thus becoming a 'technology of risk' used to balance market risks through the use of a number that in itself contained the entire financial history of an individual or company.¹⁷⁹

Although the idea of creating a centralised credit score system to stabilise and stimulate the Chinese market began to take hold in the late 1980s, it would take about a decade before the first steps towards the creation of the SCS were taken. In 1999, the then Chinese Premier Zhu Rongji assigned the task of creating a National Credit Management System¹⁸⁰ to the Chinese Academy of Social Sciences (CASS).¹⁸¹¹⁸² CASS then set out to study how credit-granting works in the emerging economies of Latin America and Asia in order to lay the foundations of China's credit infrastructure.¹⁸³ According to Lin Junyue, the research had basically three objectives:

- To solve market problems by proposing a 'fundamental solution' that would reshape business ethics on the basis of honesty and trustworthiness.
- Stimulate China's economic development to bring it into the realm of credit economy.

¹⁷⁸ Olegario, *The engine of enterprise*.

¹⁷⁹ Knight, «Technologies of Risk and Discipline in China's Social Credit System», 238; Levy, *Freaks of Fortune*.

¹⁸⁰ State Council, «国务院批转国家技术监督局等部门关于建立企业、事业单位和社会团体统一代码标识制度报告的通知_改革大数据服务平台 (Notice on the national administration of technology supervision report concerning the establishment of unified score system for industry, professions and community organisations) »

¹⁸¹ Lin, «林钧跃：为什么说社会信用体系建设起始于1999年? (Lin Junyue: Why is it said that the construction of the social credit system started in 1999?) ».

¹⁸² Lin Junyue, one of the masterminds behind the conceptualization of the SCS, says how Zhu Rongji's decision to initiate the creation of the SCS was triggered by reading a "people's petition" written by Huang Wenyun, the manager of Shenzhen Mimibao Enterprise. The entrepreneur specifically complained about the lack of access to credit in the area. However, this legend does not find confirmation in other more reliable sources, and so it remains in doubt whether this corresponded to reality or was a means of presenting the initiative as a response to the will of the people by the Party

¹⁸³ Knight, «Technologies of Risk and Discipline in China's Social Credit System», 238

- Bridging China's theoretical gaps in terms of corporate credit management and credit economy.¹⁸⁴

The results of the research conducted by CASS formed the basis on which, in November 2002, President Jiang Zemin officially proposed the creation of a 'Social Credit System' during the 16th Party Congress.¹⁸⁵

Responsibility for the design and management of the SCS was primarily entrusted to the People's Bank of China (PBoC), which in 2004 created the 'Banking Credit Reference Service Centre' (later known as the 'Credit Reference Centre' or CRC), the first independent credit scoring bureau.¹⁸⁶¹⁸⁷ According to CRC chair Zhang Zihong during a press conference in January 2021, the CRC has so far collected data from more than 1.1 billion people and 60.92 million enterprises.¹⁸⁸ In December 2004, the State Council set up the first 'leading small group' (*lingdao xiaozu*) with the task of advancing the construction of the credit system.¹⁸⁹ The first *xiaozu* meeting, chaired by the PBoC, consisted of 17 government ministries and the five largest national banks. The structure of the *xiaozu* was later upgraded in 2007, becoming the 'Inter-Ministerial Joint Conference on the Construction of the Social Credit System'.¹⁹⁰ This body, which in its early years continued to deal with the SCS as an exclusively financial instrument, remains to this day the most important body in terms of policy development surrounding the SCS.

Starting in 2011, in particular during the Sixth Plenum of the 17th Party Congress, the concept of social credit began to move out of the purely economic realm and into a variety of Party objectives.¹⁹¹ During this Congress, the 'four general areas' (*sida lingyu*) - government, commerce, judiciary and society - in which social credit must intervene, are

¹⁸⁴ Lin, «林钧跃：为什么说社会信用体系建设起始于1999年? (Lin Junyue: Why is it said that the construction of the social credit system started in 1999?) ».

¹⁸⁵ Ibid.;

¹⁸⁶ Subsequently, the "Banking Credit Reference Service Centre" will be launched nationwide simply as the "Credit Reference Centre" starting in 2006. This explains why authors such as Creemers and Knight, while talking about the same institution, place its creation on different dates.

¹⁸⁷ Creemers, «China's Social Credit System»; Knight, «Technologies of Risk and Discipline in China's Social Credit System».

¹⁸⁸ CBNEditor, «The Credit Reference Center of the People's Bank of China - China Banking News».

¹⁸⁹ Knight, «Technologies of Risk and Discipline in China's Social Credit System»

¹⁹⁰ State Council, «国务院办公厅关于社会信用体系建设的若干意见 (Several Opinions of the General Office of the State Council on the Construction of the Social Credit System) ».

¹⁹¹ 6th Plenum of the 17th Central Committee of the Chinese Communist Party, «Central Committee of the Chinese Communist Party Decision Concerning Deepening Cultural Structural Reform».

highlighted. In the context of a Congress focused on "promoting the complete development of socialist spiritual civilisation and material civilisation", the SCS begins its transformation from a financial instrument to an abstract concept aimed at bringing about a moral and spiritual transformation of society. These changes will be reiterated at the 18th Party Congress in November 2012, which will insist on the importance of solving governance problems through moral education, and at the Third Plenum of the Congress in 2013.¹⁹² Accompanying this ideological shift in what the SCS stands for, in 2012 the control of the Inter-Ministerial Joint Conference shifted from being managed exclusively by the PBoC to being co-managed by the National Development and Reform Commission (NDRC).¹⁹³ This development allows the SCS to claim more power in areas beyond the purely economic.

2.1.2 Expanding the Reach of the SCS: The 2014 Planning Outline

The publication in June 2014 of the 'Planning Outline for the Construction of a Social Credit System' marks a fundamental turning point in the conceptualisation and development of the SCS. This document still stands today as the most articulate and comprehensive presentation of the SCS and marks its official expansion from the economic to the social, political and legal realms. Analysing this passage of the Planning Outline allows us to understand some of the essential characteristics of the SCS as well as some of the motivations behind its creation:

“A social credit system is an important component part of the Socialist market economy system and the social governance system. It is founded on laws, regulations, standards and charters, it is based on a complete network covering the credit records of members of society and credit infrastructure, it is supported by the lawful application of credit information and a credit services system, its inherent requirements are establishing the idea of an sincerity culture, and carrying forward sincerity and traditional virtues, it uses encouragement to keep trust and constraints against breaking trust as incentive

¹⁹² Knight, «Technologies of Risk and Discipline in China's Social Credit System», 240; Sina News, «中央要求开展道德领域突出问题专项教育和治理_新闻中心_新浪网 (The central government requires the launch of special education and governance on outstanding issues in the field of ethics) ».

¹⁹³ Ibid.

mechanisms, and its objective is raising the honest mentality and credit levels of the entire society.”¹⁹⁴

This passage shows how there has been a clear shift in the objectives pursued by the SCS. The focus is no longer exclusively on supporting the 'socialist market economy' but on making the SCS an integral part of social governance capable of promoting honesty and credibility (*chengxin*). The promotion of honesty becomes the main objective to be promoted in each of the 'four general areas' highlighted above.¹⁹⁵ Indeed, the same document points out that 'strengthening sincerity in government affairs, commercial sincerity, social sincerity and judicial credibility' are the generic objectives pursued by the SCS.¹⁹⁶

In this context, the promotion of 'commercial sincerity' reflects the economic roots of the SCS and, at the same time, the desire to improve trust within different economies. Strengthening sincerity in government affairs should be understood as an attempt to bring greater transparency to a government whose actions, especially at the local level, are often seen as marked by corruption.¹⁹⁷ Judicial sincerity is to be understood as a strengthening of the capacity of judicial authorities to share information and to implement punishment more effectively by solving the enforcement problem mentioned above. Finally, social sincerity refers to interventions in areas such as healthcare, social security, labour, employment, education, environmental protection and culture..¹⁹⁸ Overall, the 2014 Planning Outline only provides a set of guidelines as to the objectives and direction the SCS was to follow until 2020. Rather than a specific and articulated design, what stands out is an abstract ideological plan devoted to promoting honesty in multiple areas.

Going further, following the 2014 Planning Outline the construction of the SCS focused on trying to overcome numerous technical barriers. First of all, it was necessary to acquire and process data from different ministerial departments which, as noted above, are often at odds with each other and therefore unwilling to share the data they possess.¹⁹⁹ In an

¹⁹⁴ State Council, «Planning Outline for the Construction of a Social Credit System (2014-2020) ».

¹⁹⁵ Knight, «Basket Case», 240.

¹⁹⁶ State Council, «Planning Outline for the Construction of a Social Credit System (2014-2020) ».

¹⁹⁷ Transparency International, «The ABCs of the CPI»; Transparency International, «China».

¹⁹⁸ State Council, «Planning Outline for the Construction of a Social Credit System (2014-2020) ».

¹⁹⁹ Kluver, «The Architecture of Control»; El-Ebiary et al., «A Prognosis of Chinese E-Governance»; Knight, «Basket Case».

attempt to overcome this blockade, the NDRC created the 'unified social credit code' in June 2015. This 18-digit code was designed as a means to make it possible for different government departments to check information or add new information to a company or individual's social credit record.²⁰⁰

A second obstacle to be tackled was the lack of nationally valid standards for the acquisition of the data needed to feed the SCS. In this regard, following the launch of the unified code, the 'National Technical Committee for the Standardisation of Social Credit Data' was created, composed of 75 members.²⁰¹

Finally, a further technical development aimed at increasing data accessibility and sharing was the creation in October 2015 of the 'National Credit Information Sharing Platform' (NCISP).²⁰² It is the main interdepartmental repository and exchange of information needed for social credit. The National Credit Information Sharing Platform now connects 94 central government departments and 31 provinces, and enables the interconnection and sharing of information with 77 social credit institutions. According to data from 2021, the NCISP has accumulated 61.842 billion credit information data, provided 131.364 billion pieces of data and 2.136 billion times of real-time query/verification services.²⁰³

In the accumulation of NCISP information, an important role is played by private companies. Since the publication of the 2014 Planning Outline, more than sixty companies, including giants such as Alibaba and Baidu, have signed government agreements in which they pledged to share the data they collect that is relevant to the SCS with the central government. The 'Credit China' site itself, which serves as a hub for

²⁰⁰ Knight, «Technologies of Risk and Discipline in China's Social Credit System», 241; State Council, «国务院关于批转发展改革委等部门法人和其他组织统一社会信用代码制度建设总体方案的通知_社会信用体系建设_中国政府网 (Notice of the State Council on approving and forwarding the overall plan for the construction of a unified social credit code system for legal persons and other organizations of the National Development and Reform Commission and other departments) ».

²⁰¹ Ibid.

²⁰² Ibid.

²⁰³ Department of Public Technical Service, «【全国信用信息共享平台项目（二期）（国家信息中心建设部分）顺利通过竣工验收】-国家发展和改革委员会 (The National Credit Information Sharing Platform Project (Phase II) (National Information Center Construction Part) successfully passed the completion acceptance) ».

collecting and sharing a fraction of the social credit information collected with the public, was developed in June 2015 following a collaboration with Baidu.²⁰⁴

In addition, as of January 2015, 8 commercial companies were granted a trial licence by the central government to develop their own credit rating and scoring system.²⁰⁵ The best known example of a commercial credit system is Sesame Credit, created by Ant Financial, a company affiliated with the multinational technology giant Alibaba. Sesame Credit brings together a multitude of personal information, data obtained from social platforms and information on consumption habits to provide a credit score of the individual.²⁰⁶ The model employed by Sesame Credit appears to be considerably more complex than that of the PBoC. According to Li, Sesame Credit would in fact operate machine learning to model thousands of different data dimensions against a PBoC mechanism that would often exploit low-quality data and models.²⁰⁷

2.1.3 The Current Status of the SCS

The Planning Outline covered a period from 2014 to 2020. During this time, the objective was to build an SCS that could operate on a national scale. Today, three years after the end of the period covered by the Planning Outline, it is necessary to understand whether the set objectives have been achieved.

First of all, it would be wrong to think that there is a single, unified SCS in China today. Instead, it is more correct to speak of multiple and co-existing SCSs operating at different levels and often not aggregated with each other. In this regard, Liu identifies the existence of four main types of SCSs stemming from two different approaches.²⁰⁸

The first approach considers the SCS as an infrastructure for economic and financial activities using data mainly from banks and other financial institutions. From this point of view, we can distinguish between the Credit System implemented by the PBoC and the Commercial Credit Systems created by private companies. The latter, of which the major example is the aforementioned Sesame credit score, are no longer operational. In fact, the test licences granted to private companies for the development of individual

²⁰⁴ State Council, «China establishes credit score website».

²⁰⁵ Liu, «Multiple Social Credit Systems in China», 23.

²⁰⁶ Ohlberg, Ahmed, and Lang, «Central Planning, Local Experiments | Merics», 4.

²⁰⁷ Li, «Ant Financial Subsidiary Starts Offering Individual Credit Scores ».

²⁰⁸ Liu, «Multiple Social Credit Systems in China», 23.

credit systems ended in 2017 and were not renewed by the PBoC.²⁰⁹ The reason for this seems to be a lack of data sharing between various platforms by these companies, numerous conflicts of interest and a misalignment as to what information went into the credit. In place of these private business initiatives, in 2018 the National Internet Finance Association of China, under the control of the PBoC, launched in conjunction with these 8 companies the Baihang Credit.²¹⁰ To date, Baihang Credit stands as the only commercial company licensed for credit scoring activities in China.

The second approach sees the SCS as a social governance mechanism under the control of the NDRC.²¹¹ Through this approach we can distinguish the adoption of mechanisms for assigning punishments or rewards called blacklisting/redlisting developed by different government departments or municipalities. This type of SCS exploits a multiplicity of data, not only of a financial nature, collected through different modalities and aimed at punishing or rewarding certain behaviours according to their trustworthiness. These SCSs constitute those most discussed both nationally and internationally and are specifically aimed at promoting social trustworthiness. Here, local governments have established hubs of innovation and experimentation about SCS-related punitive measures.

In such a fragmented landscape, there is still a lack of systematic codification of what SCS is and how it should be implemented in the future. A first step in this direction seems to be the draft law on the Establishment of the Social Credit System (Social Credit Law) announced in November 2022.²¹² While the Social Credit Law provides clear regulation to what SCS is from a financial perspective, it does not clarify the social aspect of SCS. In this respect, the SCS is still characterized by differing practices depending on the context in which it is applied, varying data quality as well, an almost non-existent level of centralization, and the use of often low-tech technologies for data acquisition. The development of the SCS as a social tool is likely to be one of the major issues from an internal governance perspective that Beijing will face in the coming years. With this in

²⁰⁹ Ibid. 24

²¹⁰ Zhou, «China approves personal credit platform for online lending - Xinhua | English.news.cn».

²¹¹ Liu, «Multiple Social Credit Systems in China», 23.

²¹² Yang, «China Just Announced a New Social Credit Law. Here's What It Means »; China Law Translate, «Law of the PRC on the Establishment of the Social Credit System (Draft Released for Solicitation of Public Comments) ».

mind, a major challenge is to increase data sharing and aggregation processes in anticipation of a more massive centralization of the SCS.²¹³

In conclusion, and based on what has been said so far, SCS should be understood as an attempt to automate various aspects of governance through heavy reliance on ICTs. Such an approach is described by Pieke as "neosocialism," or a fusion of socialist beliefs with technologies made available by the market.²¹⁴ The future about the development of the SCS remains an open parenthesis to date, but what is certain is the CCP's desire to make it a pillar of the country's social governance.

2.2 The Coercive Arm of the Social Credit System: The Joint Reward and Punishment System

So far, I have reconstructed the path that led to the conceptualization of the SCS and the first institutional steps aimed at its implementation. Originally conceived as a financial instrument, the SCS now presents itself as a governance tool aimed at promoting honesty and credibility in the economic, political, legal and social spheres. In this endeavour, one can see the desire to create a digital dossier attesting to an individual's reputation.²¹⁵ According to Xin Dai, China is in fact moving toward what he calls the construction of a "reputation state".²¹⁶ Reputation is institutionalized here and used in the decision-making process to improve efficiency and compliance with the norms and values that the state wishes to promote.

Within the Chinese system, reputation thus becomes not an abstract concept but an actual currency on the basis of which one can gain advantage or alternately receive punishment. It is in this way that the credit score becomes capable of having repercussions on the real lives of individuals and companies. Individuals who engage in behaviour in violation of ministerial regulations can see their private information recorded, published and shared among different government bodies each of which will go on to impose its own sanction.

²¹³National Development and Reform Commission, «【关于加强信用信息共享应用推进融资信用服务平台网络建设的通知(发改办财金〔2022〕299号)】-国家发展和改革委员会 (The General Office of the National Development and Reform Commission and the General Office of the China Banking and Insurance Regulatory Commission have issued a notice on strengthening Credit information sharing application promotes financing credit service platform Network construction notice)».

²¹⁴Pieke, *The Good Communist*.

²¹⁵ Dai, «Toward a Reputation State».

²¹⁶ Ibid.

Often the punishment is not only administrative in nature but becomes a full-fledged process of public humiliation aimed at mortifying the individual in question and destroying his or her reputation in the public square. Finally, punishments may come in the form of a ban on access to certain services or the purchase of certain goods.

Conversely, behaviours that are considered virtuous, in line with Chinese moral values, and that demonstrate trustworthiness are rewarded through benefits of a variety of kinds and public exaltation. These benefits can range from easier access to certain types of credit to public exaltation in local newspapers for actions that manifest a high level of morality

The awarding of punishments or rewards is a function of a subject's placement on a blacklist or redlist. The criteria that are adopted and the data considered to place a subject on one of these lists are often unclear. The following sections will focus on explaining in more detail how the blacklist/redlist system works, the criteria for awarding penalties or rewards, and the critical issues and limitations of this system.

2.2.1 Redlisting and Blacklisting

Central to the breakthrough marked by the 2014 Planning Outline was the creation of a joint system devoted to creating incentives or disincentives that could increase compliance. Such a system was intended, with the abstract goal of promoting trustworthiness, to enable the aforementioned governance problems in terms of judicial enforcement, social management, economic development, and internal governmental monitoring to be bridged.²¹⁷ For the purpose of this, the policy mechanism central to the operation of the SCS was the creation of blacklisting i.e., a list into which both individuals and companies considered untrustworthy were grouped.

Blacklisting was originally created in 2013 at the initiative of the Supreme People's Court (SPC) to make up for the courts' inability to enforce established punishments (*zhixing nan*).²¹⁸ In fact, as pointed out earlier, China, as a rule by law system, goes to prioritize the will of the party in the legislative sphere over the autonomy and power of the courts. As a corollary of this, we can observe a very low rate of enforcement about the judgments

²¹⁷ Ibid. 41

²¹⁸ Knight, «Technologies of Risk and Discipline in China's Social Credit System», 242; Clarke, «The Execution of Civil Judgments in China», 65–81.

of Chinese courts especially in civil and economic cases.²¹⁹ If a court is unable to enforce its judgments then the law to little meaning and this goes to undermine the very deterrence potential of the laws. In this context, the development of black lists (*hei mingdan*) meant that judgment defaulters or laolai saw their information recorded on specific lists for a period of two years and that their names were made public through the news media.²²⁰ One's presence on a blacklist carried with it a number of penalties for the laolai such as the inability to access government subsidies or to advance in employment if the person in question was a public employee.²²¹

This system was originally absorbed within the SCS. The creation and maintenance of blacklists is extended from control by the SPC to go to include other government ministries, the PBoC, the NDRC, and forty-one other organs through the signing of a memorandum of understanding (MOU) dating back to April 2016.²²² This MOU was intended to establish a framework in which various government departments could cooperate to share information with each other about judgment defaulters and apply punishments to them. Later, this initiative was further formalized by the State Council through the publication of a *guiding opinion on Establishing and Improving a Joint Incentive for Trustworthy* and a *Joint Punishment System for Untrustworthy to Accelerate the Construction of Social Integrity*.²²³

The strengthening of interministerial blacklist sharing should be interpreted in light of the principle that an untrustworthy individual should be prevented from advancing in society.²²⁴ According to this approach, those who committed violations in one area were to be punished in all others as well. Moreover, these punishments were to be visible to all

²¹⁹ Ibid.

²²⁰ Ibid.; Creemers, «China's Social Credit System»; The term laolai can be translated as "deadbeat" and goes in a generic sense to indicate an extraordinarily dishonest individual who refuses to pay his or her debts. The category of laolai thus presents a moral judgment based on the inherent dishonesty of the person in question and an economic dimension encapsulated in the unwillingness to repay a debt.

²²¹ Liu, «Multiple Social Credit Systems in China», 24.

²²² Finder, «Supreme People's Court & 43 Other Central Institutions Commit to Punishing Judgment Debtors».

²²³ State Council, «国务院关于建立完善守信联合激励和失信联合惩戒制度加快推进社会诚信建设的指导意见_社会信用体系建设_中国政府网 (Guiding Opinions of the State Council on Establishing and Improving a Joint Incentive for Trustworthy and a Joint Punishment System for Untrustworthy to Accelerate the Construction of Social Integrity) ».

²²⁴ Li, «建立黑名单制度·让失信者全社会寸步难行_财经上下游_澎湃新闻 (Establish a blacklist system to make it difficult for the whole society to move forward with dishonest people) ».

and made public. With this in mind, the publication of blacklists on national platforms such as NCISP and Credit China served this very purpose.

At the same time, in addition to the desire to punish in sympathetic manners those who violate the law, there also emerges a desire to reward those who engage in virtuous behaviour. To this end we can observe the creation of redlists, or lists of individuals whose actions are held up as examples of good morals. As expressed through the words of the Chinese government, the task of redlists is to "allow the trustworthy to roam everywhere under heaven."²²⁵ However, compared to blacklists whose criteria for inclusion are clearer by going with behaviours that violate laws and regulations, the criteria that result in inclusion on redlists appear extremely vague.

Engelmann notes how individuals or companies included in redlists are awarded honorary titles depending on behaviours that may be considered noteworthy moral activities.²²⁶ However, it is not possible to understand concretely what trustworthy behaviours are since they are loosely associated with a simple attribution of characteristics that reflect the moral values the CCP aims to promote. In contrast to blacklists, which have clear sanctions that will be the subject of the next section, redlists do not often have benefits beyond simple reputational gain.²²⁷ This can probably be attributed to two factors. First, while blacklisting results in the exclusion of the individual from certain resources, associating redlisting with material benefits would entail costs that the state would have to bear. Thus, the first reason is economic, related to proper resource management.

Secondly, inclusion in a redlist responds primarily to moral criteria, and therefore, offering material benefits would impose a utilitarian rationale. In this view, redlists respond to ideological rather than practical needs.

In terms of redlists, starting with the "Second Summit for the Construction of City Social Credit" in June 2018, the NDRC's creation of "CreditEase+" (*xinyi jia*) is announced.²²⁸ This is a new policy about awards attributable under the aegis of the SCS that aimed to

²²⁵ Engelmann et al., « Clear Sanctions, Vague Rewards », 70.

²²⁶ Ibid.

²²⁷ Ibid.

²²⁸ Sohu News, « 国家信息中心发布《中国城市信用状况监测评价报告2018》蓝皮书 (The National Information Center released the "China Cities Credit Status Monitoring and Evaluation Report 2018" blue book) ».

produce incentives in relation to the demonstrated behaviours and credit score of individuals in five different areas: loans, rent, travel, approve and tourism. CreditEase Loans offers access to low-interest loans for small and medium-sized businesses. CreditEase Travel offers opportunities for discounts or free travel regarding public transportation. CreditEase Approve offers preferential treatments in accessing government services. CreditEase Rent offers start-ups and small businesses subsidies in order to boost innovation. Finally, CreditEase Tourism provides access to discounts and promotions in hotels, restaurants and tourist attractions.²²⁹

Before proceeding to describe in more detail the penalties and rewards given to individuals according to their credit score, I think it is important to further clarify how the data to calculate these scores are obtained. The nature of the data collected is both financial and non-financial. Financial data include bank statements, taxes, loans, and transactions acquired by financial institutions and whose acquisition is through the platforms of domestic banking institutions and the PBoC.

Non-financial data a multiplicity of personal and social information such as employment, education, criminal record, social media use, and other social behaviour data obtained through state surveillance infrastructure.²³⁰ These data are generally held by the NCISP, which obtains them through a combination of government and private channels.

Once collected, the data are differentiated into private sharing, limited sharing, and intergovernmental sharing depending on the sensitivity of the data and the freedom with which they can be shared and then aggregated to enable the implementation of the sanctions provided under the Joint Punishment and Reward Mechanism.²³¹ It must be pointed out that at present it is not yet possible to produce sanctions in real time by exploiting an algorithmic decision-making process.²³² Although this constitutes the desired end point of the CCP, sanctions are still imposed by various government departments or local governments based on aggregate information on reputation and violations by individuals and companies.

²²⁹ Knight, «Technologies of Risk and Discipline in China's Social Credit System», 248.

²³⁰ Meissner and Wübbecke, «It-Backed Authoritarianism: Information Technology Enhances Central Authority and Control Capacity under Xi Jinping»; Cheung and Chen, «From Datafication to Data State»;

²³¹ Liang et al., «Constructing a Data-Driven Society», 428.

²³² Arsène, «China's Social Credit System: A Chimera with Real Claws», 12.

It is for this reason that it is currently not possible to identify a specific set of measures that can be taken in the case of blacklisted or redlisted individuals. The various departments and local governments often apply sanctions that are not a direct expression of the central government but the result of their personal interpretation about the consequences of untrustworthiness leading to the implementation of sanctions that are often very different from each other. In an effort to standardize the sanctions regime related to the SCS, the State Council in November 2020 highlighted the need to standardize and improve the disciplinary measures implemented.²³³ According to Premier Li Keqiang's statement, the sanctions taken must have a legal basis, must be applied when necessary and be limited in purpose, and must adhere to the criteria of proportionality about the offense they are going to punish.²³⁴

2.2.2 Making Sense of the SCS's Sanctions

In its coercive function, symbolized by the Joint Punishment and Reward Mechanism, the SCS aims to punish the "untrustworthy" (*shixin*).²³⁵ In this regard, the aforementioned 2016 Guiding Opinion, offers a simple list of behaviours deemed as untrustworthy without, however, providing details about which individuals fall into this category or what actions they take.²³⁶ In addition to judgement defaulters, who are the individuals most clearly categorized as untrustworthy and therefore subject to SCS sanctions, vagueness about the meaning of *shixin* has often led to individuals, whose behaviours do not constitute violations of the law, being subject to sanctions under the SCS.

In several contexts, cases have emerged where administrative violations, or even what can be seen as crimes with a moral nature, have led to sanctions. Behaviours such as

²³³ State Council, «[李克强主持召开国务院常务会议 确定完善失信约束制度健全社会信用体系的措施等_滚动新闻_中国政府网](#) (Li Keqiang presided over an executive meeting of the State Council to determine measures to improve the breach of trust restraint system and improve the social credit system) ».

²³⁴ Knight, «Basket Case», 198.

²³⁵ Ibid.

²³⁶ State Council, «[国务院关于建立完善守信联合激励和失信联合惩戒制度加快推进社会诚信建设的指导意见_社会信用体系建设_中国政府网](#) (Guiding Opinions of the State Council on Establishing and Improving a Joint Incentive for Trustworthy and a Joint Punishment System for Untrustworthy to Accelerate the Construction of Social Integrity) ».

frequently changing jobs, getting parking tickets, or even eating on the subway have in some cases impacted the credit record of individuals.²³⁷

These elements suggest that the coercive mechanisms of the SCS are not solely aimed at making up for the lack of judicial enforcement but at empowering the state to supervise and direct the moral and ethical life of the individual. In this perspective, the SCS would go on to constitute a kind of moral dossier by making the ethical norms promoted and desired by the state become sorts of pseudo-laws to be adhered to.²³⁸

Because of the reasons presented so far, clearly identifying the punishments meted out to blacklisted individuals and businesses presents itself as a complex task due to the lack of uniformity in the sanctions employed in China's different regional and local contexts. Even more complex is presented by understanding the scale of severity with which each violation is punished. However, Professor Shen Kui, an expert in constitutional and administrative law at Peking University, distinguishes six categories to which the applied punishments fall:

1. Credit file entries: This constitutes the disciplinary measure of the most basic nature and having the least punitive component. It consists of centrally recording information about untrustworthy behaviour and perpetrators. This data will be recorded in the credit score of the individual in question who will subsequently be subject to other punishments under the system.
2. Cautionary warning: This disciplinary measure constitutes a simple warning to persons considered to be dishonest and, therefore, the impact on the individual is presented as very limited. This measure has a cautionary function and may in practice lead to the individual in question having to undergo an interview with an officer who will be tasked with assessing the behaviour considered untrustworthy.
3. Increased supervision: As the name suggests, this punitive measure consists of imposing increased supervision and control on the subject in question. Shen points out that this type of measure is usually applied to firms that, as a result of

²³⁷ China Internet Joint Rumour Refutation Platform, «正常使用花呗会影响个人信用?关于个人征信的这些谣言你中招了吗?--社会·法治--人民网 (Will normal use of Huabei affect personal credit? Have you fallen for these rumors about personal credit reporting?)».

²³⁸ Knight, «Basket Case», 192.

infractions, may be subject to more frequent scrutiny by labor inspectors and subject to severe punishment if repeated violations are found.

4. Reputational damage: This punitive measure involves going after the reputation of those considered untrustworthy in order to affect their social standing. Measures that fall into this category are public dissemination of the dishonest behaviour through the media, public condemnation, and revocation of any honorary titles. The punishment inflicted in this case is not legal but reputational in nature. This naming and shaming mechanism can be seen in numerous local-level applications of the SCS.
5. Disqualification Measures of this type are the restriction, for people who demonstrate dishonest behaviour, on access to public resources, public offices, public services, honours, and specific jobs or positions in specific industries. Restrictions on access to credit or obtaining insurance may also be applied. This stands as one of the most commonly adopted measures as well as one of the few whose implementation measures are clearly mentioned within the 2014 Planning Outline.²³⁹
6. Restrictions on personal freedoms: These measures frequently consist of restricting the freedom of movement of the individual who does not perform their legally prescribed obligations or who qualifies as untrustworthy. According to the State Council, these sanctions go to restricting the ability to "exit the country and purchase real property, travel by plane, travel by higher class train seat, travel and vacation, stays in star-rated hotels, and other high-spending conduct".²⁴⁰²⁴¹

Each of these sanctions is classified according to its progressive severity, moreover, different sanctions may be applied simultaneously. For example, in March 2018, the Jilin city government blacklisted 17 soldiers accused of leaving the military.²⁴² The soldiers in question have been subjected to restrictions on their personal freedom such as the inability

²³⁹ State Council, «Planning Outline for the Construction of a Social Credit System (2014-2020) ».

²⁴⁰ State Council, «国务院关于建立完善守信联合激励和失信联合惩戒制度加快推进社会诚信建设的指导意见_社会信用体系建设_中国政府网 (Guiding Opinions of the State Council on Establishing and Improving a Joint Incentive for Trustworthy and a Joint Punishment System for Untrustworthy to Accelerate the Construction of Social Integrity) ».

²⁴¹ Shen, «社会信用体系建设的法治之道 (The rule of law in the construction of social credit system) », 525–46.

²⁴² Mo, «Jilin City punishes 17 people for quitting military service».

to leave the country, purchase property, the ability to travel by air, and to purchase luxury goods. In addition, they were subjected to disqualification measures such as the inability to take the civil service test and to pursue higher secondary education for two years. Finally, their information was made public through the media to destroy their reputation.

This naming and shaming mechanism is a widely applied strategy within the sanctions regime under the SCS. In some localities, this may take the form of displaying the names of untrustworthy individuals on LED screens in train stations or outside public buildings.²⁴³ Even, the Henan court ordered that blacklisted individuals be forced to change their ringtone to a public service announcement signalling the person's untrustworthiness to everyone in the vicinity whenever the phone owner receives a call.²⁴⁴ According to Yang Jun, Secretary of the Enforcement Bureau of Dengfeng Court, such measures should push the *laolai* not to repeat their faults through popular solicitation and humiliation.²⁴⁵ Such measures reinforce the view that the SCS is not solely a tool of judicial enforcement but an attempt to make morality itself law.

Another aspect related to SCS punitive measures is how they are not limited only to the *laolai* but often involve his or her own family. A much-discussed case involve the city of Quanzhou where, faced with a parental debt of RMB 80 million, a child was expelled from the school where he was studying through the Joint Punishment System.²⁴⁶ This practice was subsequently repeated by numerous other schools in the cities, even being endorsed by the Quanzhou Municipal Ministry of Education itself.

2.2.3 Critiques and Limitations of the SCS's Sanctions

The vagueness with which the criteria by which individuals are defined as untrustworthy and the lack of clearly defined punishments have led numerous voices both domestically and internationally to criticize the sanctions imposed by the SCS. Indeed, the punishments imposed go to violate the right to privacy and freedom of expression. Moreover, the very

²⁴³ Dai, «Toward a Reputation State», 26.

²⁴⁴ Sohu News, «就问你怕不怕！老赖：“我马上还钱” (Just asking you if you are afraid! Lao Lai: “I’ll pay you back right away!”) ».

²⁴⁵ Ibid.

²⁴⁶ Zhong, «泉州一私立学校：父母任何一方是失信被执行人的，拒接纳新生_中国政库_澎湃新闻 (A private school in Quanzhou: If either parent is a person subject to breach of trust, it will refuse to admit new students) ».

legal foundations on which the SCS is supposed to be based seem to fail when we look at how the system is implemented. What was ideally meant to serve as a tool to increase compliance with the law seems to have evolved into a tool that does not act within the law but autonomously from it. The SCS disregards foundational principles of law such as that of legal certainty, the principle of proportionality, and the prohibition of double jeopardy. These shortcomings have raised multiple sets of criticisms.

The first set of criticisms refers to the lack of clarity that distinguishes both the concepts of credit and untrustworthy. According to Wang Lu, former deputy director of the PBoC's Credit Information Center, the concept of credit has become the bogeyman behind which many government officials conceal multiple different governance challenges.²⁴⁷ This position is shared by Xin Dai, who believes how the expansion of policy initiatives conducted in the name of the SCS can be traced to the gains in capacity and power that these entail.²⁴⁸ Access to more information, coercive powers, and jurisdictional power then become powerful incentives. Moreover, this expansion of credit beyond its original conceptualization would conceal a desire to grab accomplishment by government officials who would find it easier to prove their worth through the SCS than through economic growth.²⁴⁹ Finally, initiatives under the auspices of the SCS attract investment in ICTs and this further the capabilities of local officers and governments.²⁵⁰ From this perspective, the concept of restricting the actions of the untrustworthy in any area and by any means would deprive the entire system of legitimacy and expose it to abuses that would undermine its foundations in the long run.

Regarding the penalties resulting from blacklisting, the criticism that assumes the most prominence both internally and externally refers to the failure to meet the criterion of proportionality. Through the Joint Punishment Mechanism, penalties pile on top of each other turning into the adoption of extreme measures that have accessed a vibrant debate

²⁴⁷ Wang, «泛化信用十日谈：这颗子弹还要飞多久_观点频道_财新网 (Generalized Credit Decameron: How long will this bullet fly?) ».

²⁴⁸ Dai, «Toward a Reputation State», 48.

²⁴⁹ Wang, «泛化信用十日谈：这颗子弹还要飞多久_观点频道_财新网 (Generalized Credit Decameron: How long will this bullet fly?) ».

²⁵⁰ Ibid.; Shen, «社会信用体系建设的法治之道 (The rule of law in the construction of social credit system) », 525–46.

within public opinion.²⁵¹ The magnitude of the offense loses weight, no matter whether this is greater or lesser, the important thing is the punishment inflicted. In this way, crimes such as jaywalking assume are hit with the same ferocity as a company guilty of massive environmental destruction. Moreover, sharing blacklists in order to allow different jurisdictions to impose their own penalties would go a long way toward increasing the risk of double jeopardy, or the duplication of sentences for the same behaviour.²⁵²

Such an operational model would lack a legal basis within the Chinese model according to Peng Tao.²⁵³ In particular, Peng points out that although many of the behaviours classified as untrustworthy do qualify as unlawful under Chinese law, the punishments provided arise from administrative rules whose position lacks the necessary authority.²⁵⁴ The entire system of sanctions provided within the SCS would also be deficient in terms of legal certainty. Since the behaviours to be punished are often free to be interpreted by local governments based on the vague guidance provided by the central government, it is almost impossible to know firstly whether a given behaviour corresponds to untrustworthy behaviour, and secondly how this will be sanctioned.

At present, China's legislation does not offer solid privacy guarantees to its citizens, instead merely reinforcing the control exercised by the state over domestic data management.²⁵⁵ However from a human rights perspective, the practice of releasing the data of those considered untrustworthy in order to humiliate them comes across as a clear violation of privacy and dignity. The publication of citizens' data makes it possible to profile them on the basis of government-imposed sanctions. The reputational damage caused by this practice is extensive and often irreversible. Suffice it to recall the humiliation suffered in 2006 by some sex workers and clients forced to march through downtown Shenzhen as a form of humiliation or the similar treatment of those who violated

²⁵¹ Arsène, «China's Social Credit System: A Chimera with Real Claws», 15.

²⁵² Knight, «Basket Case», 195.

²⁵³ Peng, «失信联合惩戒制度的法治困境及出路: 基于对41份中央级失信惩戒备忘录的分析 (The legal dilemma and solution of the joint punishment system for dishonesty — Based on the analysis of 41 central-level disciplinary memos for breach of trust) ».

²⁵⁴ Ibid.

²⁵⁵ Chen and Cheung, «The Transparent Self Under Big Data Profiling», 371-74

Covid-19 rules in 2021.²⁵⁶ Such measures are a clear reminder of the "rectification campaigns" common during the Cultural Revolution in which class enemies were referred to popular justice, publicly beaten, and forced to confess their crimes.²⁵⁷

Finally, sanctions also lend themselves to becoming a repressive measure directed against political opponents. In this regard, Human Rights Watch points to the case of Liu Hu, an investigative journalist who over the years exposed numerous cases of bribery and wrongdoing by high-ranking officials by publishing details of their violations.²⁵⁸ Liu was allegedly unbeknownst to him blacklisted and prevented from purchasing an airline ticket. The reason would be a defamation lawsuit dating back to 2016 in which Mr. Liu was ordered to publicly apologize and pay the court an amount of \$115. Although Liu was found to be seeking legal redress about the conviction, he would still be blacklisted without any prior notification. Although it cannot be clearly said that there was a clear intent of repression behind the case in question, Zhu Xiaoding, a Beijing lawyer who specializes in administrating proceedings, says how there are dozens of cases in which individuals who had strongly criticized the government in the past find themselves blacklisted out of the blue.²⁵⁹ One of the main problems in these cases is the lack of appeal mechanisms that make it possible to access and modify blacklisted data if it turns out to be incorrect.²⁶⁰ In fact, access to judicial remedies often depends on the relevant local legislation making the entire process extremely context-dependent.²⁶¹

In the face of the flaws highlighted so far, Knight highlights some important developments Following numerous requests from many Chinese scholars, in July 2020 the NDRC published the *Guiding Opinions on Further Regulating the Scope of Public Credit Information Untrustworthy Punishments and Credit Repair, and Establishing Long-term Mechanisms for the Construction of Trustworthiness* that would go on to clarify what kind of credit information should be considered, when and how the data should be made public, what punishments can be applied, and how the credit record can

²⁵⁶French, «Shenzhen's Public Humiliation of Sex Workers Provokes a Backlash - Asia - Pacific - International Herald Tribune»; Guangxi Daily, «百度安全验证 (Jingxi carries out on-site punishment and warning activities for violating the ten laws) ».

²⁵⁷ Ibid.

²⁵⁸ Human Rights Watch, «China's Chilling 'Social Credit' Blacklist | Human Rights Watch».

²⁵⁹ Vanderklippe, «Chinese Blacklist an Early Glimpse of Sweeping New Social-Credit Control».

²⁶⁰ Chen and Cheung, «The Transparent Self Under Big Data Profiling», 373-76

²⁶¹ Ibid.

be repaired.²⁶² This draft document, together with the *Guiding Opinions on Further Improving the Restraint System for Untrustworthy Behavior and Establishing Long-Term Mechanisms for Construction of Trustworthiness* published by the State Council, symbolize to date the major attempts to want to give a legal foundation to the sanctions under the SCS and to terminate SCS demonstrations that do not comply with the required requisites. However, in the same announcements, the government expresses a willingness to maintain the best practices that have proven their efficiency over the years, no matter how extreme or extravagant these are.²⁶³

Based on these two documents in 2021, the *Draft Measures for the Management of Credit Repair* and the *National Social Credit Information Basic Catalogue* were published by the NDRC in conjunction with the PBoC.²⁶⁴ The first document expands about the ways through which a negative credit score can be recovered. The second, on the other hand, offers a clearer definition about the data that government departments must collect which must be primarily market data and administrative violations. These catalogues already existed at the local level, but through this document, standards are defined at the national level.²⁶⁵ However, local governments continue to retain a degree of autonomy about what data can be published except for a few specific categories. Complementing the Basic Catalogue, the *National Basic List of Disciplinary Measures for Untrustworthiness* is also published which presents some standardized penalties to be assigned to untrustworthy

²⁶² Ibid.; National Development and Reform Commission, «关于进一步规范公共信用信息纳入范围、失信惩戒和信用修复构建诚信建设长效机制的指导意见 (征求意见稿) (Guiding Opinions on Further Regulating the Scope of Inclusions in Public Credit Information, Punishments for Untrustworthiness, and Credit Restoration to Build Long-Term and Effective Mechanisms for Establishing Creditworthiness (Draft for Solicitation of Public Comments)) ».

²⁶³ Knight, «Basket Case», 196–210; State Council, «国务院办公厅关于进一步完善失信约束制度构建诚信建设长效机制的指导意见_社会信用体系建设_中国政府网 (Notice of the General Office of the State Council on further improving the breach of trust restraint system Guiding Opinions on Establishing a Long-term Mechanism for Integrity Construction) ».

²⁶⁴ National Development and Reform Commission, «关于对《信用修复管理办法 (试行) (征求意见稿)》公开征求意见的公告-法治政府网 ((Announcement on the public solicitation of opinions on the "Credit Repair Management Measures (Trial) (Draft for Comments)) »); National Development Reform Commission and People's Bank of China, «互动交流-国家发展和改革委员会 (Announcement on the public solicitation of opinions on the "Basic Catalogue of National Public Credit Information (2021 Edition) (Draft for Comments)" and the "Basic List of National Punishment Measures for Dishonesty (2021 Edition) (Draft for Comments))».

²⁶⁵ Knight, «Basket Case», 196–210.

individuals.²⁶⁶ The penalties in the Basic List do not differ substantially from those already imposed in local applications of the SCS. In addition, local governments retain the power to make changes to the prescribed punishments, albeit in accordance with existing laws and with the approval of central authorities.

These reforms, as well as the Social Credit Law, should not be understood as a radical change about the functioning of the SCS but as an attempt to bring back to the central government control about the development and implementation of the SCS. The changes are not structural in nature but serve only to give a clear guideline that is independent of locally implemented interpretations and to give the SCS a clear legal and administrative framework that is valid nationwide. In essence, the risks and potential for abuse of the measures under the SCS remain. Indeed, there are no changes that go to mitigate the violations for the right to privacy, freedom of movement, and freedom of expression previously highlighted. These developments certainly solve problems related to legal certainty and the vague conceptualization of the penalties involved and what is meant by trustworthiness. However, they do not go to significantly affect the problems of proportionality and double jeopardy highlighted. Moreover, these measures are still in the embryonic stage. It will be necessary to wait a few more years before seeing their effects.

2.3 The Importance of Local Experimentation: The SCS Pilot Cities

In the development of the Social Credit System, local contexts have been an extremely important hub of innovation and experimentation. It is by virtue of this that the SCS in its most concrete manifestations has been characterized by endless facets in terms of procedures, ways of acquiring data, measures implemented and punishments applied. Local implementation has been the only stable feature in what is otherwise configured as a chaotic and erratic system.

Pilot programs to test the SCS can be divided into two categories.²⁶⁷ First we find SCS run by local governments or applied sectorially to specific provinces, cities, or specific

²⁶⁶ National Development Reform Commission and People's Bank of China, «互动交流-国家发展和改革委员会 (Announcement on the public solicitation of opinions on the “Basic Catalog of National Public Credit Information (2021 Edition) (Draft for Comments)” and the “Basic List of National Punishment Measures for Dishonesty (2021 Edition) (Draft for Comments)» ».

²⁶⁷ Ohlberg, Ahmed, and Lang, «Central Planning, Local Experiments | Merics», 11.

policy or business areas. The second category refers to commercial SCSs carried out by private companies such as the aforementioned Sesame Credit by Ant Financial. The latter category of initiative, having not been extended beyond 2018 at the behest of the central government, will not be covered. It is in local experiments and pilot cities that the most interesting developments about SCS go to reside.

Starting in August 2015, the Joint Conference on the Construction of the Social Credit System decided to launch a project of 11 pilot cities, later increased to 43, that would implement their own version of the social credit system.²⁶⁸ Local projects of this kind began to proliferate exponentially outside the official pilot cities leading to a record 653 separate social credit initiatives in 2017.²⁶⁹

One year after the official launch of the 43 pilot cities, the think tank Reform Daily and the universities of Beijing and Renmin were commissioned by the NDRF and the PBoC to analyse and evaluate the progress of the pilot cities.²⁷⁰ Each of the cities analysed was rated on a 100 basis as a function of criteria such as the level of intra-governmental cooperation, characteristics about the implementation of the joint punishment and reward system, the degree of computerization of the system, and the accessibility of credit information to citizens. Alongside these technical criteria there were also more abstract and ideological ones such as the ability to promote a culture of honesty and trustworthiness or adherence to Xi Jinping's thinking.²⁷¹ The result of this analysis was the publication in 2018 of a list of 12 cities that constituted themselves as virtuous models of Social Credit System implementation.²⁷² Prominent among them was the city of

²⁶⁸ National Development and Reform Commission, «[全国首批创建信用体系建设示范城市确定_滚动新闻_中国政府网](#) (The first batch of demonstration cities for establishing credit system construction in the country have been confirmed) ».

²⁶⁹ Knight, «Technologies of Risk and Discipline in China's Social Credit System», 250.

²⁷⁰ Ibid.

²⁷¹ Ibid., 251.

²⁷² National Development and Reform Commission, «[【首批社会信用体系建设示范城市名单公布】- 国家发展和改革委员会](#) (List of first batch of demonstration cities for social credit system construction announced) »; Specifically, the model cities listed were Hangzhou, Nanjing, Xiamen, Chengdu, Suzhou, Suqian, Huizhou, Wenzhou, Weihai, Weifang City, Yiwu City, and Rongcheng City. Each of these cities had distinguished themselves by their achievements about the SCS. In terms of implementation, each city could differ significantly from the other. For example, in Wenzhou, credit scores ranged from A to D and were aimed primarily at deterring fraud and plagiarism within the academic sector. In contrast, in Huangzhou, the SCS was presented as more targeted at public services and welfare. Citizens were

Rongcheng, at the eastern extremity of Shandong Province. Rongcheng was praised by numerous Chinese authorities as the most developed and inclusive example of SCS, being awarded a national innovation award and ranked as the most developed city in China.²⁷³

2.3.1 Credit Cities as a Form of Adaptive Governance

This emphasis on local implementation, although underlying the problems and criticisms previously found about the SCS, is not to be seen as a fluke or design flaw. The highly decentralized structure in terms of decision-making and the difference in the application of sanctions at the local level are an integral part of the Chinese governance model. The general direction to be followed is enshrined by the central government through key documents, which in the case of the SCSs consist of the 2014 Planning Outline and the 2016 Guiding Opinion while the actual implementation is left in the hands of local entities that direct their conduct according to their priorities according to what Heilmann and Perry call guerrilla-style adaptive governance.²⁷⁴

This approach is a defining characteristic of Chinese governance techniques, the origin of which can be traced back to the Maoist era. Indeed, Mao's China was defined by a style of policymaking that, rather than regime consolidation, sought to foster experimentation and transformation.²⁷⁵ This guerrilla-style policymaking boasts a very high degree of creativity, and adaptability. China's fragmented authoritarianism thus offers the opportunity to maximize bottom-up inputs and decentralized knowledge generation. However, this gain in flexibility has costs that are reflected in the essence of what the SCS is. Accountability, legal consistency, and procedural stability are inevitably sacrificed. The legal codification of the SCS itself occurs after its mechanisms have been tested, but even so, this codification cannot produce overly stringent criteria if the flexibility of this instrument is to be maintained.

From this perspective, the SCS is an instrument that, because of the very mindset that animates it, is ill-suited to incisively solve the problems for which it seeks to be a solution.

assigned a credit score from 0 to 1000 depending on their information and were punished or rewarded on this basis.

²⁷³ Sohu News, «荣成"三奖"闪耀中国城市信用建设高峰论坛福州峰会 (Rongcheng's "Three Awards" Shine at the Fuzhou Summit of the China Urban Credit Construction Summit Forum) ».

²⁷⁴ Heilmann and Perry, «Embracing Uncertainty», 1–29.

²⁷⁵ Ibid. 10

In attempting to strengthen judicial enforcement, the SCS does not go to work within the Chinese legal regime but parallel to it through punishments that often transcend the very principles of law. Similarly, it seems difficult for the SCS to go about curbing the corruption of party officials if this is nothing more than an expression of a system that sacrifices accountability in exchange for adaptability. It must be noted that this is not necessarily bad for the central government. The lack of accountability also means that it's easier for the central government to shift the blame for policy failure or scandals on the local officials. In this way, local official appears as corrupt while the central government is perceived as acting in the citizen's best interest.

What the SCS seems to succeed best at, however, and this is evident when observed in its local declinations, is providing a means through which to control society and inculcate morality that is able to ensures stability. This aspect will be analysed later on but for now we can simply say that promoting morality through the SCS can be seen as a way through which the CCP set a standard of behaviour that must be respected and realized by each citizen. In addition, the flexibility of the SCS is seemingly limitless as evidenced by its comprehensive and innovative recalibration to meet the challenges posed by Covid-19.

276

2.3.2 The Social Credit System in Rongcheng

The flexibility of the SCS and its innovative scope can be better understood by observing its deployment in a real-world context. In the city of Rongcheng, the SCS operates simultaneously at the government, municipal, and sub-district levels through a multiplicity of initiatives operating independently of each other united only by the same ideology.²⁷⁷ The SCS in Rongcheng consists of a system that initially assigns each individual 1,000 points and each business 100 points. Based on this score, each individual is classified into one of six categories ranging from "AAA" to "D".²⁷⁸ This score can increase or decrease depending on the criteria defined by the Rongcheng Credit Management Office, which has identified about 150 categories of behaviour that are

²⁷⁶ Knight and Creemers, «Going Viral».

²⁷⁷ Guangming Daily, «山东荣成：让信用成为城市“金字招牌”-新华网 (Shandong Rongcheng: Let credit become the city's "golden sign") ».

²⁷⁸ Ibid.

followed by an award of points and 570 that are followed by a decrease.²⁷⁹ However, how to implement and interpret these categories is left to the individual ministry or locality depending on the governance issues it wants to prioritize.

For example, the city's Ministry of Transportation has applied the SCS in detail to the cab industry. Here, in an effort to promote "honesty and core socialist values," each of the cabs operating in the city is grouped under the supervision of an "Honest Model Taxi Team" that monitors their conduct in order to improve the service provided.²⁸⁰ The driver is evaluated according to vehicle status, driving safety, and professionalism and then generates a star ranking ranging from a maximum of 4 to a minimum of 0 to symbolize driver trustworthiness.²⁸¹ Apparently 95% of the city's 205 cabs can boast three or more stars.²⁸² In addition, behaviours such as returning a lost phone inside the vehicle or donating blood can result in an increase in one's rating while behaviours such as not displaying one's license decrease it. According to the Ministry of Transport, this system is reported to have caused a 72 percent decrease in passenger complaints and resulted in the return of lost items worth RMB 2 million.²⁸³

The transportation example is just one of many SCS-related initiatives implemented by the city. Other initiatives that have gained national prominence have involved the boat industry, field management in agricultural and rural communities, the energy sector, and the food industry.²⁸⁴ The implementation of SCS in Rongcheng also involves financial and credit institutions. For example, the Chunrongcheng Rural Commercial Bank launched the "Integrity Personal Honor Loan," which uses "honor as guarantee and morality as collateral" as criteria for granting low-interest loans.²⁸⁵ Finally, many companies in the city give the opportunity to redeem rewards based on the credit score

²⁷⁹ Knight, «Technologies of Risk and Discipline in China's Social Credit System», 252; Chen and Zhang, «以诚为荣看荣成 (诚信中国) --时政--人民网 (Take pride in honesty and see Rongcheng (Integrity China)) ».

²⁸⁰ Wu, «荣成 : 用信用管理出租车 (Rongcheng: Use credit to manage taxis) ».

²⁸¹ Ibid.

²⁸² Ibid.

²⁸³ Ibid.

²⁸⁴ Chen and Zhang, «以诚为荣看荣成 (诚信中国) --时政--人民网 (Take pride in honesty and see Rongcheng (Integrity China)) ».

²⁸⁵ Ibid.

employees have, obtain promotions and salary bonuses, and corporate courses are even offered where employees are trained on how to improve their social credit.²⁸⁶

On the other hand, in the event that negative behaviours such as gambling, animal abuse, or neglecting elderly parents are detected, points are deducted from individuals' credit score resulting in restrictions on the purchase of certain luxury products, travel violations by high-speed airplanes, demotivation in the workplace, and the aforementioned naming and shaming. The behaviours that lead to point deductions are among the most diverse, ranging from acts that constitute actual offenses under the law such as bribing a public official to trivial actions such as not paying a bus fare.

2.3.3 Honest Shanghai App

Another initiative that has attracted much attention is the Honest Shanghai App launched in November 2016 by the Shanghai Municipal Government in conjunction with "honesty week," a celebration of virtuous behaviour throughout the city.²⁸⁷ Compared to Rongcheng, Honest Shanghai has several differences in terms of program membership and how data is collected.

The app operates on a voluntary basis, so unlike in Rongcheng, citizens can choose whether or not to join. However, the most substantial difference lies in how the data are collected. After downloading the app, citizens register using their 18-digit national ID number. Then, the app leverages facial recognition software in order to identify their personal data collected by the government and, after 24 hours, provide a credit score that can be classified as very good, good, or bad. Unlike Rongcheng therefore, the technology used is much more advanced and exploits, according to Shao Zhiqing, deputy director of Shanghai's Commission of Economy and Informatization, up to 3,000 items of information collected from nearly 100 government entities to determine an individual's public credit score.²⁸⁸

²⁸⁶ Rongcheng Social Credit Center, «荣成市人民政府 营商速递 【信用建设】荣成市以职工信用建设赋能高质量发展 ([Credit Construction] Rongcheng City empowers high-quality development with employee credit construction) ».

²⁸⁷ Schmitz, «What's Your "Public Credit Score"? »

²⁸⁸ Ibid.; Cyber Policy, «Honest Shanghai»; Ohlberg, Ahmed, e Lang, «Central Planning, Local Experiments | Merics», 12.

Another major difference lies in the consequences that credit scoring has on the individual's life. Since membership is on a voluntary basis, there are no credit score-related penalties but simply rewards intended for individuals with good scores.²⁸⁹ These may take the form of facilitated access to loans, purchase of train tickets at reduced figures, or discounts for renting electric bikes. Such a measure looks to be strongly counter-trend to many other SCS implementations that instead make penalties associated with a low credit score one of their cornerstones.

From this perspective, the Honest Shanghai App seems to shape up more as a gentle nudge that the government has decided to adopt to incentivize certain behaviours rather than a technology designed to punish those who do not behave according to desirable standards of honesty and trustworthiness in Chinese society. While incorporating some of the main ideas of other local SCS, the Shanghai App seems to lack most of the dangerous or concerning features that other credit system across china present

2.4 Morality Under the Social Credit System

SCS as a tool is difficult to frame because of the very adaptability that distinguishes it. Indeed, the applications of social credit range from the economic and financial to the legal realms embodied in dozens of different initiatives that seem united solely by the desire to promote honesty, credibility, and sincerity in every expression of society. The credit score goes to embody the moral value that an individual present, and according to this, punishments or rewards are arranged. The punishments and rewards provided through the Joint Punishment and Reward System are emblematic of this, and the local implementation examples in Rongcheng and Shanghai give us insight into the extent of these moral implications. Morality and law merge; automatically a law-abiding action is an inherently moral action.²⁹⁰ Such an extensive system seems to aim at the construction of a true moral dossier.²⁹¹

This law-morality amalgam is a distinctive feature of the current conformation that the Chinese regime has. The emphasis on morality is an element that can be traced through all of Chinese policy, in key government documents, in speeches by the country's leaders

²⁸⁹ Ohlberg, Ahmed, and Lang, «Central Planning, Local Experiments | Merics», 12.

²⁹⁰ Creemers, «China's Social Credit System».

²⁹¹ Knight, «Basket Case», 192.

and local officials, and now through the SCS in solving every single governance problem the country faces. This element is characteristic of the Xi Jinping era. Indeed, Xi is implementing an attempt to consolidate the idea of the state as "an intrinsically moral institution that is capable of delivering justice in perfect harmony with unitary collective interests" by spasmodically pushing the concept of "governing the country by moral virtue" (*yide zhiguo*).²⁹² This explains the insistence about integrating the twelve moral virtues that constitute the socialist core values within every sphere of governance, administration and law.²⁹³

The line pursued by Xi appears consistent with China's longstanding political tradition. In fact, the importance of the moralizing role to be played by the CCP in society can be seen as a recovery of the Confucian-style "rule by virtue" (*dexing zhengzhi*) that characterized imperial China.²⁹⁴ In this model, the state stood as the moral arbiter of society and guided its actions. A similar moralizing function can also be traced in the Maoist era. Here, moral construction merged with social engineering by going on to produce a model that saw the promotion of a specific morality as a mechanism for giving society its desired shape and direction.²⁹⁵ Emblematic in this regard was the mythological figure of Lei Feng, Mao's perfect soldier who went on to embody all those values such as selflessness, modesty, and devotion to Mao Zedong that the regime wanted to promote.²⁹⁶

2.4.1 The Social Credit System as a Cure to Moral Decay

Morality has thus always played an important role within Chinese politics and society, but why is it important for the SCS to promote morality? The answer to this question lies in the perceived moral decadence that has permeated political discourse and media narratives for years now, well before Xi came to power. Indeed, since the 1980s it is

²⁹² Rosenzweig, «State, Society and the Justice Debate in Contemporary China», 26–66; Lin and Trevaskes, «Law–Morality Ideology in the Xi Jinping Era», 121–30.

²⁹³ Ibid.; The 12 core socialist values are the national values of "prosperity", "democracy", "civility" and "harmony"; the social values of "freedom", "equality", "justice" and the "rule of law"; and the individual values of "patriotism", "dedication", "integrity" and "friendship". The complementarity between these values is what the SCS seeks to promote is evident.

²⁹⁴ Zhai, «Traditional Values and Political Trust in China», 350–65; Tong, «Morality, Benevolence, and Responsibility», 141–59.

²⁹⁵ Zhang, Kleinman, and Tu, *Governance of Life in Chinese Moral Experience*.

²⁹⁶ Xinhua News Agency, «Chinese Treasure Spirit of Lei Feng».

possible to trace a heated social and intellectual debate about the "spiritual vacuum" (*jingshen zhenkong*) that seems to characterize Chinese society.²⁹⁷

In particular, abetted by the mediatization of information that has made possible the constant and wide-ranging circulation of news, China has experienced in recent years the proliferation of scandals that go to reinforce the perception of a country that has now lost its moral compass and is about to lose its soul. Mentioning some of them allows one to understand the depth of this alleged moral decadence and the importance of this problem for both the public and the government.

The first scandal that deserves mention according to the nationwide upheaval it has caused is the Yueyue case, a two-year-old girl who was run over in Foshan, Guangdong, and left agonizing on the side of the road amid the indifference of passers-by until she later died in the hospital.²⁹⁸ The case caused a sensation after video of the incident, captured by one of the thousands of cameras in every Chinese city, was circulated online. The case was framed by the media as a symbol of Chinese moral decadence and proof of the need for the law to stand as a moral beacon to prevent such tragedies.²⁹⁹ The case caused a sensation after video of the incident, captured by one of the thousands of cameras in every Chinese city, was circulated online. The case was framed by the media as a symbol of Chinese moral decadence and proof of the need for the law to stand as a moral beacon to prevent such tragedies. The relevance of the case as evidence of Chinese moral degeneracy was further increased when the girl's father was accused by much of the public of skimming off donations intended to be given to charity received from numerous citizens.³⁰⁰ Although these speculations later proved to be unfounded, the deep skepticism and social distrust that the case generated forced local authorities in Foshan to intervene

²⁹⁷ Zhang, Kleinman, and Tu, *Governance of Life in Chinese Moral Experience*; Knight, «Basket Case», 192.

²⁹⁸ Sina News, «两岁女童遭两车碾压_新闻中心_新浪网 (A girl who was run over by a car in Foshan, Guangdong died this morning) ».

²⁹⁹ Sina News, «广东小悦悦案肇事司机被诉过失致人死亡|小悦悦|过失致人死亡|佛山_新浪新闻 (The driver responsible for the Xiao Yueyue accident in Guangdong was charged with negligent causing death) ».

³⁰⁰ Sina News, «小悦悦父亲回应敛财质疑 称将捐出全部善款_新闻中心_新浪网 (Little Yueyue's father responded to questions about his money-making and said he would donate all the money to charity) »; Sina News, «张遇哲：小悦悦父亲担不起慈善公信之殇_新闻中心_新浪网 (Zhang Yuzhe: Little Yueyue's father cannot afford the loss of charity and credibility) ».

to limit the spread of misinformation and the damage done to the image of Chinese society and charitable institutions.³⁰¹

The Yueyue case seems to focus attention on the lack of morality of bystanders who failed to assist the child. However, one needs to look in more detail at the Chinese social context to understand the reasons for this failure to assist and apparent disinterest. Indeed, the case of the Good Samaritans, or the dynamic whereby on many occasions unsuspecting bystanders who are intent on helping a person seemingly in distress later become the victims of extortion or denunciation by the people they try to help, has been much talked about in the country.³⁰² Faced with the frequency of such occurrences, it seems obvious why the bystanders in the Foshan affair decided to ignore the little girl—they thought it might be a scam or that they could be unfairly sued if they intervened. The phenomenon of Good Samaritans is so widespread that it led the Ministry of Health to issue guidelines encouraging people to consider the circumstances before intervening.³⁰³ What officials have attempted to present as an action to ensure people's health in the face of inadequate care, however, has been seen as a warning to the well-meaning. Once again these cases have fuelled the internal debate about the loss of morality of the Chinese.

These are just a few examples of a sprinkling of scandals and manifestations of social disregard and moral corrosion that characterize China. Cases of bribery of government officials such as the recent one involving Chen Xuyuan, head of the Chinese Football Association, are daily occurrences.³⁰⁴ In addition, cases related to the malpractice of numerous companies continue to increase. Emblematic in this regard was the case of baby milk powder produced by the Sanlu Group and which, having been adulterated with a toxic industrial compound called melamine, caused health damage to some 300000 children and the death of at least six of them due to kidney damage produced by the toxin.³⁰⁵ The scandal has since spread like wildfire, involving numerous other dairy

³⁰¹ Golden Sheep Net - Yangcheng Evening News, «广东佛山称小悦悦事件发生后曾在网上引导舆论 (Foshan, Guangdong, said it had guided public opinion online after the Little Yueyue incident) ».

³⁰² Branigan, «China's Good Samaritans Count the Cost of Their Altruism».

³⁰³ Ibid.

³⁰⁴ France 24, «Corruption Scandal Deals New Blow to Xi's Chinese Football Dream»; Tiezzi, «Charities and Corruption in China».

³⁰⁵ Huang, «The 2008 Milk Scandal Revisited».

producers companies and generating numerous criticisms of the government's failure to ensure food safety in the industrial sector.

The proliferation of cases such as those just mentioned is seen and framed by public debate as a symptom of a moral crisis whose underpinnings have been hotly debated. From a sociological perspective, the moral crisis that China is experiencing would be attributed to its being a "low-trust" society in which family ties and social networks that are created as a function of geographical proximity constitute the centre of public, political and moral life.³⁰⁶ The concept of a low-trust society finds its foundation in the theories of Francis Fukuyama who, in analysing the importance of trust for economic development, argues that "trust arises when a community shares a set of moral values in such a way as to create expectations of regular and honest behaviour".³⁰⁷ Within a low-trust society we can observe a high level of trust with regard to members of one's own group and a high level of distrust with regard to those who are not part of it. In this dynamic, relative to the Chinese context, an important role is played by the still-present influence of Confucianism..³⁰⁸

This dynamic was further reinforced by the country's rapid socio-economic growth that occurred during the reform period. The social shocks that resulted from these reforms are seen as a reason for the collapse of collective identity, followed by the emergence of increasingly atomized and narcissistically self-absorbed individuals.³⁰⁹ To this must be added the growing number of corruption both real and perceived by the population, the anti-liberal sentiments within society, and the growing and devastating socio-economic inequalities.³¹⁰ The end point of this process is loss to society of a common moral horizon and thus the loss of that element that is crucial in being able to ensure trust among individuals belonging to the same community.

In this way, the SCS becomes on the one hand an instrument of legitimation about the government's actions and on the other a resource for the Party. The PSC becomes the only

³⁰⁶ Wang and You, «The Arrival of Critical Citizens»; Ward, Mamerow, and Meyer, «Interpersonal Trust across Six Asia-Pacific Countries», 1–3.

³⁰⁷ Fukuyama, *Trust*, 153.

³⁰⁸ Tong, «Morality, Benevolence, and Responsibility»; Zhai, «Traditional Values and Political Trust in China», 350–65.

³⁰⁹ Steinmüller, *Communities of complicity*.

³¹⁰ Knight, «Technologies of Risk and Discipline in China's Social Credit System».

moral actor in the field and, therefore, becomes the only one able to act as an arbiter about moral issues. This opens up staggering possibilities for social control, pushing the government right into the most intimate matters of each individual's life. The corollary of this reasoning is that power can and should be concentrated in the party because the party is the purest representation of the people whose will it embodies.³¹¹ The government constructs its own notion of morality as the means by which it governs the country.

2.4.2 The Legitimacy Enhancing Function of Morality

The extensive transformations that have gone through and continue to go through Chinese society have created, not only shocks, but also pockets in society in which there can be a growth of awareness about individual freedoms.³¹² The most significant repercussions of this can be found mainly with regard to political trust and the legitimacy enjoyed by the party. In particular, political trust can be seen as a building block for legitimacy of any political regime. At the same time, every regime must enjoy a certain level of legitimacy in order to ensure its existence. Conceptualizing legitimacy as the right to govern³¹³, it is easy to see how a high level of legitimacy allows the state to control the population at a lower cost and without having to resort spasmodically to coercion. These two variables interact with each other and are mutually reinforcing.

In terms of political trust, we can find that the Chinese regime enjoys high levels of trust.³¹⁴ However, the level of political trust is not equally high at all institutional levels. As already pointed out, the Chinese model is presented as highly decentralized, which causes the detection of different levels of political trust. Specifically, Wang and You point out that in the face of a 90 percent level of trust in the national government, three institutions enjoy low levels of trust.³¹⁵ These institutions are legal institutions, local governments and the police, respectively. This significant difference can be attributed to a prevailing tendency to ascribe the failures of public policies to local governments and

³¹¹ Lin and Trevaskes, «Law–Morality Ideology in the Xi Jinping Era», 126.

³¹² Lin and Trevaskes, «Law–Morality Ideology in the Xi Jinping Era», 144.

³¹³ Tong, «Morality, Benevolence, and Responsibility», 141–42.

³¹⁴ Shi, «Cultural Values and Political Trust»; Tianjian Shi and Jie Lu, «The Shadow of Confucianism»; Wang, «Before the Emergence of Critical Citizens»; Wang and You, «The Arrival of Critical Citizens».

³¹⁵ Wang and You, «The Arrival of Critical Citizens», 114–15.

the consequential lack of influence within the judicial system, which tends to favour a centralized government that manipulates the law to further its interests.³¹⁶

Before delving further into the analysis, it is imperative to address a pertinent concern: given the authoritarian nature of the Chinese regime, how can we presume that the results presented are not distorted due to respondents' reluctance to express their genuine sentiments out of fear of potential persecution? In this context, intriguing insights emerge from surveys conducted by Jie Chen. To validate the veracity of responses gathered within the questionnaires distributed in his research concerning the legitimacy and support of the Chinese government and to gauge the influence of political fear, Chen devised questions aimed at measuring political apprehension.³¹⁷

The results obtained reveal that, despite the looming fear of political persecution, it does not significantly impede the respondents' evaluation of the government. This outcome may initially appear surprising. However, when examining the Chinese landscape, our preconceptions and biases can often lead us to an erroneous perception that the data does not substantiate. First and foremost, if the Chinese regime were as widely unpopular and possessed virtually no legitimacy, it would be challenging to explain how it has persevered for an extended period. Secondly, it is crucial to acknowledge that China harbours its internal dynamics in which critiquing the government's performance (within certain boundaries) is not only permissible but also helps the state identify areas for improvement in which is important to address social grievances.³¹⁸

Returning to the discourse on legitimacy and political trust in China, the study in this field has been characterized by two distinct approaches: the institutional approach and the culturalist approach.³¹⁹ The institutional perspective asserts that the determinants of political trust and legitimacy are rooted in the performance of political institutions.³²⁰ The government's ability to foster economic development, provide essential services, safeguard citizens' rights, and the quality of these institutions collectively influence the level of political trust within a specific regime.³²¹ In contrast, the culturalist approach

³¹⁶ Tong, «Morality, Benevolence, and Responsibility», 143

³¹⁷ Ibid.; Chen, *Popular political support in urban China*.

³¹⁸ Ibid.

³¹⁹ Wang and You, «The Arrival of Critical Citizens», 106

³²⁰ Chen, *Popular Political Support in Urban China*.

³²¹ Wang and You, «The Arrival of Critical Citizens», 106

contends that it is the political and social culture of a society that underpins trust and legitimacy.³²² Cultural, societal, and historical factors shape perceptions of political legitimacy and trust. Moreover, a crucial part is played by shared norms, values, and beliefs, as well as national identity and narratives. Each of these approaches captures different dimensions through which a regime establishes its legitimacy and secures the support of its citizens.

When viewed through the lens of the institutional approach, the Chinese regime predominantly benefits from its remarkable socio-economic performance to sustain its legitimacy and ensure the population's trust.³²³ However, if the CCP's legitimacy were solely anchored in performance-based metrics, it would be challenging to account for the regime's resilience in the face of imbalances such as unemployment and socio-economic disparities engendered by its economic growth. Moreover, it would be equally challenging to explain how it could persist in light of the imminent economic growth slowdown that the country will probably face now that it's approaching the economic level of other developed economies.³²⁴

The cultural and traditional social values expressed through Confucianism play a pivotal role in upholding the party's legitimacy amid lower performance levels. Confucianism portrayed the ruler as a paragon of moral conduct, whose actions embodied benevolence, filial piety, and integrity.³²⁵ This elucidates why in contemporary Chinese political discourse, especially within the ethos that fuels the Social Credit System, the restoration of traditional moral values assumes paramount significance. Through morality, political power legitimizes itself, rendering the SCS a tool through which the CCP acts as a moral agent, thereby augmenting its legitimacy.

To borrow the terminology of Lin and Trevaskes, "self-proclaimed moral authority defines the Party's political legitimacy and enables the Party to assert unity with its populace in an era when it seeks complete integration with the state. However, it simultaneously constrains individuals' autonomy as moral agents".³²⁶ This approach also

³²² Ibid.

³²³ Lowenthal, «On "Established" Communist Party Regimes».

³²⁴ Kennedy et al., «Experts React».

³²⁵ Tong, «Morality, Benevolence, and Responsibility», 146.

³²⁶ Lin and Trevaskes, «Law–Morality Ideology in the Xi Jinping Era», 140.

elucidates why the SCS endeavours to ensure judicial enforcement by amalgamating morality and law. The intent is not to confer authority upon the law but to ensure that the law is a manifestation of ruling through moral virtue. In a system where the law cannot serve as a mechanism for checks and balances due to the party's determination to assert its centrality, propagating the notion that the law must be an expression of morality amplifies the party's legitimacy. The party becomes the moral compass of the nation and its actions inherently virtuous.

2.4.3 The Realization of an “Exemplary Society”

Drawing from the aforementioned analysis, China is presently undergoing a phase in which traditional morality appears to be gradually eroding. The frequent occurrence of scandals, escalating instances of corruption, and tragic episodes like the Yueyue case accentuate this moral decline within society. Nevertheless, preserving and fortifying traditional morality hold paramount importance for the CCP. Firstly, relying solely on institutional performance, particularly economic growth, is no longer sufficient to secure support for the party's actions. Secondly, a return to traditional values implies a return to a conception where the CCP assumes the role of the moral arbiter of society, with the capacity to steer its trajectory. The law also assumes a moral role, further bolstering the state's authority.

In this context, the Social Credit System positions itself as a tool to address the moral apprehensions prevalent in China. Leveraging the tools provided by the SCS, the state can construct what Bakken terms an "exemplary society".³²⁷ This society is founded on both educational practices and a culture of discipline, where virtuous conduct is rewarded, and transgressions against morality are severely penalized. In this regard, the SCS offers the possibility, through a combination of incentives and penalties, to establish behavioural norms that every individual is expected to adhere to. This mechanism is rhetorically supported by the inherent morality that characterizes the central government.

By utilizing morality, the SCS seeks to introduce divisions within the population, thereby enhancing its control. By defining what is virtuous and what is not, the government categorizes citizens into distinct groups and conditions their behaviour to ensure social

³²⁷ Bakken, «Norms, Values and Cynical Games with Party Ideology».

stability. This conditioning is further reinforced by the practice of "naming and shaming." Individuals who prove untrustworthy and, consequently, morally deficient are exposed to public judgment and serve as negative examples. This mechanism aligns with the concept of exemplarity, where the creation and dissemination of virtuous ethics and righteous conduct hinge on mechanisms involving acting, repetition, and imitation.³²⁸

The creation of blacklists and redlists represents the manifestation of this social division orchestrated by the government. On one side, you have the virtuous individuals, while on the other, the untrustworthy ones. The former embodies the morality that is meant to characterize Chinese society, while the latter symbolize the degeneration it has undergone in recent years. All of this is conveyed through a credit score that becomes nothing less than the projection of each individual's soul, a soul that the party evaluates and potentially punishes. All of this is not just the state's desire to achieve "good governance" but conceals the safeguarding of essential interests to maintain the party's supremacy and social control.

CHAPTER III: INTERPLAY OF COVID-19, THE SCS, AND THE A4 REVOLUTION IN CHINA

The framework outlined so far regarding the Social Credit System highlights how it is currently one of the most representative tools of Chinese digital governance. From being a financial instrument to a socially motivated means of manipulation, the SCS finds its primary strength in adaptability. It is precisely due to this adaptability that the SCS has the potential to be employed in addressing various governance challenges, from corruption to judicial enforcement. The core of this adaptability lies in its ideological component, which allows the SCS to avoid being constrained by specific governance objectives.

The COVID-19 pandemic, in relation to the SCS, presented an opportunity to test and further develop this tool. Simultaneously, COVID-19 posed a complex governance challenge for Beijing, putting to the test the e-governance model that has been under construction for decades.³²⁹ The COVID-19 pandemic has indeed, for both China and all

³²⁸ Bakken, *The exemplary society*.

³²⁹ Wu et al., «Application of Big Data Technology for COVID-19 Prevention and Control in China», 1–13.

nations worldwide, emerged as a governance dilemma that extended far beyond the realm of public health. The challenge was to balance the health challenges presented by the pandemic with the impacts it had on economic development, social stability, and international relations.³³⁰ The rapid evolution of the virus and its high contagiousness necessitated the development of governance mechanisms capable of adapting in real-time to changing circumstances.³³¹

In this context, it becomes evident why the SCS was used and adapted to the pandemic context, leveraging social credit as a measure to limit socially harmful behaviours such as the sale of counterfeit medical goods or violation of imposed quarantine measures. Simultaneously, it served as a means to encourage social cooperation in combating the virus and alleviating economic pressures on small and medium-sized enterprises (SMEs). On one hand, COVID-19 exposed some of the shortcomings analysed in the previous chapter; on the other hand, it accelerated the development of the SCS.

The pandemic is essential not only because it witnessed the application and adaptation of the SCS to a national-scale crisis but also because it is crucial to answering the central question of this thesis: what determines public acceptance and support for the SCS. China's approach to the pandemic involved not only the use of the SCS to manage the emergency but, more broadly, a massive reliance on ICTs, surveillance technologies, contact tracing, and big data to predict, monitor, and respond to the pandemic.³³² In particular, the response based on digitalized grid management and the application of the QR Health Code were two cornerstones of the Chinese strategy.³³³

The latter, in particular, despite its fundamentally different goals that characterized its development, invites a comparison with the SCS in terms of issues related to individual privacy, restrictions on freedom of movement, and its potential for repressive use.³³⁴ At the same time, both the SCS and the QR Health Code share another fundamental

³³⁰ Pei, «Crisis Management of Authoritarian Regimes in the Digital Era», 276–87.

³³¹ Knight and Creemers, «Going Viral», 1–23.

³³² Chaturvedi, «The China Way».

³³³ Wei et al., «COVID-19 Prevention and Control in China», 76–78.

³³⁴ Lei et al., «Using Health QR Code to Fight Against COVID-19», 194–98; Xiangwei, «Opinion: China's Health QR Code System Is Ripe for Abuse and Must Not Outlast Covid»; Zhang, Zhang, and Yang, «Fear of Data Misuse as Health Code Turns Red for Chinese Bank Protesters»; Tsang, «China Abuses Health Code App for Crowd Control»; Tyson, «Why China's COVID-tracking QR codes raise surveillance concerns».

characteristic: they enjoy broad support from the public.³³⁵ Similarly to the SCS, the adoption of the Health Code also serves to reinforce the legitimacy of Chinese authorities.³³⁶ However, while support for the SCS appears to remain unshakeable, the widespread support that underpinned the Health Code and, more broadly, the government's measures to combat the pandemic, has shown signs of weakening.

The A4 or White Paper Revolution embodies all of this.³³⁷ These series of protests, which began in November 2022 against the extreme measures implemented by Beijing within the framework of the Zero-Covid policy, demonstrate that even support for the state has its limits. Through the glimpse offered by the A4 Revolution, it is possible to understand the limits in accepting the measures taken for COVID-19, and at the same time, the factors that can explain why there has not been an equally evident opposition to a mechanism like the SCS, which presents significant coercive potential and the ability for the state to impose restrictions partly comparable to those that could be imposed during the pandemic.

This chapter will, therefore, first present the CCP's approach to pandemic management, highlighting its phases, the use of big data, and the applied restrictions. Subsequently, I will explain how the QR Health Code functions, the issues that distinguish it, and the criticism that were moved against this instrument. The example of the QR Code is relevant because, although very similar in several aspects to the SCS, it was at some point openly rejected by the population, something that did not happen with the SCS. The next step will be to present how the SCS was implemented in the context of pandemic management. Finally, I will discuss the Zero-Covid policy and the protests in response to it in an attempt to understand the limitations that surveillance and social management measures can have in China. This reflection will be essential to explain and analyse, in the fourth and final chapter, the public support for the SCS and, more broadly, digital governance.

³³⁵ Kostka and Habich-Sobiegalla, «In Times of Crisis»; Chen, Huang, and Hu, «Red, Yellow, Green or Golden», 618–33.

³³⁶ Liu and Graham, «Making Sense of Algorithms», 1–13.

³³⁷ Chan, «Unwritten Endings», 57–66.

3.1 China's Response to COVID-19: Phases and Policy Shifts

Morens, Folkers, and Fauci identify six fundamental characteristics that define a pandemic: low population immunity, transmission through traceable means, extensive geographic spread, novelty, high attack rates, explosiveness, infectiousness, and severity.³³⁸ Based on these characteristics, a pandemic demands a swift response and a high level of preparedness. In particular, COVID-19 possesses certain features that have made it even more challenging for governments to effectively address. COVID-19 is highly contagious, with an infectious rate ranging from 1.4 to 2.5 according to the World Health Organization (WHO).³³⁹ The infection is primarily transmitted through the air with a maximum incubation period of approximately 24 hours, and its symptoms resemble those of a common flu, making identification difficult.³⁴⁰

These characteristics make it impossible for governments to adhere to the usual timeline of policymaking, which involves assessing the situation, considering the opinion of the scientific community, and building consensus among various social and institutional actors. Action or inaction becomes vital considerations for mitigating the potential economic and social consequences of the pandemic.³⁴¹ Managing COVID-19 is thus a complex governance challenge in which the involved actors must adjust their approach by weighing the costs and benefits of the measures implemented.

From a pandemic management perspective, China stands as a virtuous example, even praised by the WHO for its effectiveness and transparency.³⁴² As of today, China, with over 99 million confirmed COVID-19 cases, reports a death toll of only 121,764.³⁴³³⁴⁴ In

³³⁸ Morens, Folkers, and Fauci, «What Is a Pandemic? », 1018–21; Santos, «Multi-Level Governance Tackling the COVID-19 Pandemic in China», 95–96.

³³⁹ Weng et al., «Responding to the Coronavirus Pandemic», 497–98; Liu and Saltman, «Policy Lessons From Early Reactions to the COVID-19 Virus in China», 1145–46.

³⁴⁰ Ibid.

³⁴¹ Ibid.

³⁴² Nebehay and Farge, «WHO Lauds Chinese Response to Virus, Says World “at Important Juncture” ».

³⁴³ WHO, «China».

³⁴⁴ It is important to highlight that the data reported by the WHO and shared by the Chinese government continue to face significant criticism. According to a New York Times article dated March 10, 2023, the actual number of casualties is believed to be much higher than what has been officially reported. This discrepancy can be attributed to China's practice of considering cases as COVID-19 related deaths only when the infection has been verified through a molecular laboratory test. A recent study published by the Fred Hutchinson Cancer Center in Seattle appears to support the findings reported by The Times. This study indicates that between December 2022 and January 2023, after the abandonment of the zero-COVID policy, there were approximately 1.4 billion new infections and 1.87 million excess deaths compared to what the WHO has reported. However, in the absence of official confirmation, I have chosen

comparison, the United States, with a similar number of confirmed cases, reports a death toll of approximately 1,136,920, roughly ten times that of China.³⁴⁵³⁴⁶

These results, attesting to the effectiveness of China's response to the pandemic, are partly attributable to the authoritarian nature of the Chinese regime. Based on various academic research, it appears that authoritarian regimes are subject to lower fatality rates and demonstrate better post-pandemic recovery performance compared to democracies. This can be attributed to the greater ease with which authoritarian regimes can impose coercive measures and the tendency of numerous authoritarian regimes to falsify their data regarding COVID-19 management in order to enhance their international image projection.³⁴⁷

3.1.1 The Different Phases of China's COVID-19 Response

The COVID-19 pandemic has presented a complex governance challenge for China, demanding a series of adaptive responses over nearly four years since its first appearance in December 2019.³⁴⁸ The following discussion highlights the key phases in China's approach to managing the pandemic, setting the stage for in-depth exploration of specific measures implemented, centralization of decision-making, and the use of ICTs in subsequent chapters.

On December 31, 2019, the WHO China Country Office was informed of the presence of 27 cases of pneumonia of unknown origin detected in Wuhan, Hubei Province.³⁴⁹ Wuhan, often referred to as the "Chicago of China," has a population of 11 million and serves as one of China's major commercial and transportation hubs.³⁵⁰ The situation was exacerbated by the coincidence of the virus's emergence with the Chinese Lunar New Year, a period when an average of 3 billion people in China travel due to the holidays.³⁵¹

to rely on the data provided by the WHO, given its international recognition and status. See The New York Times, «Tracking Coronavirus in China».

³⁴⁵ WHO, «United States of America».

³⁴⁶ The data reported for China and the United States is updated as of October 31, 2023.

³⁴⁷ Weible et al., «COVID-19 and the Policy Sciences», 225–41; Cheibub, Hong, and Przeworski, «Rights and Deaths»; Annaka, «Political Regime, Data Transparency, and COVID-19 Death Cases», 1–7.

³⁴⁸ Page, Hinshaw, and McKay, «In Hunt for Covid-19 Origin, Patient Zero Points to Second Wuhan Market».

³⁴⁹ Altakarli, «China's Response to the COVID-19 Outbreak», 44–49.

³⁵⁰ Encyclopaedia Britannica, «Wuhan | History, Economy & Culture ».

³⁵¹ Wong, «3 Billion Journeys».

Despite early warning signs, the initial response from local authorities in Wuhan was slow. Whistle-blowers on WeChat had already raised concerns about a potential outbreak of what was thought to be SARS-like pneumonia as early as December 30.³⁵² Unfortunately, these warnings were dismissed, and the whistle-blowers (including Dr. Li Wenliang) were even reprimanded by local authorities and accused of spreading disinformation.³⁵³ The National Health Commission's expert group in Beijing, dispatched on January 8, provided another opportunity to assess the situation.³⁵⁴ However, the expert group will state that “the epidemic can be controlled and prevented”, and the Wuhan Municipal Government Health Commission will later confirm that no new cases had been identified between January 11 and January 16, suggesting the situation was already under control.³⁵⁵ This further delayed critical actions from being taken. Finally, the last opportunity to quickly detect the pandemic was the inspection on January 15 by the National Health Commissioner.³⁵⁶ However, the Wuhan Health Commission stated on the same day that they had "not found evidence of human-to-human transmission" and that the risk was "relatively low."³⁵⁷

The inefficiency of Wuhan's local authorities in notifying the central government resulted in a significant delay in pandemic response. The significance of economic development and social stability, coupled with the upcoming Lunar New Year festivities and political events in Wuhan, clouded the judgment of local officials.³⁵⁸ As mentioned earlier, performance is the fundamental determinant for any possible career advancement in the political life of a government official therefore, possibly jeopardizing one's own career over an alleged virus seemed exaggerated to most local officials.³⁵⁹

³⁵² Shih, Rauhala, and Sun, «Early Missteps and State Secrecy in China Probably Allowed the Coronavirus to Spread Farther and Faster».

³⁵³ Hegarty, «The Chinese Doctor Who Tried to Warn Others about Coronavirus».

³⁵⁴ Shih, Rauhala, and Sun, «Early Missteps and State Secrecy in China Probably Allowed the Coronavirus to Spread Farther and Faster».

³⁵⁵ China News Network, «专访王广发：我依然认为疫情“可防可控”-中新网视频 (Exclusive interview with Wang Guangfa: I still believe the epidemic is “preventable and controllable”) ».

³⁵⁶ Wuhan Health Commission, «武汉卫健委：肺炎不排除有限人传人可能·但持续风险较低 | 每经网 (Wuhan Health Commission: limited human-to-human transmission of pneumonia not ruled out, but sustained risk is low) ».

³⁵⁷ Ibid.

³⁵⁸ Liu and Saltman, «Policy Lessons From Early Reactions to the COVID-19 Virus in China», 1146.

³⁵⁹ Zuo, «Promoting City Leaders», 955–84.

In response to this initial inaction by local authorities, we can consider China's pandemic response to begin on January 20, 2022, when human-to-human transmission was confirmed³⁶⁰Pei identifies three different phases in which China's response to COVID-19 can be classified:³⁶¹

- The Initial Containment Phase (January to April 2020): China's response began with a rapid effort to contain the outbreak. Wuhan was swiftly placed under lockdown on January 23, 2020.³⁶² A nationwide anti-pandemic campaign, mobilization of extensive economic and material resources, and extraordinary social control measures led to domestic transmission being brought under control by March 31, and Wuhan's quarantine measures were eased on April 8.³⁶³
- The Normalized Management Phase: Following the initial containment phase, the central government delegated pandemic management to local governments. They were responsible for community-level monitoring to prevent new outbreaks. The objective was to avoid the import of cases from other regions and quickly suppress local outbreaks.³⁶⁴
- Dynamic Zero-COVID Policy: The most recent phase began with the official launch of the "dynamic Zero-COVID" policy in August 2021.³⁶⁵ This policy aimed to definitively defeat the virus by implementing stringent measures, including prolonged lockdowns in the event of new cases and widespread testing, all in the name of protecting lives, as emphasized by President Xi Jinping.³⁶⁶

Each of these phases in China's pandemic response has necessitated a continuous adaptation of policies. In this regard, to assist local governments in pandemic management, the central government has issued a total of 11 versions of the "Novel Coronavirus Pneumonia Prevention and Control Protocol."³⁶⁷ This document provided guidelines on protecting vulnerable populations, managing specific locations, handling

³⁶⁰ Gu and Li, «Crippled Community Governance and Suppressed Scientific/Professional Communities», 160–77.

³⁶¹ Pei, «Crisis Management of Authoritarian Regimes in the Digital Era», 2.

³⁶² He, Shi, and Liu, «Crisis Governance, Chinese Style», 243.

³⁶³ Ibid.

³⁶⁴ Ibid.

³⁶⁵ Yuan, «Zero COVID in China», 1856.

³⁶⁶ Ibid.

³⁶⁷ Qiu et al., «Chinese Guidelines Related to Novel Coronavirus Pneumonia».

confirmed cases and close contacts, and, more broadly, all aspects related to pandemic management. Generally, despite some variations in the initiatives implemented, this Protocol has consistently advocated a model based on "early detection, early reporting, early isolation, and early treatment".³⁶⁸

3.1.2 An Aggressive Containment Strategy

In terms of approach, the WHO Independent Panel for Pandemic Preparedness and Response (IPPPR) classifies the strategies adopted by different countries into three categories: aggressive containment, suppression, or mitigation.³⁶⁹ Each of these strategies involves different levels of pandemic control efforts and responds to different objectives in terms of pandemic control.

Aggressive containment aims to eliminate community transmission and achieve virus elimination for 28 consecutive days through the implementation of public health interventions.³⁷⁰ The benefit offered by this strategy is to rapidly reduce COVID-19-related infections and deaths, thus reducing the risk of overburdening the health care system.

Suppression, on the other hand, aims to minimize the impact of COVID-19 without completely halting transmission but by targeting manageable transmission through population immunity obtained from vaccines or antibodies following infection.

Mitigation seeks to minimize the harmful effects of the virus on vulnerable populations, such as the elderly or those with pre-existing conditions. The focus of this strategy is to prevent overburdening the healthcare system by allowing controlled virus circulation among low-risk groups.

Each of these strategies involves different combinations of public health interventions, which can be categorized into three groups: case-based (e.g., case detection, isolation, and contact tracing), border control measures (e.g., quarantine and travel bans), and population-based measures (e.g., social distancing and mask usage).³⁷¹ Additionally,

³⁶⁸ Pei, «Crisis Management of Authoritarian Regimes in the Digital Era», 3.

³⁶⁹ Cheng et al., «Public Health Measures and the Control of COVID-19 in China», 10.

³⁷⁰ Ibid.

³⁷¹ Ng et al., «Comparison of Estimated Effectiveness of Case-Based and Population-Based Interventions on COVID-19 Containment in Taiwan»; Wu et al., «Aggressive containment, suppression, and mitigation of covid-19».

community involvement and citizen cooperation complement each of these response strategies.³⁷²

Regarding the pandemic, China has adopted the strategy of aggressive containment. In this way, China was able to bring the pandemic under control in about three months (from January to April).³⁷³ This outcome was achieved through the adoption of extremely aggressive containment strategies that imposed a significant burden on the population in exchange for achieving pandemic control in an extremely short time.

Cheng et al. highlight some elements that constitute the Chinese strategy:³⁷⁴

1. Rapid response for controlling the sources of infection: In the initial stage of the pandemic, case-based public health interventions were crucial to the success of the Chinese strategy. Through epidemiological investigations, large-scale PCR testing, and house-to-house inquiries, the central and local governments were able to closely monitor the emergence of new COVID-19 cases, allowing for precise interventions.³⁷⁵ This strategy involved the widespread use of infrared thermometers in public places, airports, and railways, as well as the use of facial recognition cameras to identify individuals showing symptoms.³⁷⁶ Thousands of health stations were also strategically placed at entrances to stations to conduct sample checks on the population.³⁷⁷
2. Strict closed-off management to cut off the chain of transmission: the use of border control measures to stop the spread of internal contagion from one area to another and prevent the arrival of external sources of contact was one of the major strategies implemented by Beijing. The Chinese government implemented strict immigration controls, preventing the issuance of non-urgent visas.³⁷⁸ Gli individui che entrano in aree ad alto rischio dovevano inoltre sottoporsi a quarantene di 28 giorni. Individuals entering high-risk areas also had to undergo 28-day

³⁷² Ibid.

³⁷³ Pan et al., «Association of Public Health Interventions with the Epidemiology of the COVID-19 Outbreak in Wuhan, China», 1915–23; Cheng et al., «Public Health Measures and the Control of COVID-19 in China», 10–11.

³⁷⁴ Ibid.

³⁷⁵ Graham-Harrison and Kuo, «China's Coronavirus Lockdown Strategy».

³⁷⁶ Altakarli, «China's Response to the COVID-19 Outbreak», 46.

³⁷⁷ WHO, «Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19)».

³⁷⁸ Cheng et al., «Public Health Measures and the Control of COVID-19 in China», 2.

quarantines. China also implemented a flight circuit breaker mechanism, prohibiting flights or closing airports for varying periods in case of outbreaks.³⁷⁹ Finally, the Chinese government implemented strategic lockdowns to limit contagion. Based on the pandemic situation, each province was categorized as high, medium, or low risk, and corresponded to more stringent containment measures, ranging from simple lockdowns of areas with cases and the prohibition of mass gatherings to large-scale lockdowns with the closure of all production facilities.³⁸⁰

3. Centralized mobilization of national resources Dealing with the pandemic inevitably requires the mobilization of massive national resources. In this regard, the Chinese one-party authoritarian system offers advantages because the decision-making process is significantly faster making resource allocation far less challenging. Suffice to consider the speed with which the government built two new hospitals in Wuhan in just 10 days to alleviate the strain on the healthcare system.³⁸¹ During the pandemic, hospitals applied a patient classification system based on the severity of symptoms to better manage the healthcare response.³⁸² Additionally, the implementation of a "province-for-city" system combined cities affected by the pandemic with support from nearby provinces.³⁸³ This strategy made it possible to mobilize medical personnel, medical resources, and other necessary goods quickly to alleviate the pandemic's burden.³⁸⁴
4. Grid Management: In pandemic management, China extensively used grid management as a system to maintain public safety and social order.³⁸⁵ Under this system, each local government divides its territory into different segments controlled by designated individuals responsible for gathering information on every household in each grid unit The system, which was introduced in 2004, was widely used during the COVID-19 pandemic to monitor the pandemic situation

³⁷⁹ Civil Aviation Administration of China, «民航局关于调整国际客运航班熔断措施的通知 (Notice from the Civil Aviation Administration of China on adjusting circuit breaker measures for international passenger flights) ».

³⁸⁰ Shangguan and Wang, «China's community-based crisis management model for COVID-19», 6-7.

³⁸¹ Zhou et al., «Workers Race against Time to Build "high-Speed" Hospitals».

³⁸² Cheng et al., «Public Health Measures and the Control of COVID-19 in China», 10

³⁸³ Chen, Wang, and Hua, « "Pairing Assistance" », 2-4.

³⁸⁴ Ibid.

³⁸⁵ Zhou, «Is China's Grassroots Social Order Project Running Out of Money? »

in each community and to impose restrictions in case of contagion, blocking transmission at the physical level, or allocating resources efficiently.³⁸⁶

5. Efficient contact tracing: This was a fundamental strategy for identifying infections, tracing the contacts of infected individuals, and subsequently implementing the necessary restrictive measures. The Chinese approach to the pandemic made extensive use of technologies that leveraged citizens' GPS locations to trace their movements. Regarding contact tracing, the government adopted the so-called "Health QR Code," whose specific functioning, privacy implications, and public response will be discussed later.

The aggressive strategy adopted by the government in China has undoubtedly borne fruit. However, it would have been impossible to implement it without two fundamental elements: the adoption of a highly centralized and government-centric approach and community support.

Regarding the first element, after the early mistakes in the Wuhan pandemic's initial stages, the government quickly took control of the situation. Although decentralization is one of the main features of the Chinese government, during the pandemic, the central government played a clear decision-making role, leaving local authorities only minimal discretion in implementing centrally developed measures while enhancing the authority of local officials to implement the aforementioned measures.³⁸⁷ Two of the main initiatives in this regard were the creation of the Joint Prevention and Control Mechanism of the State Council led by the Health Commission on January 21, 2020, and the creation of the Central Leading Group on COVID-19 Response chaired by Premier Li Keqiang a few days later.³⁸⁸ Such a centralized approach improves the coordination of collective action and reduces transactional costs.³⁸⁹ Centralization about health issues is not new in the Chinese landscape but is constituted as an ongoing trend since the 2000s desired to ensure a more equitable, inclusive, and efficient health care system.³⁹⁰

³⁸⁶ Pei, «Crisis Management of Authoritarian Regimes in the Digital Era», 282–87.

³⁸⁷ Lv, Luo, and Duckett, «Centralization vs. Decentralization in COVID-19 Responses», 411–27.

³⁸⁸ Yang, «Unprecedented Challenges, Familiar Paradoxes», 660.

³⁸⁹ Weng et al., «Responding to the Coronavirus Pandemic», 498.

³⁹⁰ Tan and Yu, «Has Recentralisation Improved Equality? »; Jakovljevic et al., «Successes and Challenges of China's Health Care Reform».

The Chinese community has expressed a high level of support for government pandemic management and a high level of compliance with government-mandated measures.³⁹¹³⁹² Many scholars attribute this primarily to the collectivist spirit fuelled by Confucianism and Marxist ideology characterizing the Chinese population, as well as a transparent and direct communicative approach by the government.³⁹³ As previously mentioned in the context of the SCS, Confucian ideals associate a person's high degree with a certain moral superiority and, therefore, an obligation to recognize and respect authority.³⁹⁴ This, combined with the collectivism promoted by Marxist ideology, creates a combination in which collective well-being takes precedence over individual selfishness.³⁹⁵ In addition to values, the role of the media has had a significant impact. During the emergency, according to multiple Chinese sources, the government shared pandemic information quickly and transparently, gaining the trust of the population.³⁹⁶ Moreover, apps such as TikTok, Tencent, and Volcano released numerous videos showcasing and praising the hard work of medical staff, healthcare workers, and volunteers engaged in combating the pandemic.³⁹⁷

3.1.3 Application of Big Data Technology in the War Against COVID-19

In the battle against the pandemic, the Chinese government has extensively leveraged ICTs and big data to carry out personal surveillance, contact tracing, trace the virus's

³⁹¹ Lin et al., «Citizen Compliance with Pandemic Rules in China», 59–69; Liu et al., «Compliance with COVID-19-Preventive Behaviours among Employees Returning to Work in the Post-Epidemic Period».

³⁹² In acknowledging the high level of compliance toward pandemic measures, one criticism that can be made is that Chinese citizens had no choice in the face of stringent government control. However, although it is undeniable how the mechanisms put in place by the CCP (including the SCS itself) made it virtually impossible to evade control, numerous analyses such as those by Liu et al. and Lin et al. associate compliance with citizens' political and cultural values. The level of compliance does not seem to arise from the inability to evade the measures put in place but from the belief that these measures were necessary to defeat the virus. China's collectivist tradition, trust in the central government, and the heavy media campaign to present the pandemic as a collective challenge created a context in which anti-pandemic measures were observed not because there was no escape from them but because they were seen by citizens as the best means to defeat COVID-19

³⁹³ Shangguan and Wang, «China's community-based crisis management model for COVID-19», 8; Weng et al., «Responding to the Coronavirus Pandemic», 498; Wei et al., «COVID-19 Prevention and Control in China», 80; Altakarli, «China's Response to the COVID-19 Outbreak», 44–49.

³⁹⁴ Shangguan and Wang, «China's community-based crisis management model for COVID-19», 10

³⁹⁵ Palko and Xiang, «In Fighting Common Threats, People's Deep Commitment to Taking Collective Action Matters», 257–60

³⁹⁶ Weng, Lin, and Kudireti, «评估紧急情况下开放数据的质量： covid-19 流行病国家样本的实证分析 (Evaluation of the quality of open data in emergencies: An empirical analysis of national samples of covid-19 epidemic) », 2–13.

³⁹⁷ Shangguan and Wang, «China's community-based crisis management model for COVID-19», 10

origin, allocate resources, and make predictions about the pandemic's economic impact. The significance of big data in the pandemic fight was explicitly underscored during the Scheduling Meeting on Big Data Supporting the Prevention and Control of Corona Virus Disease 2019. Subsequently, in February 2020, the government mandated the use of digital technologies, including big data, artificial intelligence, and cloud computing, to monitor the pandemic, trace virus sources, and assist in implementing pandemic containment measures.³⁹⁸

One primary use of data is related to the utilization of location and travel data to create predictions about virus spread and identify high-risk areas for quarantine measures. Given the clear correlation between mobility and COVID-19 transmission, location data, gathered through both private and government platforms and shared by mobile devices, were aggregated to develop a "map" of COVID-19, allowing the population to become aware of high-risk contagion areas.³⁹⁹ Additionally, these data were employed to track the movements of infected individuals, thus identifying close contacts and establishing early alert mechanisms at the provincial level. Such mechanisms have proven effective in identifying shopping malls like Baodi Mall, Tulong Mall in Harbin, and Yintaidao Mall in Wenzhou as transmission sites.⁴⁰⁰

For pandemic management, medical data has also been a valuable resource to promptly identify and report infections, enhance patient management in hospitals, and identify diagnoses and treatments. Especially in the pandemic's early phase, medical staff faced significant challenges in identifying patients and their medical information. Electronic Medical Records (EMRs) of patients were utilized by the Center for Disease Control (CDC) to identify suspected COVID cases, improve the transmission of essential health data like COVID-19 diagnoses, and expedite virus research.⁴⁰¹ Through the application of AI, keyword searches, such as "pneumonia," enabled quicker reporting of infections and selection of the most appropriate hospital treatment regimen.⁴⁰² Moreover, the use of big data has proven crucial in managing available medical resources. When hospitals were

³⁹⁸ Wu et al., «Application of Big Data Technology for COVID-19 Prevention and Control in China».

³⁹⁹ Ibid.; Wang et al., «Migration Patterns in China Extracted from Mobile Positioning Data», 71–80.

⁴⁰⁰ Wu et al., «Application of Big Data Technology for COVID-19 Prevention and Control in China», 8; Zhou et al., «COVID-19», 77–87.

⁴⁰¹ Yang et al., «Modified SEIR and AI prediction of the epidemics trend of COVID-19 in China under public health interventions», 165–74.

⁴⁰² Wu et al., «Application of Big Data Technology for COVID-19 Prevention and Control in China», 8

overwhelmed by too many cases, big data technologies allowed the development of a patient classification system to accurately allocate the limited resources.⁴⁰³

Big data has also been essential in combating misinformation that spread in China during the pandemic. Claims, such as drinking alcohol and gargling with saltwater combating the virus or that consuming Banlangen could prevent the pandemic, posed a risk that the population might engage in behaviours endangering both individual and collective health.⁴⁰⁴ The government promptly took action to discredit false news through official channels.⁴⁰⁵ Additionally, social media data were widely used to identify and assess public opinion by monitoring keywords like "fever," "epidemic," and "pneumonia" on web platforms.⁴⁰⁶

In conclusion, big data and algorithm-based interpretation have been potent tools that Beijing has harnessed to confront and control the pandemic. In addition to the aforementioned data usage, surveillance technologies, such as the deployment of infrared cameras and facial recognition to identify the infected, have been of great importance. Overall, technology played a central role in the battle against COVID-19. Simultaneously, the use of such a massive volume of data encountered challenges similar to those encountered with the Social Credit System. Data sharing and integration proved complex due to the existence of data islands. Furthermore, managing such extensive data raised significant concerns about privacy and protection.⁴⁰⁷ The pandemic provided CCP with an opportunity to expand the reach of its surveillance, data collection, and predictive technologies, which were used to develop faster and work better.⁴⁰⁸ In fact, these instruments were presented as a useful and efficient weapon to contrast the pandemic thus gaining support from the population. At the same time, it can be argued that the pandemic

⁴⁰³ Ibid.

⁴⁰⁴ Sohu News, «健康知多少 | 预防新型冠状病毒肺炎·这些偏方很管用?别逗了_钟南山 (How much do you know about health | These folk remedies are very effective in preventing new coronavirus pneumonia? Give me a break) ».

⁴⁰⁵ Zheng and Zhao, «郑保卫 赵新宁:论新闻媒体在新冠肺炎疫情传播中的职责与使命 - 中国记协网 (Zheng Bao and Zhao Xinning: On the responsibilities and missions of news media in the spread of the new coronavirus epidemic) ».

⁴⁰⁶ Wu et al., «Application of Big Data Technology for COVID-19 Prevention and Control in China», 9.

⁴⁰⁷ Ibid. 11-13

⁴⁰⁸ Oxford Analytica, «COVID-19 Tech Will Expand Surveillance State in China»; Germanò et al., «Digital Surveillance Trends and Chinese Influence in Light of the COVID-19 Pandemic», 91–115; Khalil, «Digital Authoritarianism, China and COVID».

has reduced the stigma associated with surveillance technologies not only in authoritarian countries but also in democratic countries that found themselves having to rely on similar measures to contain the spread of the virus.⁴⁰⁹ In light of this, it can be argued that COVID-19 has enabled China to promote the efficiency of its pandemic response and at the same time its norms and approaches to digital rights, privacy, data collection, and the development and use of AI not only domestically but also in the international arena.

3.2 The QR Health Code to Contrast COVID-19

Digital contact tracing apps (CTAs) were one of the most widely used tools to combat the global spread of COVID-19. In comparison to manual contact tracing systems, these apps offer the clear advantage of utilizing data to generate a digital code, typically using smartphones to identify and notify individuals thus preventing the direct spread of the virus and fastening the detection of cases.⁴¹⁰ The adoption of CTAs has been one of the most prevalent pandemic monitoring measures. According to research conducted by the MIT Technology Review, in January 2021, a total of 49 CTAs were documented in 48 different countries.⁴¹¹

Despite their widespread usage, each CTA can differ significantly from the others. National and local preferences, as well as the specific political regime in place, influence the app's design, data management, adoption speed, privacy protection criteria, and development, depending on the involvement of private companies and research institutions.⁴¹²

Another fundamental variable is the varying adoption rates of these apps. Countries like Qatar or China have very high adoption rates, equal to or exceeding 80%.⁴¹³ Others, on the contrary, exhibit much more modest adoption rates, as seen in the United States with a 10% adoption rate or Germany with only 30%.⁴¹⁴ In addition to the impact of different adoption rates on pandemic control effectiveness, these variances can be explained by

⁴⁰⁹ Khalil, «Digital Authoritarianism, China and COVID».

⁴¹⁰ Ferretti et al., «Quantifying SARS-CoV-2 Transmission Suggests Epidemic Control with Digital Contact Tracing».

⁴¹¹ O'Neill, Ryan-Mosley, and Johnson, «A Flood of Coronavirus Apps Are Tracking Us. Now It's Time to Keep Track of Them. »

⁴¹² Kostka and Habich-Sobiegalla, «In Times of Crisis», 2.

⁴¹³ Ibid.

⁴¹⁴ Ibid.

individual preferences, trade-offs between privacy and security, as well as cultural values inherent to each society.

This section will delve into the functioning, issues, and level of acceptance of the Health Code adopted in China. In doing so, we will highlight similarities and differences between it and the Social Credit System to lay the foundation for understanding the reasons behind the support the SCS enjoys in China in the next chapter.

3.2.1 Emergence of the QR Health Code During the Pandemic

Ever since the outbreak of the COVID-19 pandemic, the enormous potential of contact tracing in pandemic counteraction has garnered the attention of both policymakers and academics.⁴¹⁵ The debate revolves around issues such as privacy, discrimination problems associated with these apps, and the real effectiveness of these mechanisms in detecting and containing the virus.⁴¹⁶ The major portion of these debates focuses on health apps adopted in the West, with less attention given to contact tracing systems developed in China. When discussed, the debate surrounding contact tracing systems in China is primarily framed by the Western media in terms of potential abuses and its role as a mechanism for mass surveillance.⁴¹⁷

Despite heavy criticism in Western media as a draconian measure, China presents the Health Code App (HCA) as the ultimate governance tool to halt the transmission of COVID-19.⁴¹⁸ The HCA is undeniably one of the cornerstones upon which the CCP's effective response to the pandemic is based. Simultaneously, it aligns with Beijing's

⁴¹⁵ Cong, «From Pandemic Control to Data-Driven Governance», 1–5; Mello and Wang, «Ethics and Governance for Digital Disease Surveillance», 951–54; Morley et al., «Ethical Guidelines for COVID-19 Tracing Apps», 29–31; Taylor et al., *Data justice and COVID-19*.

⁴¹⁶ Ibid.

⁴¹⁷ Liu and Zhao, «Privacy Lost», 743–50; Tyson, «Why China's COVID-tracking QR codes raise surveillance concerns»; O'Neill, Ryan-Mosley, and Johnson, «A Flood of Coronavirus Apps Are Tracking Us. Now It's Time to Keep Track of Them. »

⁴¹⁸ Zhang, «7天, “健康码”从杭州跑遍全国 一人一码·大数据助力精准防疫--社会·法治--人民网 (In 7 days, the “Health Code” traveled across the country from Hangzhou. One code per person, big data helps precise epidemic prevention) »; Mozur, Zhong, and Krolik, «In Coronavirus Fight, China Gives Citizens a Color Code, With Red Flags»; Hu Xijin, «胡锡进：国家最近对互联网行业的一系列治理行动·不应被误读 (Hu Xijin: The country's recent series of governance actions on the Internet industry should not be misunderstood) ».

broader attempt to advance digital governance.⁴¹⁹ In this respect we can note two features of the HCA that are important to emphasize.

First, the development of the HCA builds on existing digital projects in China, particularly the SCS within which it has been integrated as a criterion for assigning punishments for violating anti-covid regulations.⁴²⁰ As we have seen, the development of big data and e-governance has become a government priority since 2014. The SCS constitutes both the model and a major data source upon which the HCAs were modelled and developed.⁴²¹ Moreover, the development of the HCAs reflects in its design and application the power dynamics that characterize local governments and central government.⁴²²

Second, the emergence of HCA does not happen in a vacuum but is set and integrated on a vast pre-existing ecosystem of apps such as Alipay and WeChat developed by tech giants such as Alibaba and Tencent, respectively.⁴²³ This element is noteworthy as it allows us to observe and debate about the importance of public-private partnerships not only in relation to HCAs, but more broadly in the development of digital governance initiatives promoted by the CCP. While the SCS in its advanced stages has diminished the role of private companies at the government's behest, they have played a central role in developing various HCAs.⁴²⁴

The Health Code made its debut in early February in the cities of Hangzhou and Shenzhen through collaboration between local authorities and Alibaba and Tencent. At this early stage it is the local governments themselves who, based on their needs in reference to the pandemic situation, initiate the development of HCAs according to their own needs. For example, in Hangzhou the local government, driven by a desire to mitigate the economic damage of the pandemic, commissioned Alibaba on February 6, 2020, to develop an HCA that would allow employees to resume work in the city.⁴²⁵ The Hangzhou HCA went live in just four days, while Tencent launched the Shenzhen HCA on February 9.⁴²⁶ These

⁴¹⁹ Chen, Huang, and Hu, «Red, Yellow, Green or Golden», 618–33.

⁴²⁰ Liang, «COVID-19 and Health Code», 2.

⁴²¹ Chen, Huang, and Hu, «Red, Yellow, Green or Golden», 2.

⁴²² Ibid.

⁴²³ Ibid. 3

⁴²⁴ Cong, «From Pandemic Control to Data-Driven Governance», 7–10.

⁴²⁵ Hangzhou Daily, «市疫情防控工作领导小组召开专题会议 - (Special conference of the city's anti-COVID working group) ».

⁴²⁶ Cong, «From Pandemic Control to Data-Driven Governance», 3.

first HCAs were internal to Alipay and WeChat, applications that are already widely popular and used by the population.⁴²⁷ Following these trials, over 200 cities adopted Hangzhou and Shenzhen's example, forming partnerships with tech giants and other major ICT companies to develop their versions of the HCA.⁴²⁸

Despite differences between HCAs adopted in different local contexts, each app shares the same basic functionality. Users must first search for the relevant health code app in their city or province through Alipay or WeChat and then register.⁴²⁹ During registration, the user is asked to provide multiple pieces of information, which Li Keshun, director of the Product Research Institute of Guizhou Databao Network Technology Co., Ltd. and deputy director of the East China Jiangsu Big Data Trading Center, classifies into four data categories.⁴³⁰ The first includes household registration information held by the public security department as well as the user's national identifier code; the second category consists of the user's self-reported health status data such as body temperature and any symptoms; and the third is the user's location data and travel history acquired through the communication management department. Cell phone location reporting also includes rail and air traffic travel data to determine whether the user has passed through a risk area; the fourth category refers to medical treatment information provided by the health and disease control department to determine whether the user has interacted with an infected person.⁴³¹⁴³²

⁴²⁷ Making the HCA appear as a kind of mini-application integrated in the two aforementioned platforms offers a significant advantage in terms of QR code usage. Given the widespread use of both Alipay and WeChat, accessing the healthcare QR code turned out to be an extremely simple task for any user. Not having to download a specific app to obtain the healthcare QR code should be seen as one of the factors that explain why HCA has enjoyed such a high adoption rate in China.

⁴²⁸ Cong, «From Pandemic Control to Data-Driven Governance», 3; Jao, «Virus Tracking Apps Aren't Helping Fight Panic · TechNode».

⁴²⁹ Ibid.

⁴³⁰ Yuan, «中国防疫神器“健康码”是怎么运转的? -中新网 (How does China's anti-epidemic tool "Health Code" work?) ».

⁴³¹ Chinese National Standardization Administration, «个人健康信息码参考模型 (Personal health information code - reference model) ».

⁴³² There is not full clarity about the exact data sources exploited to generate the health QR code. According to information published by the Chinese National Standardization Administration, the data used to generate the QR code include, but are not limited exclusively to, data of confirmed and suspected cases of COVID-19; data of people who came in contact with infected; data of COVID tests conducted; data about the risk level of the places where the individual's mobile devices were registered; travel information; data collected by customs authorities; information about communities and places affected by the pandemic; and self-reported information; Ibid.

This information determines the user's risk level of infection, assigning a QR code (green, yellow, or red) that dictates freedom of movement based on infection risk.⁴³³ Green allows unrestricted travel, yellow imposes a one-week quarantine, and red imposes a two-week quarantine. The QR code thus acts as a kind of voucher on which the user's freedom of movement depends depending on the level of risk he or she is exposed to according to the data analysed by the algorithm.⁴³⁴ Having a yellow or red code therefore does not necessarily mean that the user has contracted the virus but only that he or she has a higher risk of infection. Through a constant self-reporting mechanism, in case of a code yellow or red, the user is required to update his or her health condition daily through the app in order to prove that he or she has not been infected and thus regain a green code.

HCAAs in China operate on the above mechanism, aiming to reduce infection by imposing restrictions on individuals' freedom of movement if they are deemed to have a risk of infection. These restrictions are enforced through stringent controls, requiring people to show their QR code for access to public spaces and transportation.⁴³⁵ For instance, subway passengers in many cities are required to scan their QR code upon entry and exit.⁴³⁶ To ensure that this is done, in many cities such as Wuhan there were attendants whose job was to make sure that passengers scan their health code when they board public transportation.⁴³⁷ Similar checks were also put in place to gain access to some residential communities, inside restaurants, or in supermarkets. This approach aims to contain the virus's spread through the extensive acquisition and constant updating of information from HCAAs, simultaneously facilitating the resumption of economic activity.⁴³⁸

Travel monitoring and management were key features of the Chinese pandemic approach facilitated by the use of HCAAs. The Health QR code played a vital role in implementing "point-to-point," "closed circuit" management of people returning to work or school.⁴³⁹ With this system, the movement of a person between two areas became subject to prior

⁴³³ Chen, Huang, and Hu, «Red, Yellow, Green or Golden», 2.

⁴³⁴ Liang et al., «Constructing a Data-Driven Society», 1–2.

⁴³⁵ Yuan, «中国防疫神器“健康码”是怎么运转的？-中新网 (How does China's anti-epidemic tool “Health Code” work?)».

⁴³⁶ Cong, «From Pandemic Control to Data-Driven Governance», 4.

⁴³⁷ Qiao and Zhang, «姿势 | 健康码：人员流动的健康保障 (Health code: health protection for personnel mobility) ».

⁴³⁸ Ibid.

⁴³⁹ Cong, «From Pandemic Control to Data-Driven Governance», 4.

approval and had to take place by means of roads indicated by anti-covid authorities who could monitor compliance with the directions given precisely because of the QR code.⁴⁴⁰ This system extended not only to domestic travel but also to Chinese citizens returning from abroad.⁴⁴¹ Thus, we see how the adoption of the health QR code progressively moves from being an emergency management tool to one of normalization of epidemic prevention and control to be used even after the first critical phases of the pandemic.⁴⁴²

The rapid and widespread adoption of the QR code made it, in the absence of legal obligation, practically mandatory. While there was no legislation mandating the use of the Health QR code, citizens in China faced legal liability if they refused to cooperate with government authorities enforcing anti-COVID-19 measures.⁴⁴³ As such, there was no legislation mandating the use of the health QR code, but its use proved indispensable for anyone who had to take part in essential activities such as going shopping, going to work or school, or taking public transportation.

3.2.2 Issues, Criticisms and Abuses of the QR Health Code App

Within the Chinese context, the adoption of Health Code Apps (HCAs) stands out for the broad support they have enjoyed among the population. Kotska and Sobiegalla, in one of the most comprehensive and detailed cross-country studies about the acceptance of HCAs, report that in China, 80% of the population strongly or somewhat accepts HCAs.⁴⁴⁴ This is in stark contrast to countries such as the U.S. or Germany, where the acceptance rate equals 39 percent and 41 percent, respectively.⁴⁴⁵ Furthermore, it is relevant to note that in China, only 2% of the population has strong or moderate

⁴⁴⁰ Beijing Shijingshan District People's Government Office, «进京、返京·哪些人必须隔离? (Who must be quarantined when entering or returning to Beijing?)».

⁴⁴¹ Civil Aviation Administration of China, «民航局关于调整国际客运航班熔断措施的通知 (Notice from the Civil Aviation Administration of China on adjusting circuit breaker measures for international passenger flights)».

⁴⁴² Beijing Shijingshan District People's Government Office, «进京、返京·哪些人必须隔离? (Who must be quarantined when entering or returning to Beijing?)».

⁴⁴³ Joint Prevention and Control Mechanism of the State Council, «国务院联防联控机制印发《关于进一步强化责任落实 做好防治工作的通知》_最新政策_中国政府网 (The Joint Prevention and Control Mechanism of the State Council issued the "Notice on Further Strengthening the Implementation of Responsibilities and Effective Prevention and Control Work")».

⁴⁴⁴ Kostka and Habich-Sobiegalla, «In Times of Crisis», 13

⁴⁴⁵ Ibid.

opposition to HCAs.⁴⁴⁶ This research showed the low opposition to HCAs by Chinese citizens, when compared to their Western counterparts, would be found in a higher level of trust in the government, the mandatory nature of HCAs, the lesser weight given to privacy compared to the benefits associated with this technology, and a socio-political context in China that is characterized as state-oriented relations with civil society.⁴⁴⁷⁴⁴⁸

Outside of this study, general satisfaction with the apps is also supported by anecdotal evidence, such as numerous praises expressed on Weibo, the main microblogging platform used in China. The app was quickly rebranded as "Green Horse" on social media due to the homophony between it and the word "Green Code," soon becoming the subject of memes that further increased its popularity.⁴⁴⁹

Despite this broad support, the adoption of HCAs has not been without criticism. A first group of criticisms involves concerns about data security and privacy breaches.⁴⁵⁰ The operation of apps, as highlighted earlier, requires the massive acquisition of sensitive

⁴⁴⁶ Ibid.

⁴⁴⁷ Ibid.

⁴⁴⁸ Kostka and Sobiegalla's research has some shortcomings that should be mentioned. First, the research results do not take into account the participants' affinity for technology and this can lead to biased results. In fact, the surveys were conducted via the Internet and thus the results only reflect the Internet-connected population of each country surveyed. In addition, virtual prizes were offered to incentivize survey participation, which may have influenced participants' attitudes toward HCAs. In addition, the mandatory nature of HCAs in China, coupled with the authoritarian nature of the regime, may have further contributed to a falsification of the preferences expressed by participants. Finally, some of the questions posed in the survey may have been subject to different interpretations in different countries going to create variations based on cultural or contextual differences. However, the results of this research are in line with those of other research conducted on the topic such as those of Liu & Graham, and Chen & Huang. At the same time, additional analyses conducted by the authors further confirmed the results of this research. Regarding the major criticism of the reported analysis results, namely the impact of the authoritarian nature of the Chinese regime on the veracity of opinions expressed, multiple statistical surveys such as those presented by Shi Tianjian and Lily Tsai have repeatedly shown that the quality of data collected on sensitive issues does not appear to be significantly affected by the political control experienced by Chinese citizens. See Tsai, «Solidary Groups, Informal Accountability, and Local Public Goods Provision in Rural China»; Shi, «Cultural Values and Political Trust»; Chen, Huang, and Hu, «Red, Yellow, Green or Golden»; Liu and Graham, «Making Sense of Algorithms»; Habich-Sobiegalla and Kostka, «Sharing Is Caring».

⁴⁴⁹ Kostka and Habich-Sobiegalla, «In Times of Crisis», 4; Jao, «Virus Tracking Apps Aren't Helping Fight Panic · TechNode»; Zhang, «“绿马”火了“抗疫周边”成新商机-新华网 (Green Horse" has become popular in “anti-epidemic peripherals” and has become a new business opportunity)»; Koetse, «“Guarding the Green Horse” – How China’s Health Code System Provided Solutions and Generated Problems».

⁴⁵⁰ Feng, «China Launches Coronavirus ‘Close Contact Detector’ Platform».

personal data, which is a pressing privacy issue that people have expressed concern about.⁴⁵¹

The most obvious manifestation of such concern emerged following the Hangzhou local government's declaration that it wants to normalize the use of the health code into a permanent health index.⁴⁵² In a survey conducted on Weibo with a sample of 6,000 users, 86 percent said they opposed the initiative.⁴⁵³ In addition to the lack of an exit mechanism that could guarantee the withdrawal of acquired information after the end of the health emergency, the possibility that citizens' privacy could be violated and exploited by the local government and private companies for economic purposes was strongly criticized.⁴⁵⁴

As a result of this criticism, the Hangzhou government quickly withdrew the proposal.⁴⁵⁵ This example highlights two elements: the existence of sensitivity on the part of the Chinese population to privacy issues, especially where this may be exploited by private companies for economic purposes, and the critical role that public opinion in China can play on governmental policies in some circumstances.

Another relevant aspect is the impact that a tool such as HCAs, highly dependent on digital technologies, has on the autonomy of categories that do not have the knowledge or technological tools necessary to make use of the Health QR Code, creating a real problem of digital inclusion.⁴⁵⁶ The category most affected by this digital divide is the elderly, who during the pandemic were quickly recognized as one of the most vulnerable groups to harm from the virus. Although seniors using the internet have grown significantly, from 980,000 in 2006 to 60 million in 2019, a substantial portion of this

⁴⁵¹ Du, «杭州推行渐变色健康码·涉嫌侵犯市民隐私_疫情 (Hangzhou implements gradient colour health code, suspected of infringing on citizens' privacy) ».

⁴⁵² Ibid.

⁴⁵³ Kostka and Habich-Sobiegalla, «In Times of Crisis», 4.

⁴⁵⁴ Zhang, «杭州市卫健委回应“渐变色健康码”：仅为设想·暂无上线计划_长三角政商_澎湃新闻 (Hangzhou Municipal Health Commission responded to the “Gradient Collar Health Code”: It is just an idea and there is no plan to launch it) ».

⁴⁵⁵ Ibid.; Huang, «China's Virus Tracking Technology Sparks Privacy Concerns»; Cheung and Chen, «From Datafication to Data State», 9–12.

⁴⁵⁶ Wang and Jia, «The Impact of Health QR Code System on Older People in China during the COVID-19 Outbreak», 55–56.

category remains excluded from access to digital tools.⁴⁵⁷ Older citizens who use the internet constitute only 6.9 percent of total users, corresponding to only 23 percent of the entire elderly population.⁴⁵⁸

Within a pandemic coping strategy heavily reliant on digital technologies, this exclusion affects the effectiveness of applied anti-COVID strategies and creates profound difficulties impacting the elderly population. In the period between January and May 2020, The Paper published more than 25 articles reporting on the difficulties faced by the elderly.⁴⁵⁹ These included the inability to order food and masks during lockdown periods, access to relevant public health information, and, most importantly, severe restrictions on freedom of movement due to the need to use the health QR code for public transportation or community residential checkpoints.⁴⁶⁰ Even after the public became gradually aware of this issue, especially thanks to the work of film producer and NPC deputy for Shanxi Jia Zhangke, the government's response, embodied in the adoption of the "Implementation Plan for the Effective Resolution of the Difficulties Facing the Elderly in the Use of Smart Technology," has been unable to adopt effective and lasting solutions, making the problem of digital division faced by the elderly a recurring issue related to the adoption of HCAs.⁴⁶¹

An additional concern raised by the large-scale use of HCAs was the possibility that they could be used to perpetrate abuses and repression against the population. The most emblematic case in this regard occurred during the protests that erupted in May 2022

⁴⁵⁷ China Internet Network Information Center, «CNNIC发布第44次《中国互联网络发展状况统计报告》-中国信息化中国信息协会 (CNNIC releases the 44th “Statistical Report on China’s Internet Development”) »; China Internet Network Information Center, «CNNIC发布第47次《中国互联网络发展状况统计报告》_部门政务_中国政府网 (CNNIC releases the 47th “Statistical Report on China’s Internet Development”) ».

⁴⁵⁸ Ibid.

⁴⁵⁹ Rochot, Peng, and Hou, «The Digital Inclusion of Older Persons in China».

⁴⁶⁰ Cao, «让老人开心扫码、潇洒亮码_澎湃新闻_澎湃新闻 (Let the elderly scan the code happily and show the code in a cool way) »; Huang, «对话 | 段勇：如火如荼的博物馆数字化建设，还需兼顾老者_艺术评论_澎湃新闻 (Dialogue | Duan Yong: The digital construction of museums is in full swing, but we still need to take care of the elderly) »; Rochot, Peng, and Hou, «The Digital Inclusion of Older Persons in China»; Zhang and Zheng, «“社区守护者”，他们是上海抗疫的平凡之光_浦江头条_澎湃新闻 (“Community Guardians”, they are ordinary people’s lights in Shanghai’s fight against the epidemic)».

⁴⁶¹ Rochot, Peng, and Hou, «The Digital Inclusion of Older Persons in China».

following the Henan rural bank financial scandal.⁴⁶² The scandal had affected four banks located in Henan province, the Yuzhou Xinminsheng Village Bank, the Shangcai Huimin County Bank, the Zhecheng Huanghuai Community Bank, and the Kaifeng New Oriental Country Bank, where many investors found themselves unable to withdraw their deposits.⁴⁶³ The closure of withdrawals sparked criticism on Weibo of the Henan government that found expression in protests on May 23 in Zhengzhou, the provincial capital, in which depositors demanded their money back.⁴⁶⁴ Many protesters involved in the protests would later see their health code turn red, forcing them to restrict their movements due to anti-COVID restrictions and thus preventing them from demonstrating.⁴⁶⁵

This appears to have been a decision made without authorization by the executive deputy of the Political and Legal Affairs Committee of the Zhengzhou Municipal Committee Feng Xianbin, Zhang Linlin, Secretary of the Youth League Committee and Deputy Director of the Social Control and Guidance Department of the Municipal COVID-19 Epidemic Prevention and Control Headquarters, Zhao Yong, director of the Stability Maintenance Guidance Division of the Political and Legal Affairs Commission, Chen Chong, a staff member of the Municipal Big Data Bureau and leader of the Health Code Management Group of the Social Control Guidance Department of the Municipal Epidemic Prevention and Control Headquarters, and Yang Yaohuan, deputy general manager of Zhengzhou Big Data Development Co. Ltd.⁴⁶⁶

According to reports, 1317 rural bank depositors were assigned a health code red, 446 of them after scanning the Zhengzhou location code and 871, despite not being in the city, after scanning the Zhengzhou location code sent to them by others.⁴⁶⁷ Those responsible for this decision were subject to administrative sanctions and demerits with serious

⁴⁶² Duan, «1651家村镇银行现在怎么样？鲁冀豫数量最多·全国122家为高风险 (How are the 1,651 rural banks doing now? Shandong, Hebei and Henan have the largest number, with 122 high-risk companies across the country) ».

⁴⁶³ Koetse, «The Curious Case of the Henan Bank Depositors and the Changing Health QR Codes».

⁴⁶⁴ BBC. «Henan: China to Repay Customers after Mass Bank Protests»

⁴⁶⁵ Dong, «A Chinese City May Have Used a Covid App to Block Protesters, Drawing an Outcry. »; Tsang, «China Abuses Health Code App for Crowd Control».

⁴⁶⁶ Global Times, «关于部分村镇银行储户被赋红码问题调查问责情况的通报 (Notice on the investigation and accountability situation of the issue of red codes assigned to some village bank depositors) ».

⁴⁶⁷ Ibid.

repercussions on their career prospects.⁴⁶⁸ This example, while not the only one, is the case in which the repressive potential of HCAs as tools of social control and not just as a means of pandemic management has been most widely seen, opening up a strong internal debate about what the limitations of this tool should be and the future of HCAs at the end of the pandemic emergency.⁴⁶⁹⁴⁷⁰

Beyond the critiques presented, HCAs in China appear to have some critical issues that potentially go to question the effectiveness of the health QR code as a cornerstone of China's pandemic counterstrategy. First, in analysing the role of HCAs, one must ask what rationale these respond to—whether they were adopted as strictly necessary measures to respond to the virus or whether they were employed to respond to and manage the social consequences of the pandemic. Chinese HCAs use algorithms and big data to estimate the likelihood of having been in close contact with an infected person and how likely it is to have become infected from this contact.⁴⁷¹ Therefore, they do not verify that contact with an infected person has occurred but, adopting a strongly preventive logic, take action even before the spread of the infection is confirmed.⁴⁷²

This strongly prevention-based approach is not unique to Chinese HCAs. In fact, health apps such as the one jointly developed by Apple and Google in the U.S. also exhibit the same preventive logic, making it complex to understand whether the use of contact tracing is in itself a successful strategy in reducing infection or whether this is to be attributed to other measures such as lockdowns.⁴⁷³ In one of the most recent meta-analyses on the effectiveness of contact tracing in countering the COVID-19 pandemic, Juneau et al.,

⁴⁶⁸ Ibid.

⁴⁶⁹ Wang, «Opinion | China's Health QR Code System Is Ripe for Abuse and Must Not Outlast Covid»; Krutika and Wu, «Police Seize on COVID-19 Tech to Expand Global Surveillance»; McMorrow and Leng, «'Digital handcuffs': China's Covid health apps govern life but are ripe for abuse»; Wang, «China: Fighting COVID-19 With Automated Tyranny».

⁴⁷⁰ The case of Henan was chosen because it is the largest confirmed case of abuse of the Health QR Code to date. Numerous other isolated cases of human rights activists or figures critical of the government's actions are extensively documented but, unlike the Henan case, these have been justified as malfunctions of HCAs thus not attributable to an explicit desire to silence and restrict the movements of the individuals in question. Other particularly relevant cases include that of human rights activist Wang Yu or former wealth manager Yang Jiahao. In both cases, the code of the individuals concerned went red without justification in the first case when the activist was in Datong to advise some of the city's miners and in the second case when Yang Jiahao was in Beijing to lodge various complaints with the central government. For more cases see Krutika and Wu, «Police Seize on COVID-19 Tech to Expand Global Surveillance», and Wu, «Beijing Human Rights Activist Immobilized by COVID-19 App».

⁴⁷¹ Cong, «From Pandemic Control to Data-Driven Governance», 5.

⁴⁷² Ibid.

⁴⁷³ Cellan-Jones and Kelion, «Coronavirus: The Great Contact-Tracing Apps Mystery».

after analysing a sample of 342 research papers on the subject, conclude that there is very-low certainty consistent evidence that contact tracing (alone or in combination with other interventions) was associated with better control of COVID-19.⁴⁷⁴ On the other hand, the adoption of effective quarantine methods, which the CCP has used extensively, appears to be strongly correlated with halting the spread of the virus as well as being more cost-effective.⁴⁷⁵

Operating vigorous monitoring and implementing effective restrictions are essential elements of countering the pandemic, but as the effectiveness of HCAs is called into question, we need to think deeply about why the central government decided to condition freedom of movement and a multiplicity of different activities on this tool. This answer could easily be found if we knew the underlying assumptions that characterize the algorithms on which HCAs operate.⁴⁷⁶ However, constituting the utilized algorithms as black-boxes operating inscrutable statistical reasoning, this proves impossible to implement.⁴⁷⁷ What turns out to be possible instead is to observe the goals that those who created the algorithms have achieved and from this to understand the logics that feed the algorithms being these not the product of simple lines of code but the expression of specific institutional wills.⁴⁷⁸

While HCAs lack effectiveness and accuracy as a virus detection tool, what they do succeed in, however, is turning health into a tool of social control and maintenance of discipline due to the widespread use HCAs have enjoyed in Chinese society.⁴⁷⁹ Conditioning citizens' freedom of movement on the health QR Code increases the disciplinary powers of the authorities and, at the same time, through the use of self-reporting to obtain green QR Codes, goes a long way toward internalizing self-discipline by individuals, turning it into yet another form of social control.⁴⁸⁰ The result is a mixture of mass surveillance and public service delivery conveyed through health apps that perform a social control operation and provide a false sense of security from the virus.⁴⁸¹

⁴⁷⁴ Juneau et al., «Effective Contact Tracing for COVID-19».

⁴⁷⁵ Juneau et al., «Lessons from Past Pandemics».

⁴⁷⁶ Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*; Abadi et al., «Deep Learning with Differential Privacy»; Tsamados et al., «The Ethics of Algorithms».

⁴⁷⁷ Pasquale, *The black box society*;

⁴⁷⁸ Zuboff, *The age of surveillance capitalism*.

⁴⁷⁹ Liu and Graham, «Making Sense of Algorithms», 1–4.

⁴⁸⁰ *Ibid.*, 6.

⁴⁸¹ Kitchin, «Civil Liberties or Public Health, or Civil Liberties and Public Health? », 362–81.

These considerations thus lead us to frame HCAs more as a control tool than a public health safeguard tool.

3.3 The Social Credit System: An Adaptive Tool for Crisis Management

The COVID-19 pandemic was a complex governance challenge, but it also provided an opportunity to test the efficiency of digital governance tools that have developed over the years. In a sense, the pandemic constituted a limit test of China's digital ambitions, allowing experimentation with new tools such as Health Code Apps and the observation of how other pre-existing tools could be repurposed to manage crises.⁴⁸² The use of HCAs during the pandemic responds to the latter case. In Chapter 2, one of the features of the Social Credit System that was most highlighted was the extreme flexibility of this tool to enforce laws and regulations, attempting to address one of the major deficits suffered by the Chinese Communist Party, while promoting a specific moral code.⁴⁸³ In the pandemic context, this flexibility has been fully exploited in three main ways:

1. As a tool to alleviate the economic and financial impact of the pandemic.
2. As an enforcement mechanism to punish behaviours potentially detrimental to pandemic law enforcement action.
3. As a propaganda tool to support the "war" against the pandemic.⁴⁸⁴

In addition to the way the SCS has characterized its approach to the pandemic, it is important to recognize the role the pandemic has played in influencing the future course of the SCS. One of the major problems that the HCA has encountered since its creation is certainly that of information islands, and in this respect, we can observe how COVID-19 has succeeded in giving new prominence to this issue and partly accelerating its resolution.⁴⁸⁵ Indeed, pandemic counteracting, and in particular the creation of HCAs, has required greater sharing of both horizontal and vertical data among agents involved in crisis management to increase regional and national interoperability.⁴⁸⁶

⁴⁸² Knight and Creemers, «Going Viral», 1–3.

⁴⁸³ Creemers, «China's Social Credit System».

⁴⁸⁴ Knight and Creemers, «Going Viral», 7-15; Giggler, «China's Social Credit System in the Light of Covid-19».

⁴⁸⁵ Chen and Greitens, «Information Capacity and Social Order», 512; Xinhuanet, «李克强主持召开国务院常务会议-新华网 (Li Keqiang presided over the executive meeting of the State Council) ».

⁴⁸⁶ Miao, «Coded Social Control».

For example, during the pandemic, the Yangtze River Delta Region created an interface devoted to sharing public health data that led to the accumulation of about 14.9 million data points.⁴⁸⁷ This initiative is to be positioned as a step forward and an enhancement of the previous Yangtze River Delta Regional Social Credit System, an attempt to unify the SCS-related systems put in place in Shanghai Municipality and Anhui, Jiangsu, and Zhejiang provinces as of 2018.⁴⁸⁸ Another interesting case is the establishment of a "digital model zone" (*shuzi shifanqu*) between Qingpu District of Shanghai, Jiashan County of Zhejiang Province, and Wujiang District of Suzhou City of Jiangsu Province.⁴⁸⁹ This development was dictated by the desire to integrate the punitive tools offered by the SCS within the pandemic response. Based on these examples, it becomes clearer why initiatives such as the one in Hangzhou were promoted by local officials. Integrating HCAs, but more importantly the data collected from them, within a broader system such as the SCS goes beyond an exponential increase in the system's ability to engineer certain social behaviours, ensuring that social credit can also become a tool for safeguarding public health.⁴⁹⁰⁴⁹¹

From a digital governance perspective, COVID-19 was thus an opportunity that opened new horizons about the future development of tools such as SCS and HCAs. On the one

⁴⁸⁷ Knight and Creemers, «Going Viral», 17.

⁴⁸⁸ Credit Nanjing, «《长三角地区深化推进国家社会信用体系建设区域合作示范区建设行动方案（2018-2020）》（“Action Plan for Deepening and Promoting the Construction of a Regional Cooperation Demonstration Zone for the Construction of a National Social Credit System in the Yangtze River Delta Region (2018-2020)”）»; Credit Division of Zhejiang Provincial Development and Reform Commission, «我省积极推进长三角信用一体化建设（Our province actively promotes the construction of credit integration in the Yangtze River Delta）».

⁴⁸⁹ Xinhua Credit, «长三角探索打造“数字示范区”信用“红黑名单”互认可期（The Yangtze River Delta explores the creation of a “digital model zone” and mutual recognition of credit “red and black lists”）».

⁴⁹⁰ Chen, «农工党中央：将医疗消费纳入个人信用系统，建立有效惩戒机制_财经上下游_澎湃新闻（Central Committee of the Peasants and Workers Party: Incorporate medical consumption into the personal credit system and establish an effective punishment mechanism）».

⁴⁹¹ Specifically, the Central Committee of the Peasants and Workers' Party submitted a proposal in May 2020 (i.e., the time when the COVID-19 pandemic became a global health emergency) to integrate medical consumption within the SCS. According to this proposal, the integration process was seen as a necessary intervention to reform the medical health system in a hard-hitting way and change the doctor-patient relationship. This proposal envisions as its main points the integration of health information and SCS in order to obtain medical services more affordably or have the option to receive treatment sooner and pay later in the case of high credit score, leverage the Joint Punishment and Reward Mechanism to create more effective disciplinary mechanisms, strengthen medical credit evaluation, and promote integrity and honesty within medical institutions. We thus see a further expansion of the SCS going to the health care sector. The note above provides a more detailed description of the proposal.

hand, we can speculate that the experience of health apps, because of the speed and scale with which it was implemented, has accustomed people to these digital governance tools, thus facilitating the evolution and normalization of SCS. However, from another perspective, we can see how the pandemic has also brought to the surface more attention to privacy issues and the potential misuse of digital tools.

Having explained why COVID-19 was an important event in the development of SCS and digital governance tools more generally, it is now important to look more concretely at how SCS was used during the pandemic. This step is essential for a variety of reasons. First, the point of contact between pandemic management and SCS is a surprisingly ignored topic in academia. To date, except for a few sparse mentions, the only two scholars to conduct such an investigation have been Rogier Creemers and Adam Knight.⁴⁹² This section, therefore, aims to provide a detailed overview of the issue. Second, observing the actions of HCAs during the pandemic is also to observe a shift in terms of the public's perception of digital tools. Thanks predominantly to the visibility of HCAs, digital tools such as the SCS, whose criticism was often limited domestically to debates among academics, have, in my view, begun to raise public awareness of the implications they have for privacy. The impact of this increased awareness on the acceptance of this tool will be discussed in the next chapter. Finally, discussing SCS and COVID-19 is to give a tangible, large-scale example of what is the greatest strength of this tool—its extreme flexibility. Talking about the usage of the SCS during the pandemic provides exactly this.

3.3.1 The SCS as an Economic Relief Instrument

The COVID-19 pandemic wasn't solely a challenge for China's healthcare system but also posed a significant threat to the Chinese economy. Pandemic response strategies needed to balance public health and economic concerns, with lockdowns, though effective in countering the virus, presenting high costs in terms of resuming economic activity.⁴⁹³

⁴⁹² The paper in question is "Going Viral: The Social Credit System and COVID-19" by Adam Knight and Rogier Creemers. These two scholars are certainly two of the leading authorities on SCS issues. My own research work has found in them a solid reference point for developing my views and navigating my way through an issue that can be extremely complex at times. I highly recommend their writings on the subject to anyone who wants to learn more about the history and evolution of the SCS.

⁴⁹³ Juneau et al., «Lessons from Past Pandemics».

One of the primary risks during the pandemic was the potential spill over of economic growth problems to the country's banks.⁴⁹⁴ This would have particularly impacted small and medium-sized enterprises, crucial contributors to China's economic development. SMEs constitute over 90% of total enterprises, provide 80% of urban employment, contribute to more than 70% of technological innovations, account for about 60% of GDP, and contribute half of national taxes.⁴⁹⁵ The concern was that lenders, especially smaller ones, might hesitate to provide credit to SMEs, causing severe economic consequences.

To prevent such a scenario, the government implemented stabilization policies, including direct subsidies, facilitated funding access, deferrals and exemptions, and employment protections..⁴⁹⁶ All'interno delle politiche di stabilizzazione, l'SCS è stato ampiamente utilizzato. The Social Credit System played a significant role in these stabilization policies. Initially, some of the system's controls were relaxed or suspended to prevent firms from facing excessive fiscal burdens.⁴⁹⁷ To reassure businesses about potential impacts on credit scores due to the pandemic, the People's Bank of China explicitly stated its commitment to protecting the public's rights and interests related to credit reporting.⁴⁹⁸ This position was later reaffirmed by the State Council through the "Notice on Temporary Postponement of Interests Charge on Loan Repayment for Small, Medium, and Micro Enterprises" in which it stated how the blacklisting system would not be applied to all those enterprises that had violated their contractual or tax obligations due to the pandemic.⁴⁹⁹ Originally intended for the initial phase of the health crisis, these initiatives

⁴⁹⁴ Haasbroek, «Coronavirus Crisis Impacts China's Credit System».

⁴⁹⁵ China Government Network, «刘鹤主持召开国务院促进中小企业发展工作领导小组第一次会议_国务院副总理刘鹤_中国政府网 (Liu He presided over the first meeting of the State Council's leading group on promoting the development of small and medium-sized enterprises) »; Sun et al., «The Impact of COVID-19 on SMEs in China, 1 »; Liu, Stambaugh, and Yuan, «Size and Value in China».

⁴⁹⁶ Chen et al., «Riding out the COVID-19 Storm», 3.

⁴⁹⁷ Knight and Creemers, «Going Viral», 9.

⁴⁹⁸ People's Bank of China, Ministry of Finance, Banking and Insurance Regulatory Commission, China Securities Regulatory Commission, State Administration of Foreign Exchange, «关于进一步强化金融支持防控新型冠状病毒感染肺炎疫情的通知_国务院部门文件_中国政府网 (Notice on Further Strengthening Financial Support for the Prevention and Control of the Novel Coronavirus Pneumonia Epidemic) ».

⁴⁹⁹ Party Central Committee and the State Council, «银保监会有关部门负责人就《关于对中小微企业贷款实施临时性延期还本付息的通知》答记者问_政策解读_中国政府网 (The head of the relevant department of the China Banking and Insurance Regulatory Commission answered reporters' questions on the "Notice on Implementing Temporary Delay in Principal and Interest Payment for Loans to Small, Medium and Micro Enterprises") ».

were extended to cover the recovery period following the initial emergency through a decision of the Supreme People's Court.⁵⁰⁰

Apart from suspending planned domestic punishments, the SCS also functioned as a tool to facilitate access to credit for companies. The PBC pledged to ensure liquidity for banks through monetary policy operations, injecting a total of 1.5 trillion Chinese Yuan.⁵⁰¹ Emphasizing the importance for financial institutions to increase credit extension, several ministries communicated the necessity of providing credit through the SCS to revitalize the economy.⁵⁰² Therefore, we can clearly see how the SCS was from the get go identified as an essential instrument for the country's economic recovery.⁵⁰³ These decisions were made available for business consultation through the Credit China platform, a primary information source for credit-related measures.⁵⁰⁴

Stimulating access to credit through the SCS is not something that has involved only government actors but also private companies such as the aforementioned Sesame Credit owned by the giant Alibaba and E-commerce platforms such as Tmall and Taobao.⁵⁰⁵ Article 12 of the "Guiding Opinion on Responding to the Impact of the Epidemic and increasing Support for Privately - or Individually - Owned Businesses" issued by the State Administration for Market Regulation, in collaboration with various ministries and departments, explicitly called for these private companies to facilitate access to credit by allowing the writing off of previous infractions included in their credit score.⁵⁰⁶

⁵⁰⁰ Supreme People's Court, «最高法举行依法妥善办理涉新冠肺炎疫情执行案件若干问题《指导意见》发布会 (The Supreme People's Court held a press conference on the "Guiding Opinions" on several issues concerning the proper handling of enforcement cases involving the COVID-19 epidemic in accordance with the law.) ».

⁵⁰¹ Haasbroek, «Coronavirus Crisis Impacts China's Credit System».

⁵⁰² People's Bank of China, Ministry of Finance, Banking and Insurance Regulatory Commission, China Securities Regulatory Commission, State Administration of Foreign Exchange, «关于进一步强化金融支持防控新型冠状病毒感染肺炎疫情的通知_国务院部门文件_中国政府网 (Notice on Further Strengthening Financial Support for the Prevention and Control of the Novel Coronavirus Pneumonia Epidemic) ».

⁵⁰³ Xinhua News Agency, «李克强主持召开国务院常务会议-新华网 (Li Keqiang presided over the executive meeting of the State Council) ».

⁵⁰⁴ Knight and Creemers, «Going Viral», 10.

⁵⁰⁵ Ibid.

⁵⁰⁶ State Administration for Market Regulation et al., «【关于应对疫情影响 加大对个体工商户扶持力度的指导意见(国市监注〔2020〕38号)】-国家发展和改革委员会 (Guiding Opinion on Responding to

These initiatives showcased a collaborative effort between government and private entities leveraging the SCS to support economic recovery during and after the pandemic.

3.3.2 The SCS as a Tool for Enforcing Covid Regulations

The use of the Social Credit System as a financial instrument and enforcement tool during the COVID-19 pandemic showcased its efficiency in financial stabilization on a national scale and its capacity as a governance enforcement tool.

From its inception, the SCS was designed to function as a financial tool, and the pandemic emphasized its effectiveness in this regard. The system demonstrated its capability to efficiently manage financial aspects on a large scale during an unprecedented emergency. This was evident not only to the government but also to the general public.

Another crucial aspect of the SCS highlighted during the pandemic was its role as an enforcement tool. As the health emergency evolved into a governance crisis, various ministries introduced new untrustworthy behaviours (shixin) to add to the blacklisting system. For example, the National Intellectual Property Office issue a notification that encouraged intellectual property offices in all provinces to speed up and improve credit record files to account for violations by individuals and companies against appropriate licensing and trademarking related to the sale of pandemic-related products.⁵⁰⁷ Along the same lines, the State Administration for Market Regulation included trade in wild animals and the sale of fake masks and other protective equipment in its blacklisting systems.⁵⁰⁸ Punishments for this conduct saw administrative penalties that had to be at least 30 percent higher than those imposed in non-emergency situations, and cases had to be handled as quickly as possible by law enforcement.⁵⁰⁹ Finally, a further example of the expansion of shixin behaviours contemplated by the SCS was the Ministry of

the Impact of the Epidemic and increasing Support for Privately – or Individually – Owned Businesses”) ».

⁵⁰⁷ National Intellectual Property Office, «国家知识产权局办公室关于严厉打击与新冠肺炎疫情相关非正常商标申请代理行为的通知_国务院部门文件_中国政府网 (Notice of the Office of the State Intellectual Property Office on Strictly Cracking Down on Abnormal Trademark Application Agent Behavior Related to the COVID-19 Epidemic) ».

⁵⁰⁸ State Administration for Market Regulation, «市场监管总局关于依法从重从快严厉打击新型冠状病毒疫情防控期间违法行为的意见_国务院部门文件_中国政府网 (Opinions of the State Administration for Market Regulation on Crackdown on Illegal Acts During the Prevention and Control of the Novel Coronavirus Epidemic Strictly and Quickly in accordance with the Law) ».

⁵⁰⁹ Ibid.

Transportation's imposition of punishments operating through the blacklisting system for all those found using the lanes reserved for the transit of essential workers.⁵¹⁰

This expansion of the blacklisting system was facilitated by the guerrilla-style governance and fragmented authoritarianism inherent in China's system. Local Social Credit Management Offices adapted and implemented these directives, creating their own categories of offenses against anti-COVID regulations for inclusion on blacklists.⁵¹¹ Two notable cases were observed in the cities of Anshan and Shanghai.

In Anshan, as part of the "2020 Work Report on the Construction of a Rule of Law Government", it was emphasized the need to strengthen blacklisting measures, already included in the "Credit Anshan"⁵¹², to carry out long-term epidemic prevention and control, extend the coverage of pandemic support policies, and strengthen the integrity monitoring system in order to promote a climate of honesty and trustworthiness that would help counter the pandemic.⁵¹³ Untrustworthy behaviours, such as hiding virus symptoms, not disclosing recent travels, and sharing false information, were considered grounds for inclusion in individuals' personal credit files, potentially leading to blacklisting.⁵¹⁴ These were progressively compounded by other behaviours such as evading contact tracing systems put in place or, in the case of businesses, charging unfair prices on necessary goods to make an unfair profit, failing to comply with opening hours under anti-covid measures, or preventing people from returning within the country for work.⁵¹⁵

In Shanghai, the local SCS was rapidly and radically employed as an anti-COVID enforcement measure. The city government explicitly stated that behaviours similar to

⁵¹⁰ National Ministry of Transport, «交通运输部 国家卫生健康委关于切实简化疫情防控应急运输车辆通行证办理流程及落实对应急运输保障人员不实行隔离措施的通知_国务院部门文件_中国政府网 (Notice from the National Health Commission of the Ministry of Transport on effectively simplifying the application process for emergency transportation vehicle passes for epidemic prevention and control and implementing no isolation measures for emergency transportation support personnel) ».

⁵¹¹ Knight and Creemers, «Going Viral», 11–12.

⁵¹² Credit Anshan is the main platform through which the city's Social Credit System credit rating operates.

⁵¹³ Anshan Municipal Development and Reform Commission, «关于2020年法治政府工作报告-文件资料-鞍山市发展改革委员会 (2020 work report on the construction of a rule of law government) ».

⁵¹⁴ Knight e Creemers, «Going Viral», 12.

⁵¹⁵ Ibid.; Nanjing Credit Office, «关于进一步加强信用管理工作 积极防控新冠肺炎疫情的实施办法_信用苏州 (Implementation Measures for Further Strengthening Credit Management and Actively Preventing and Controlling the COVID-19 Epidemic) ».

those in Anshan would be considered untrustworthy and included in the blacklisting system.⁵¹⁶ In addition to legal channels, in Shanghai we again see the use of the naming and shaming mechanism that has been constituted as a feature of the SCS in recent years. The names of individuals guilty of breaking existing regulations saw their credit record and information made public online to showcase the government's actions on the one hand and, at the same time, go on to stigmatize behaviour deemed harmful to the community.⁵¹⁷ Within a month of the publication of the new legislation, a total of 96 administrative penalty cases related to the epidemic have been sorted out, involving 104 dishonest persons whose names and information have been publicly disclosed.⁵¹⁸ The Shanghai case is not isolated but was soon replicated in numerous other cities in China.⁵¹⁹

These examples underscore how the use of the SCS became normalized in China's approach to social governance during the pandemic. Credit was no longer solely a matter of personal ethics but a crucial element of the institutional application intrinsic to the governance system itself. The pandemic accelerated the process of constructing, internalizing, and normalizing norms imposed through digital tools like the SCS, turning them into a moral compass and yardstick for individuals.

3.3.3 The SCS as a Propaganda and Behavioural Instrument

In the preceding discussion, I have delineated the coercive measures, or "sticks," wielded by the SCS within the pandemic context. However, the SCS doesn't solely rely on punitive measures; it also employs a variety of incentivizing strategies, akin to offering "carrots." Functioning much like the HCAs, the SCS serves as a tool of social control, aiming not only to discourage and penalize specific behaviours but also to encourage actions deemed

⁵¹⁶ Standing Committee of the 15th Shanghai Municipal People's Congress, «上海市人民代表大会常务委员会关于全力做好当前新型冠状病毒感染肺炎疫情防控工作的决定 (Decision of the Standing Committee of the Shanghai Municipal People's Congress on making every effort to prevent and control the current novel coronavirus pneumonia epidemic) ».

⁵¹⁷ Yao, «同心抗疫独家述评 | 疫情改变的·还有“信用习惯” (Exclusive Commentary on Fighting the Epidemic Together | The epidemic has also changed “credit habits) ».

⁵¹⁸ Ibid.

⁵¹⁹ Lanzhou News Network, «我市发布“共筑诚信德润金城”抗击疫情专题诚信“红黑榜” (Our city released a special integrity “red and black list” on the topic of “Building Integrity, Derun and Golden City Together” to fight the epidemic.)».

socially optimal. The SCS, in this regard, act as instruments incentivizing constructive behaviours in the realm of pandemic mitigation. The processes of blacklisting and redlisting are then utilized to propagate a societal vision that aligns with the goals of the CCP and steers its trajectory accordingly.

This multifaceted approach is evident in various regions, such as Anshan. Here, narratives of individuals violating anti-COVID measures, portrayed as untrustworthy due to prioritizing personal interests, are juxtaposed with stories of those contributing through donations, volunteer work, or rent reductions—exemplifying positive values for Chinese society.⁵²⁰ This juxtaposition can be detected in multiple instances. For example, on the Credit Yunnan site a total of 123 related cases have been monitored and released, including 91 cases on the "Honorable List of Epidemic Prevention" and 32 cases of illegal and breach of trust.⁵²¹ Similar tracking occurred on the Credit Lanzhou platform, listing 214 entities on the red list and four on the black list.⁵²²

These examples, among numerous others, share a common objective. On one hand, they aim to publicize the government's active role in pandemic combat, and on the other hand, they provide visible instances of virtuous behaviour for public emulation. The message is unequivocal and potent: amid a crisis, there is no room in society for those deviating from a prescribed morality. Individuals lacking this moral compass should face severe punishment and public stigma as the epitome of selfishness. Conversely, those adhering to promoted values are elevated as heroes.

While this mechanism might bear some resemblance to the concept of "nudge," they are fundamentally different. Nudge relies on subtlety and invisibility to preserve individual freedom of choice, whereas the SCS is overt and explicit.⁵²³ The conduct promoted through the SCS is not one of many possible option but the only one to adopt to act morally. It is not what behavioural economist Richard Thaler and law scholar Cass Sunstein, those who introduced the first technical definition of nudge, define as a

⁵²⁰ Knight and Creemers, «Going Viral», 13.

⁵²¹ Yunnan Daily, «云南省启动疫情防控信用监测 (Yunnan Province launches epidemic prevention and control credit monitoring) ».

⁵²² Lanzhou News Network, «我市发布“共筑诚信德润金城”抗击疫情专题诚信“红黑榜” (Our city released a special integrity “red and black list” on the topic of “Building Integrity, Derun and Golden City Together” to fight the epidemic.)».

⁵²³ Saghai, «Salvaging the Concept of Nudge», 487–90.

libertarian paternalism devoted to directing toward the decision that best individual and collective welfare but an authoritarian paternalism in which virtuous and untrustworthy behaviour are defined a priori by a clear governmental authority.⁵²⁴

Moreover, during the pandemic, the SCS served to dispense tangible benefits to individuals demonstrating trustworthiness through high credit scores. In many cases, cities were prompted to offer financial aid based on credit scores, as observed in locations like Wuxi, Changzhou, and Yancheng.⁵²⁵ Here, substantial financing was extended to enterprises via platforms like "CreditEase Loan".⁵²⁶ It is essential to note that access to credit channels was not restricted solely to redlisted companies but was intended more broadly for all enterprises affected by the COVID-19 pandemic, as demonstrated in Jiangxi City.⁵²⁷⁵²⁸

3.4 Protests in China: The "Zero-COVID" Policy and the A4 Movement

From what has been highlighted so far, it is clear that the war on the pandemic was both an unprecedented governance challenge for China's CCP but also an opportunity to take full advantage of the potential offered by ICTs, test in extreme situations existing digital governance systems such as the Social Credit System, and implement new ones such as Health Code Apps. Talking about the use of these technologies during the pandemic is essential first and foremost to frame and problematize these tools to answer the central

⁵²⁴ Ibid.; Thaler and Sunstein, *Nudge*.

⁵²⁵ Jiangsu Provincial Development and Reform Commission Office, «江苏省发展改革委关于应对新冠肺炎疫情影响切实加强信用管理和服务工作的通知-无锡市发展和改革委员会 (Notice of the Jiangsu Provincial Development and Reform Commission on Effectively Strengthening Credit Management and Services in Response to the Impact of the COVID-19 Epidemic) ».

⁵²⁶ Sohu News, «实施社会信用精准管理 江苏筑起疫情防控“信用战线”企业 (Implementing precise social credit management, Jiangsu builds a “credit front” for epidemic prevention and control) ».; Knight and Creemers, «Going Viral», 14.

⁵²⁷ Jiangxi Provincial Development and Reform Commission, «【江西省发展改革委全力以赴做好生活必需品保供稳价、重点防疫物资调配和稳定经济增长工作】-国家发展和改革委员会 (The Jiangxi Provincial Development and Reform Commission has gone all out to ensure the supply and price of daily necessities, allocate key epidemic prevention materials, and stabilize economic growth) ».

⁵²⁸ It is important to point out that although the norms and behaviours introduced in terms of blacklisting and redlisting during the pandemic were more or less the same in every city and region, the ways in which credit points were awarded or deducted as well as the scoring system itself often differed considerably depending on the local context examined.

question of this thesis, namely why the Chinese population supports technologies that have the potential to operate extremely repressive social control.

Moreover, talking about the pandemic experience in China allows us to deal with what is perhaps the most interesting event in analysing the population's acceptance of these technologies. This is the outbreak of the so-called "A4 Movement" or "White Paper Revolution" that is, the wave of protests that hit China when the population was confronted with the prospect of an indefinite continuation of the aggressive zero-COVID policy. This event is of historical significance first because it is the first nationwide mass protest since the events of Tiananmen Square but, more importantly, this case demonstrates that the social acceptance of government's promoted digital technologies is to be seen as certain. This element will be developed further in Chapter 4 where it will be used as a starting point to compare HCAs and SCSs, explaining where and why the former "failed" while the latter did not.

The next sections will first go on to explain why the government has been so slow in abandoning the zero-COVID policy despite its obvious shortcomings and criticality over time in the face of the emergence of increasingly aggressive variants such as Omicron that soon showed their ability to outperform measures that had previously proven effective in pandemic countermeasures. This will be the springboard for discussing the A4 Movement in more detail and what this tells us about the factors influencing Chinese public acceptance. Finally, we will go on to briefly discuss the impact that the pandemic experience might have on the future development of digital governance technologies.

3.4.1 Why did the CCP Refuse to Abandon the Zero-COVID Policy?

The adoption of the "dynamic Zero-COVID" policy, which aims to identify the last phase in which China's pandemic approach is classifiable, is the main reason why China has been able to deal with the pandemic much more effectively when compared to most other countries. China's aggressive approach, characterized as already highlighted by containment strategies such as extensive lockdown periods and the extensive use of digital governance tools such as HCAs and the SCS itself, has resulted in the country's ability to prevent the spread of the virus, hospitalizations, and deaths related to COVID-

19.⁵²⁹ In addition to these obvious benefits, the adoption of the Zero-COVID policy has also ensured less pressure on the national healthcare system and better economic performance⁵³⁰ during the pandemic than in many other countries..⁵³¹

At the same time, however, it must be noted that the adoption of the Zero-COVID policy caused unprecedented disruption to the lives of citizens and businesses who often found themselves forced to comply with strict lockdowns for extended periods of time and undergo mass testing to ward off contagions.⁵³² As time went by, the COVID restriction took an increasingly unbearable toll on the population who grew more and more frustrated by the limitations imposed.

While many countries were gradually easing their pandemic countermeasures with a view to a gradual return to normalcy and living with the virus, China remained steadfast in maintaining its zero-COVID policy.⁵³³ However, the harmful effects of this strategy were becoming increasingly evident, especially in the face of the emergence of the more aggressive Omicron variant. Emblematic was the case of the two-month lockdown in Shanghai which created an unprecedented crisis characterized by food shortages, disruptions in the delivery of basic necessities for the city's 25 million residents, and disastrous economic effects on businesses.⁵³⁴ In the face of criticism of the government after this event, Xi Jinping, during a speech to the nation, confirmed how there was no intention to relax pandemic countermeasures and strongly criticized all those who expressed doubts about the policy.⁵³⁵

This decision is explained primarily in light of some health considerations. Beijing has based its anti-COVID-19 strategy primarily on non-pharmaceutical remedies, and thus the main risk was the eruption of mass outbreaks in the event of an easing of zero-

⁵²⁹ Su et al., «The Advantages of the Zero-COVID-19 Strategy», 6–8.

⁵³⁰ In this regard, Burki says how in 2021 alone, when the rest of the world was suffering economic growth due to the disastrous effects of the pandemic, China recorded 8.1% growth. See Burki, «Dynamic Zero COVID Policy in the Fight against COVID».

⁵³¹ Du et al., «Mental Health Burden in Different Professions During the Final Stage of the COVID-19 Lockdown in China»; Sakib et al., «Fear of COVID-19 and Depression», 976–85; Torrente et al., «To Burn-out or Not to Burn-Out»; Ouyang, «China's economy expands 8.1% in 2021».

⁵³² Burki, «Dynamic Zero COVID Policy in the Fight against COVID», 58–59.

⁵³³ Chen and Chen, «China Can Prepare to End Its Zero-COVID Policy».

⁵³⁴ Davidson, «Xi Jinping Attacks 'Doubters' as He Doubles down on China's Zero-Covid Policy».

⁵³⁵ Ibid.; Davidson, «Outcry in Shanghai as Person Declared Dead and Put in Body Bag Found to Be Alive».

COVID.⁵³⁶ In this regard, the Chinese Centre for Disease Control estimated in the event of abandonment of the policy a number of daily infections of 637,000.⁵³⁷ It is self-evident how such an eventuality would have had disastrous consequences on society as a whole that would have been far worse than the social discontent and economic damage that the measures were causing.

One must also consider how the vaccination campaign in China has been particularly slow partly because of the government's willingness not to approve any of the developed Western vaccines.⁵³⁸ China's decision to use only domestic Sinopharm and Sinovac vaccines appears justifiable only as an action dictated by political considerations that has nevertheless slowed population immunization considerably.⁵³⁹ However, once initiated, the vaccination campaign succeeded in raising the vaccination rate from 3.56 percent in February 2021 to 87 percent at the end of August 2022.⁵⁴⁰ Despite these significant developments, it continues to remain complex to understand why the government has continued to be unwilling to abandon its policy.

One element that best explains the government's reticence in relaxing its policies lies in the politicization of the zero-COVID policy itself. In outlining its pandemic approach, the central government was initially faced with decisions dictated by the extreme urgency of the crisis. Given the high infectivity of the virus and rapid transmission, there was no material time to gather the necessary information to take more targeted measures.⁵⁴¹ An hard-hitting and extensive approach was the only possible answer. In addition, COVID-19 presented the risk of causing mass panic that would potentially undermine regime stability.⁵⁴² Thus, efficiency in pandemic countering was not only a matter of public health protection but also a matter of political system stability.

In this regard, King King Li and Ying-yi Hong actually note the existence of a close correlation between confidence in the political system and attitude toward zero-COVID

⁵³⁶ Yuan, «Zero COVID in China», 1856–57.

⁵³⁷ Burki, «Dynamic Zero COVID Policy in the Fight against COVID», 58.

⁵³⁸ Martina and Brunnstrom, «China's Xi Unwilling to Accept Western Vaccines, U.S. Official Says».

⁵³⁹ Yuan, «Zero COVID in China», 1856–57.

⁵⁴⁰ Ibid.

⁵⁴¹ Berger et al., «Uncertainty and Decision-Making During a Crisis».

⁵⁴² Guo, «Human Security and the Party-State-Society Triangle», 47–75.

policy and past experiences with lockdown.⁵⁴³ Specifically, they note that although individuals' ambiguity aversion (i.e., the attitude to support the COVID-19 policy in case the risks of the virus are perceived as unknown), collective national narcissism (the belief of one's nation's superiority) and political conservatism (the belief that the government should control social deviants in society) increase confidence in the political system in relation to COVID-19 policies, long lockdown experiences go a long way toward eroding this confidence.⁵⁴⁴ This allows us to better understand why the government was subjected to such harsh criticism during the long lockdown in Shanghai.

In addition, China's regime type certainly influenced how the crisis was managed. According to the guerrilla-style policy making model, once the CCP entered a crisis situation, it quickly took action through hard-hitting interventions and mass mobilization that left little room for adjustment and reassessment of the policies put in place.⁵⁴⁵ This is how, when the measures that had previously proved effective were destroyed by the Omicron variant, China preferred to exploit its large capabilities by redoubling its efforts in reaffirming the measures taken in the war against covid. Massive mobilization of resources, respect and trust in the leadership, and the adoption of a "war-time discourse" that presented the pandemic fight as a matter of life and death had worked in the earlier stages of the pandemic, and so the belief was that they would continue to do so.⁵⁴⁶

However, the most crucial element in explaining why the zero-COVID policy was framed as an extremely political issue in nature is to be found in the time window in which this policy began to show its flaws. In fact, the zero-COVID policy began to be less effective in containing the pandemic as preparations for the 20th National Congress of the Communist Party of China were being carried out.⁵⁴⁷ This element, which at first glance may seem of little significance, is actually an essential piece in explaining the government's delay in intervening on the zero-COVID policy despite its excessive costs. The CCP's five-year Congress is a pivotal moment in the life of the party when the Central

⁵⁴³ Li and Hong, «Confidence in China's Political System Is Linked to Attitudes Toward Dynamic Zero-COVID Policy», 18–19.

⁵⁴⁴ Ibid. 1-19.

⁵⁴⁵ Keng, Zhong, and Xie, «Why Did China's Zero-COVID Policy Persist? », 214–16.

⁵⁴⁶ Keng, Zhong, and Xie, «Why Did China's Zero-COVID Policy Persist? », 214–16; Kennedy e Chen, «State Capacity and Cadre Mobilization in China», 393–405; Guo, «Human Security and the Party-State-Society Triangle», 47–75.

⁵⁴⁷ State Council, «20th CPC National Congress».

Committee and Politburo are reorganized.⁵⁴⁸ In addition, the 20th Congress constituted a historic event in that it was the first occasion in which a CCP General Secretary began a third term ending the custom whereby power within the CCP is handed over once every decade.⁵⁴⁹ Given the sensitivity of the event, it seems obvious why turning around about the zero-COVID policy sooner would have been politically costly. This policy had been highly personalized by Xi, whose leadership could have been challenged if the zero-COVID had been abandoned because it was too costly.⁵⁵⁰ Abandoning the policy, despite concerns expressed about it even by prominent party figures such as Premier Li Keqiang, would have been for Xi like admitting that he was wrong.⁵⁵¹ Thus, although the Congress itself does not change anything about zero-COVID policy, the importance of the Congress required that critical discussion about scaling back pandemic measures were to be postponed.

3.4.2 Policy Change After the A4 Movement

The factors previously described explain why the zero-COVID policy remained in place despite beginning to show its flaws. However, it would have been legitimate to expect that past the 20th National Congress the government would have gradually relaxed the anti-pandemic measures. This was indeed the Party's intention considering that a Reopening Committee was created under the guide of Wang Huning, one of the top leaders of the CCP.⁵⁵² The reopening was originally envisioned as a slow process that would have taken months to be gradually completed.⁵⁵³ In this regard, it was stated during the Congress how China would continue on the path of dynamic zero-COVID without

⁵⁴⁸ Xinhuanet, «Full text of Constitution of Communist Party of China ». The Congress presents a certain sanctity. This is first and foremost a pivotal moment in the life of the party, enshrined in Article 19 of the PCC Constitution. Here, the balance of power is redefined, without an explicit process of political competition, but rather through alignment with specific policies that express the positions of a specific political group. This feature of the Chinese regime is extremely interesting and completely different from the dynamics we are used to observe in Western democracies. On the surface, political reorganization of the party takes place in the harmony of the Convention, but in reality this process is characterized by internal struggles that are often invisible from the outside.

⁵⁴⁹ Isachenkov and Tong-hyung, «Xi Awarded 3rd Term as China's President, Extending Rule».

⁵⁵⁰ Keng, Zhong, and Xie, «Why Did China's Zero-COVID Policy Persist? », 217.

⁵⁵¹ Brown and Wang, «POLITICS AND SCIENCE», 247–64; Xinhua News Agency, «关键时刻, 中央开了一次很不寻常的会议! (At a critical moment, the central government held a very unusual meeting!) »; State Council, «Quick view: State Council executive meeting on May 11».

⁵⁵² Zhu et al., « How China's new No.2 hastened the end of Xi's zero-COVID policy».

⁵⁵³ Ibid.

hesitation in the months to come.⁵⁵⁴ This is probably due to the fact that the massive mobilization against the virus was constituted as a process characterized by path-dependency that, in the absence of a strong signal from the central government, made local governments assume that zero-COVID was still a priority policy goal and thus continuing in its ironclad implementation could show their efficiency and support for Xi's will.⁵⁵⁵ Moreover, the risk was that, without a sufficient amount of preparation, reopening would have led to monumental economic and human losses.

However, in spite of the reasons behind it, the government's rigidity about the zero-COVID policy was unable to duly take into account the national discontent that now surrounded the policy, and this led in November 2022 to the outbreak of massive protests across China renamed the "A4 Movement" or "White Paper Revolution".⁵⁵⁶ These protests, although short-lived, are of extreme importance. First, they dispel the myth that the pandemic measures were widely supported by the population. Second, as the Movement A4 is one of the most significant nationwide wave of protests since the Tiananmen Square events in 1989, this event demonstrates that the CCP national policy agenda can be altered, and in this case sped up, based on citizens' satisfaction.⁵⁵⁷ This element is relevant for every analysis that wants to investigate public support towards a policy in the Chinese political scenario. While national protest in China are not unheard of, the A4 Movement was able to become a show of dissent that transcended localities and classes.⁵⁵⁸ In this regard Thornton identifies three disparate groups: the urban working class struck by the economic consequences of the lockdowns; the middle-class urbanities and universities students tired of the restrictions; and a strong solidarity movement acting through social media composed of overseas Chinese students and members of the next-generation Chinese diaspora.⁵⁵⁹ Finally, the protests show how people are partly aware of the implications that technologies such as HCAs have in terms

⁵⁵⁴ Xinhua News Agency, «习近平：高举中国特色社会主义伟大旗帜 为全面建设社会主义现代化国家而团结奋斗——在中国共产党第二十次全国代表大会上的报告_滚动新闻_中国政府网 (Xi Jinping: Hold high the great banner of socialism with Chinese characteristics and work together to build a modern socialist country in an all-round way - Report at the 20th National Congress of the Communist Party of China) ».

⁵⁵⁵ Zhuoran, «How Beijing Accidentally Ended the Zero COVID Policy».

⁵⁵⁶ Che and Chien, «Memes, Puns and Blank Sheets of Paper».

⁵⁵⁷ Davidson, «China Covid Protests Explained».

⁵⁵⁸ Jay Chen, «A Protest Society Evaluated».

⁵⁵⁹ Thornton, «The A4 Movement».

of social control and repression. This is evidenced by the multiple slogans calling for the abolition of these tools.⁵⁶⁰

The trigger for the protests was the death of 10 people and the injury of 9 in a residential building under lockdown in Urumqi, capital of Xinjiang, due to a fire.⁵⁶¹ The response of firefighters had been delayed due to the lockdown imposed and this was seen by citizens as the main reason behind this tragedy, sparking fierce criticism against the pandemic measures.⁵⁶² Contributing to further inflaming public opinion were some comments made by local officials denying that the building's doors were closed due to the lockdown and blaming the victims by stating how they were "unable to protect themselves as they were not familiar with the safety exits".⁵⁶³

The events in Urumqi quickly went viral, triggering a huge wave of public outrage and raising severe criticism against the government's actions.⁵⁶⁴ The protests quickly spread like wildfire. As of Nov. 26, 2022, protests and commemorations for the victims of the fire affected 51 universities and major cities such as Nanjing, Shanghai, Beijing, Chengdu, Wuhan, and Guangzhou.⁵⁶⁵ In Nanjing, after banners hung to criticize the zero-COVID policy had been removed, a student protested by displaying a white paper on the steps of the Communication University of China as a criticism of censorship imposed by the authorities.⁵⁶⁶

From this event, the use of white sheets as an expression of dissent became a symbolic element of the protests from which the movement itself would take its name. In addition to becoming a symbol of criticism against censorship, the use of the colour white is constituted as a powerful reference to the Urumqi tragedy and the victims of the zero-

⁵⁶⁰ Chan, «Unwritten Endings», 59.

⁵⁶¹ Xinhua News Agency, «乌鲁木齐市一高层住宅楼发生火灾造成10人死亡-新华网 (Fire in a high-rise residential building kills 10 in Urumqi - Xinhua) ».

⁵⁶² FitzGerald and Williams, «China Xinjiang».

⁵⁶³ Erdem, Watson, and Wright, «“I Hold China Accountable” ».

⁵⁶⁴ Qin, «乌鲁木齐火灾天怒人怨·全国数十所高校学生抗议·上海乌鲁木齐中路悼念聚会喊出罕见政治口号·不自由 毋宁死！习近平下台！共产党下台！（The fire in Urumqi has made people angry. Students from dozens of colleges and universities across the country have protested. A rare political slogan was shouted at the memorial gathering on Urumqi Middle Road in Shanghai: Give me freedom or die! Xi Jinping steps down! The Communist Party steps down!）».

⁵⁶⁵ Chan, «Unwritten Endings», 59.

⁵⁶⁶ Davidson and Yu, «Anti-Lockdown Protests Spread in China as Anger Rises over Zero-Covid Strategy».

COVID policy as white in China is used to symbolize mourning.⁵⁶⁷ The use of blank sheets of paper is not the only tool used to express dissent. In fact, Chinese protesters have shown extreme inventiveness in demonstrating their dissent by using, for example, a mathematical equation by Alexander Friedmann, whose last name in Chinese means "free man," to criticize restrictions.⁵⁶⁸ Meme, satirical comments, and witty puns became some of the most powerful weapons to criticize the government.

One of the most significant protests of the entire movement is surely the one that took place in Shanghai. Here for days hundreds of young people gathered on Urumqi Road to mourn the victims of the fire.⁵⁶⁹ However, the chanted slogans did not just criticize zero-COVID but directly called for freedom, for Xi Jinping to step down, and for an end to the Health Code.⁵⁷⁰ The protests were constituted as a response to years of pandemic measures that had exasperated the population but also as an opportunity to express general dissent against the suppression of freedom and Xi's rule. The demonstrations were met in some cases with massive police arrests which proved ineffective in curbing the protests.⁵⁷¹

Following the protests, the government quickly announced the "New Ten Requirements", a series of measures that aimed to gradually relax anti-COVID restrictions such as limiting general lockdowns, the imposition of quarantine for positives in government field hospitals, and the use of the health code only in specific places such as schools, hospitals, and nursing homes.⁵⁷² These measures were quickly implemented by local governments leading to a gradual abandonment of the zero-COVID policy, recognizing its long-term unsustainability.⁵⁷³ The A4 Movement was not the primary cause behind the sudden abandonment of zero-COVID but it was certainly an event that hastened its abandonment.

⁵⁶⁷ Che and Chien, «Memes, Puns and Blank Sheets of Paper».

⁵⁶⁸ Ibid.

⁵⁶⁹ Hall, Horwitz, and Pollard, «Clashes in Shanghai as COVID Protests Flare across China».

⁵⁷⁰ Chan, «Unwritten Endings», 59.

⁵⁷¹ Davidson and Yu, «Clashes in Shanghai as Protests over Zero-Covid Policy Grip China».

⁵⁷² AP News, «EXPLAINER».

⁵⁷³ General Administration of Customs, «《海关总署关于调整健康申报有关要求的公告》解读_政策解读_中国政府网 (Interpretation of “Announcement of the General Administration of Customs on Adjusting Requirements for Health Declaration”) »; Chongqing Daily, «落实“新十条” 现行不一致的防控措施不再执行_重庆市人民政府网 (Implement the “New Ten Articles” and the existing inconsistent prevention and control measures will no longer be implemented) ».

Zero-COVID was a pressure cooker within which popular discontent with the stringent measures mounted until it exploded in the form of the White Paper Movement protests.

3.4.3 The Legacy of Zero-COVID Policy on Digital Governance Technologies

The pandemic in China has highlighted the power of digital governance systems but also the risks they bring in terms of social mobilization. This factor is relevant in that it shows that social mobilization is possible in China despite existing structural barriers. In particular, the reduced space given to civil society and the control and censorship exercised by the CCP over the media prevent that accumulation of resources and dissemination of information that are essential in mobilization processes.⁵⁷⁴ The lack of a social base is thus one of the main reasons why we do not observe the emergence of organized movements expressing their demonstrations in China.⁵⁷⁵ However, COVID was established as a nationwide communal experience that provided an opportunity for people to share their grievances.⁵⁷⁶ Whether technologies such as the SCS are able to do the same and thus trigger an equal response remains in question.

Another element on which the end of the anti-pandemic measures should make us ponder is what will be the future of the gigantic amount of data that COVID allowed to accumulate. China has indeed quickly abandoned the zero-COVID policy measures by making it no longer mandatory to scan one's QR code to enter restaurants, hospitals, offices, residential areas and public transportation.⁵⁷⁷ However, this does not necessarily mean the end of the healthcare QR code. Michelle Miao reports in this regard how, as of July 2023, all healthcare QR codes developed on WeChat and Alipay continue to be operational.⁵⁷⁸ Health QR codes have in many cases been maintained by merging them with other social administration schemes or extending them to other social spheres.⁵⁷⁹ Only 3 out of 31 regions analysed have complemented these repurposing schemes with formal regulations or legislation enacted by local governments.⁵⁸⁰ The rest of the regions

⁵⁷⁴ McCarthy and Zald, «Resource Mobilization and Social Movements», 1212–41.

⁵⁷⁵ Castells, *Networks of outrage and hope*.

⁵⁷⁶ Chan, «Unwritten Endings», 62.

⁵⁷⁷ Cai, «How Will China Deal with the Mountain of Covid-19 Health Code Data? »

⁵⁷⁸ Miao, «Coded Social Control», 23.

⁵⁷⁹ Ibid.

⁵⁸⁰ Shanghai Municipal People's Government, «《2022年上海市全面深化“一网通办”改革工作要点》的政策解读 (Policy Interpretation of “Key Points for Shanghai to Comprehensively Deepen the «One-online Service» Reform in 2022”)»; General Office of the People's Government of Fujian Province, «福

continued the use of the QR code through ad hoc directives and standards without clear regulations.⁵⁸¹ The result is the maintenance of tools designed for crisis management without the use of these in a post-pandemic scenario being framed by appropriate regulatory interventions.

These developments make it legitimate to wonder what will become of the large volume of data collected by HCAs. A State Council document dating back to 2021 stated how all personal information collected to combat the pandemic should not be and that HCAs should be destroyed or "appropriately managed" after the pandemic ends.⁵⁸² However, this does not seem to be the case considering how, in spite of central government directives, local authorities seem intent on keeping both HCAs and the data accumulated from them as a powerful digital governance tool. To date, the Guangdong provincial government is the only one to have officially announced its intention to suspend the use of the provincial HCA and delete the data accumulated from it.⁵⁸³

In the face of the evidence presented here, it is clear that the end of the zero-COVID policy did not mean the end of that phase of development and enhancement for digital governance tools that the pandemic initiated. In the future, it seems legitimate to expect that these processes of data accumulation and integration will continue, strengthening even more the potential uses of these technologies often at the expense of citizens' privacy

建省人民政府办公厅关于印发2020年数字福建工作要点的通知_网络信息_福州市鼓楼区政府 (Notice from the General Office of the Fujian Provincial People's Government on Issuing the Key Points of Digital Fujian Work in 2020)».

⁵⁸¹ Henan Provincial Department of Transportation, «河南省交通运输厅关于加强实名公交卡与健康码信息整合的通知 (Notice from the Henan Provincial Department of Transportation on strengthening the integration of real-name bus cards and health code information)»; Inner Mongolia Autonomous Region Novel Coronavirus Pneumonia Epidemic Prevention and Control Headquarters, «内蒙古自治区新型冠状病毒感染肺炎防控工作指挥部医疗防控组关于印发以医联体为载体做好新冠肺炎分级诊疗工作实施方案的通知 (Notice from the Medical Prevention and Control Team of the Inner Mongolia Autonomous Region New Coronavirus Infection Pneumonia Prevention and Control Headquarters on issuing an implementation plan for hierarchical diagnosis and treatment of new coronavirus pneumonia using the medical consortium as a carrier)»; Yunnan COVID-19 Prevention and Control Work Leading Group Office, «转发关于进一步做好两码合一工作的通知-楚雄彝族自治州人民政府 (Forward the notice on further improving the work of integrating two codes into one)»; Miao, «Coded Social Control», 18–19.

⁵⁸² Cai, «How Will China Deal with the Mountain of Covid-19 Health Code Data? »

⁵⁸³ Wenyang and Huang, «粤康码下线部分服务·将删除所涉数据!健康码会彻底退出吗? (Guangdong Kangma has offline some services and the data involved will be deleted! Will the health code be completely withdrawn?) ».

rights. Potentially, this presents itself as a process capable of providing greater social welfare for the community. However, the current poor guarantees to privacy from a legal standpoint and the tendency for the rapid evolution of digital technologies not to be matched by an equally rapid evolution of the legal norms that should condition their use can only raise fears about the effects resulting from potential abuses of these technologies.

CHAPTER IV: UNDERSTANDING THE HIGH LEVELS OF APPROVAL TOWARD THE SCS

The trajectory traced so far by this thesis has aimed first to provide an overview of what is meant by digital governance and how it is viewed within the Chinese context by the government. The next step was to provide a detailed description of what constitutes China's most ambitious digital governance project to date, namely the Social Credit System. The SCS was analysed taking into account the different ways in which contemporary literature debates its operation and purpose. We thus saw how some research view the SCS as a tool devoted to digital surveillance and control over various spheres of society.⁵⁸⁴ From this perspective, Liang et al conceptualize the SCS as a "State Surveillance Infrastructure" while Lee speaks of the SCS as the example of true "data-driven authoritarianism".⁵⁸⁵

Other studies presented have, conversely, insisted on those aspects of the SCS that frame it as a tool for social governance and management of economic-financial activities.⁵⁸⁶ From this perspective, the SCS offers not only the possibility of policing the population but also that of attacking social problems such as corruption, food security, and fraud through the use of "sticks" and "carrots" that allow the promotion of specific conduct through a process that aims to internalize a specific morality based on trustworthiness and honesty.⁵⁸⁷ The SCS then becomes an instrument of social manipulation whose operation aims to create behavioural change in citizens.⁵⁸⁸

⁵⁸⁴ Lee, «Datafication, Dataveillance, and the Social Credit System as China's New Normal», 952–70; Liang et al., «Constructing a Data-Driven Society», 415–53.

⁵⁸⁵ Ibid.

⁵⁸⁶ Zhang, «Governing (through) Trustworthiness», 565–88; Engelmann et al., «Clear Sanctions, Vague Rewards »; Dai, «Toward a Reputation State».

⁵⁸⁷ Tong, «Morality, Benevolence, and Responsibility»; Zhai, «Traditional Values and Political Trust in China», 350–65; Kostka and Antoine, «Fostering Model Citizenship», 256–89.

⁵⁸⁸ Kostka and Antoine, «Fostering Model Citizenship», 256–89.

This framing of the SCS was followed by a careful reconstruction of the criticisms, and potential risks associated with this instrument. These include the lack of transparency about the functioning of the SCS, the risks to privacy and data security, the adequacy of sanctions, and the potential repressive use of it.⁵⁸⁹ The end point is a picture of the SCS that captures its complexities and multifaceted nature but at the same time gives grounding to the question of this thesis, namely, how such widespread public support can be explained. In the face of these many critical issues, the result that 80% of the population strongly or somewhat support the SCS seems puzzling and needs to be properly investigated.⁵⁹⁰

Finally, the previous chapter dropped the discussion regarding the SCS within the pandemic context giving evidence of the flexibility and adaptability of this tool.⁵⁹¹ At the same time, although it may seem like a digression, I have presented the emergence and partial demise of another digital governance tool that shares many characteristics with the SCS namely Health Code Apps. Presenting HCAs will allow us in this concluding chapter, not only to explain the reasons behind the support enjoyed by the SCS but, through comparison with HCAs, in what it has proven most capable of maintaining high social support.

This chapter, in analysing the reasons behind the support of the SCS, first relies on privacy calculus theory, privacy-security trade-off literature, and privacy paradox theories.⁵⁹² As the issue of privacy is one of the most pressing concerns surrounding the SCS, integrating insights from these analytical frameworks allows us to investigate how support for the SCS is influenced by considerations related to the security of the information shared, how Chinese citizens value their privacy in the face of digital governance technologies, and what factors justify an eventual loss of privacy as a result of the adoption of these

⁵⁸⁹ Chen and Cheung, «The Transparent Self Under Big Data Profiling»; Shen, «社会信用体系建设的法治之道 (The rule of law in the construction of social credit system) », 525–46; Knight, «Basket Case»; Peng, «失信联合惩戒制度的法治困境及出路: 基于对41份中央级失信惩戒备忘录的分析 (The legal dilemma and solution of the joint punishment system for dishonesty — Based on the analysis of 41 central-level disciplinary memos for breach of trust) ».

⁵⁹⁰ Kostka, «China's Social Credit Systems and Public Opinion», 1565–93.

⁵⁹¹ Knight and Creemers, «Going Viral»;

⁵⁹² Meier and Krämer, «The Privacy Calculus Revisited»; Cottrill and “Vonu” Thakuria, «Location Privacy Preferences»; Davis and Silver, «Civil Liberties vs. Security», 28–46; Pavone and Esposti, «Public Assessment of New Surveillance-Oriented Security Technologies», 556–72; Wadle, Martin, and Ziegler, «Privacy and Personalization», 319–24.

technologies. In addition, in order to better understand how experience and habits influence acceptance and support of SCS, the analysis gathers insights from different technology acceptance models (TAM) and the unified theory of acceptance and use of technology (UTAUT).⁵⁹³ The inclusion of these theories within the analysis provides greater conceptual clarity and analytical rigor in understanding the factors that condition support toward SCS.

Following the description of these frameworks, I will present in detail the results of published research and statistical analysis about the approval rate of SCS.⁵⁹⁴ The sources available in this regard are extremely limited because of the scant academic interest devoted to date to studying the factors influencing Chinese public opinion regarding the SCS. Even more surprisingly, based on the results of my research, there does not appear to have been any analysis conducted to date by the Chinese government that delves into this issue. Indeed, data and statistics on the SCS have been collected by the Chinese government, however, such sensitive data are rarely shared publicly.⁵⁹⁵ After presenting these results I will go on to analyse in detail the factors operating at the individual level that affect the approval of the SCS. Specifically, these are the privacy-security trade-off, the level of political and social trust, past experiences related to the SCS, and media framing and information control operated in relation to the SCS.

Next, I will devote a section to a detailed analysis of those factors within the political system and cultural beliefs that explain how government access to personal data enjoys public support. I will then abandon the analysis of individual elements to focus on those dynamics operating at the societal level in China. In particular, I will explain the acceptance of the SCS, and digital governance technologies more generally, through the lens of the socio-technological imaginary of Chinese society, the concept of the guardian

⁵⁹³ Davis, «Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology»; Venkatesh and Davis, «A Theoretical Extension of the Technology Acceptance Model», 186–204; Venkatesh et al., «User Acceptance of Information Technology», 425–78.

⁵⁹⁴ Xu, Kostka, and Cao, «Information Control and Public Support for Social Credit Systems in China», 2230–45; Liu, «Who Supports Expanding Surveillance? », 391–412; Kostka, «China’s Social Credit Systems and Public Opinion», 1565–93.

⁵⁹⁵ Transparency on the part of the PCC vis-à-vis the data it collects about the performance of its public policies is mixed. In fact, it is a widespread practice to keep tabs on the flow of information that is released publicly. With respect to the SCS, it is likely, given the scope of this policy, that a great deal of data has been collected regarding the results achieved or not achieved. However, these government data are not available to date. See Lee and Sun, «Managed Transparency».

model of governance, and the Chinese communitarian tradition which has its roots in Confucianism.⁵⁹⁶

Finally, the SCS will be placed in dialogue with HCAs by presenting the similarities between the two instruments both in terms of how they function and the factors that explain their broad support. From this, I will go on to set up a discussion that aims to explain why HCAs have ultimately lost a significant portion of their support as evidenced by the A4 Movement events. Despite the differences between the two instruments, both SCS and HCAs share similar factors that influence their public support, but more importantly, both instruments share the characteristic of providing social benefits.⁵⁹⁷ Furthermore, it is relevant to ask whether and how much the adoption of a mandatory technology such as the QR Health Code has had an effect in terms of incremental acceptance and support of the SCS.⁵⁹⁸

4.1 Theoretical Framework

Analysing and understanding why people support and accept SCS, as well as any other digital technology, first requires approaching with methodological rigor the factors that individuals take into account when confronted with such technologies. In this regard, the privacy calculus theory, the privacy-paradox, and the privacy-security trade-off literature offer important guides. The SCS when analysed as a surveillance tool operating through algorithmic decision-making based on the accumulation and processing of massive amounts of data is closely related to the issue of privacy. Supporting SCS means accepting a loss of control over one's own information. In this sense, the three theories that will be presented will go on to highlight how this trade-off occurs primarily as a function of perceived benefits at the individual level that outweigh the loss in terms of privacy.⁵⁹⁹ This cost-benefit analysis is not done by comparing abstract concepts but must be appropriately placed within a specific institutional and social context.⁶⁰⁰ Within this framework, factors such as institutional trust and perceived risk in relation to the threat

⁵⁹⁶ Liu and Zhao, «Privacy Lost», 743–56.

⁵⁹⁷ Kostka and Antoine, «Fostering Model Citizenship», 256–89; Kostka e Habich-Sobiegalla, «In Times of Crisis», 1–39.

⁵⁹⁸ Li and Kostka, «Accepting but Not Engaging with It», 845–74.

⁵⁹⁹ Meier and Krämer, «The Privacy Calculus Revisited», 1–25.

⁶⁰⁰ Pavone and Esposti, «Public Assessment of New Surveillance-Oriented Security Technologies», 556–72.

that the technology in question is intended to mitigate matter.⁶⁰¹ Finally, the privacy paradox highlights how the weight given to one's privacy does not necessarily reflect the actions individuals take to protect it..⁶⁰²

The other set of theories used are technology acceptance models (TAMs) and the Unified Theory of acceptance and use of technology (UTAUT), which further enrich the analysis about the factors that condition SCS support. Where the previously mentioned theories place more emphasis on factors related to risk perception in conditioning individual choices, TAMs and UTAUT aim to provide a holistic understanding of the factors that have an influence on individuals' behavioural intentions toward adopting a new technology.⁶⁰³ However, it is necessary to point out that these models were originally developed to understand how the acceptance of ICTs at the workplace functioned and, therefore, not all aspects of these theories will be relevant to the analysis of the SCS.⁶⁰⁴ These theories will then be used primarily for considerations of the impact of factors such as direct experience with the SCS, the weight of specific socio-demographic factors, and the perceived usefulness of the SCS. Although these theories are not much relevant in terms of understanding the level of approval of the SCS they will be used to investigate whether or not high approval translates in high adoption and usage.

4.1.1 Privacy Calculus, Privacy Paradox and Privacy-Security Trade-Off

The first contributions used in the analysis come from the extensive literature about the trade-off between privacy and security. Before proceeding to present how the relationship between these two objects is understood in the literature, it is useful to clarify how the terms privacy and security should be understood from a conceptual standpoint.

An adequate privacy definition is provided to us by B. T. Riley who defines privacy as the right of individuals to protect their personal information from governments or organizations that wish to exploit this information without the individual's consent.⁶⁰⁵

⁶⁰¹ Davis and Silver, «Civil Liberties vs. Security», 28–46.

⁶⁰² Barth and De Jong, «The Privacy Paradox – Investigating Discrepancies between Expressed Privacy Concerns and Actual Online Behavior – A Systematic Literature Review», 1038–58.

⁶⁰³ Stuttgart University of Applied Science, «Unified Theory 1 & 2 & Extension (UTAUT)»; Blut et al., «Meta-Analysis of the Unified Theory of Acceptance and Use of Technology (UTAUT)», 13–95.

⁶⁰⁴ Kostka, Steinacker, and Meckel, «Between Security and Convenience», 673.

⁶⁰⁵ Riley, «Security vs. Privacy: A Comparative Analysis of Canada, the United Kingdom, and the United States».

In contrast, providing a definition of security is much more challenging due to the constant evolution that the concept itself has undergone. Indeed, over the years we have witnessed a gradual shift from a security concept that revolved around the notion of national security and was extremely hinged on military and geopolitical considerations to frameworks in which security is conceptualized as a multidimensional challenge characterized by a broad spectrum of issues that go beyond the mere military dimension.⁶⁰⁶ In this way we can trace an evolution from a concept of security embodied in the state-centric vision of authors such as Carl Von Clausewitz, moving to the broadening of what falls within the spectrum of security through the works of Barry Buzan who focus on the securitization processes of problems belonging to the societal and individual spheres, to the more modern works of Mary Kaldor and Ken Booth who emphasize respectively the concept of human security and the emphasis on a human-centric approach to security.⁶⁰⁷ Following these more recent conceptualizations, in this thesis the concept of security is to be understood as going beyond a state-centric view to include the safety and well-being of individuals along the lines of what constitutes human security.⁶⁰⁸⁶⁰⁹

Returning to the literature on the privacy-security trade-off, this has traditionally been understood as a direct exchange, a zero-sum game, between privacy and security. According to this view, security and privacy are constituted as abstract concepts whose decrease of one determines an increase in the other.⁶¹⁰ Wanting to go beyond this overly reductive view, in this section this trade-off will be considered in more concrete terms by

⁶⁰⁶ Pavone and Esposti, «Public Assessment of New Surveillance-Oriented Security Technologies», 558.

⁶⁰⁷ Clausewitz et al., *On War*; Stritzel, «Securitization Theory and the Copenhagen School», 11–37; Kaldor, *Human security*; Booth, *Theory of World Security*.

⁶⁰⁸ Tadjbakhsh and Chenoy, *Human security*.

⁶⁰⁹ Rigorously reconstructing the concept Human Security is set up as a task well beyond the scope of this thesis. The very reference to authors such as Kaldor and Booth without specifying the differences in views between them in terms of Human Security may appear as an oversight but this choice was made conscientiously to simplify the development of the thesis. While both Kaldor and Booth share a common commitment to human security, Kaldor's emphasis is on addressing a wide range of human needs and challenges, including economic and social dimensions, while Booth places a strong emphasis on the emancipatory potential of security policies in enhancing human freedom and flourishing.

⁶¹⁰ Dourish and Anderson, «Collective Information Practice», 319–42; Monahan, *Surveillance and Security*.

relating it to the social and institutional context in which surveillance technologies are implemented, and the trust in the institutions that characterize said context.⁶¹¹

According to the privacy calculus theory, which is the second relevant contribution to the analysis conducted in this chapter, individuals make a cost-benefit assessment before agreeing or not agreeing to share their sensitive information..⁶¹² Consequently, notwithstanding the presence of any privacy concerns, it is on this calculation that the sharing of sensitive information depends.⁶¹³ In this sense, privacy calculus theory allows us to observe whether or not there are privacy concerns and, second, whether the balance of risks and benefits brought by the SCS offers a justification for its wide approval.

Finally, the privacy paradox theory was originally developed by Brown after observing the discrepancy between individuals' concerns about their privacy and security and the actual behaviours they adopted in relation to online shopping and the use of supermarket loyalty cards.⁶¹⁴ This study thus highlights a paradox between how an individual values his or her security and how in fact he or she protects it. Subsequent research, such as that carried out by Purchases & Grossklags and Barnes, highlights how this paradox becomes more apparent when the disclosure of personal information becomes the means of obtaining even marginal benefits such as online discounts.⁶¹⁵ This theory, along the lines of privacy calculus theory, gives us the opportunity to test, in relation to the SCS, whether even individuals who show interest in their privacy in practice do without it according to the benefits that the SCS offers.

4.1.2 Technology Acceptance: TAMs and UTAUT

The technology acceptance model was originally introduced by Fred Davis in 1989 in the field of information and technology management systems being subsequently adopted, improved, and extended outside its original scope by numerous researchers.⁶¹⁶ The TAM

⁶¹¹ Pavone and Esposti, «Public Assessment of New Surveillance-Oriented Security Technologies», 556-72

⁶¹² Laufer and Wolfe, «Privacy as a Concept and a Social Issue», 22–42.

⁶¹³ Al-Jabri, Mustafa I., and Abed, «The Willingness to Disclose Personal Information», 161–81.

⁶¹⁴ Brown, «Studying the Internet Experience».

⁶¹⁵ Acquisti and Grossklags, «Privacy and Rationality in Individual Decision Making», 26–33; Barnes, «A privacy paradox».

⁶¹⁶ Davis, «Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology».

in its original form seeks to explain the motivations behind the acceptance and adoption of new technologies. In doing so, the TAM considers two main elements:

1. Perceived Usefulness: The more a technology is perceived to be useful in improving job performance, productivity, or overall effectiveness the more it will be accepted. In the context of the SCS, this theory leads us to ask how much support for the SCS depends on the perception that this system is capable of securing and improving social order and, in general, ensuring greater well-being for society.
2. Perceived Ease of Use: This element refers to how much the use of a given instrument is influenced by the user's perception that it is user-friendly. Although this element in itself is not of interest in explaining support toward the SCS, it is instead useful in testing whether the characteristics of the SCS affect its adoption by citizens.⁶¹⁷

Based on the original TAM developed by Davis and the TAMs derived from it, the unified theory of acceptance and use of technology is developed, the first formalization of which can be traced in the essay "User Acceptance of Information Technology: Toward a Unified View."⁶¹⁸ UTAUT aims to explain user acceptance and behaviour toward a specific technology by enriching the elements of the TAM through the inclusion of variables such as social influences.⁶¹⁹ UTAUT was later extended in the form of UTAUT2 by going on to include factors such as hedonistic motives⁶²⁰, cost/perceived value and habits.⁶²¹ Other research, such as that carried out by Lee and Song or Wenjuan Li, have further extended the UTAUT model to include elements such as organizational trust, risk perception, user behaviour, and technology trust in the study of elements that condition the adoption of new technologies.⁶²² In the application of these models,

⁶¹⁷ Ibid.

⁶¹⁸ Venkatesh et al., «User Acceptance of Information Technology», 425–78.

⁶¹⁹ Blut et al., «Meta-Analysis of the Unified Theory of Acceptance and Use of Technology (UTAUT)», 13–95; Li, «The Role of Trust and Risk in Citizens' E-Government Services Adoption»; Stuttgart University of Applied Science, «Unified Theory 1 & 2 & Extension (UTAUT)».

⁶²⁰ Hedonistic motives must be understood as "the fun or pleasure derived from using technology, and it has been shown to play an important role in determining technology acceptance and use". See Venkatesh, Thong, and Xu, «Consumer Acceptance and Use of Information Technology».

⁶²¹ Stuttgart University of Applied Science, «Unified Theory 1 & 2 & Extension (UTAUT)», 6.

⁶²² Lee and Song, «Effects of Trust and Perceived Risk on User Acceptance of a New Technology Service», 587–97;

sociodemographic elements such as age and gender play a moderating role that, when applied to the SCS, allows us to understand what the sociodemographic characteristics of the supporters of this technology are.⁶²³ Including in the analysis of the support toward the SCS insights from these models allows us to understand how sociodemographic factors, experience, and perceived risks, benefits, usefulness, and reliability affect public attitudes on the SCS.

4.2 Analysing and Explaining Public Support of SCS

At the time research for this thesis began, we can observe the existence of only three research studies explicitly aimed at observing the level of public support enjoyed by the SCS.⁶²⁴ Professor Genia Kotska's work was the first to survey public opinion about SCS and still stands today as the main reference point about the link between SCS and public opinion. Subsequently, other academics have on the basis of this work expanded the understanding about this issue, which nevertheless still remains under-analysed. Some of these analyses have given more accurate indications about the factors that would influence public opinion about SCS, the role of the media in influencing the perception of SCS, or the approval enjoyed by SCS within specific social sections such as students.⁶²⁵ However, this strand of analysis still comes across as extremely meagre, and there is still a lack of comprehensive analysis about the determinants of approval of SAIs. More generally, an in-depth analysis can be found about the factors influencing public support toward surveillance technologies in China.⁶²⁶

In an attempt to fill in some of these gaps and offer a sympathetic explanation as to what accounts for the level of support found toward the SCS, this section will first present research findings on public approval of the SCS. Next, these results will be interpreted through the analysis of individual factors and societal elements that allow for an understanding of why such a level of approval is found.

⁶²³ Venkatesh et al., «User Acceptance of Information Technology», 425–78; Venkatesh, Thong, and Xu, «Consumer Acceptance and Use of Information Technology».

⁶²⁴ Kostka, «China's Social Credit Systems and Public Opinion»; Liu, «Who Supports Expanding Surveillance? »; Roelofs, «China's Social Credit System: Levels of Approval of Chinese and Dutch Citizens».

⁶²⁵ Liu, «Who Supports Expanding Surveillance? »; Ohlberg, «What Do Young Chinese Think about Social Credit? »; Xu, Kostka, and Cao, «Information Control and Public Support for Social Credit Systems in China».

⁶²⁶ Su, Xu, and Cao, «What Explains Popular Support for Government Monitoring in China? », 377–92.

4.2.1 What is the SCS Approval Level?

The first findings concerning the level of approval are brought to us by Kostka. Within a sample comprising 2209 individuals, it is found that the approval rate for SCS is around 80 %.⁶²⁷ Only 19% of respondents expressed a neutral opinion while 1% expressed disagreement with this system.⁶²⁸ The analytical framework used in this research takes into consideration three categories including individual characteristics and beliefs of participants, the impact of SCS characteristics on approval, and individuals' perceptions about the functions performed by the SCS.⁶²⁹ This highlighted how specific factors such as political position, perceived transparency of the SCS, or benefits obtained through the system condition support. Moving on to present the most relevant results of this research in more detail, we will then explore the individual factors in the following paragraphs.

In looking at the sociodemographic variables that affect approval, Kostka notes how the SCS enjoys greater support among individuals who are male, highly educated, and of high income.⁶³⁰ Similar results were achieved by Roelof in replicating Kostka's analysis and this allows us to discuss the highlighted factors with a stronger degree of solidity. In this study, the detected approval rate corresponds to 76.14% thus confirming how the SCS enjoys a high level of support.⁶³¹

Before proceeding with the analysis, it should be stated how between the two researches there are in some cases statistical differences regarding the weight of certain factors such as gender, education, or income. This is first of all attributable to a difference between the samples of the two studies, which in the case of Roelof's amount to 352, a much smaller number than in Kostka's study.⁶³² A first explanation for these differences is therefore to be found in the size of the statistical sample, which being smaller in the second research presents less representativeness with consequent effects on the precision of the estimates and greater standard error.⁶³³ In addition, the two researches differ in statistical method used in that Kostka uses ordinal logistic regression while Roelf operates

⁶²⁷ Kostka, «China's Social Credit Systems and Public Opinion», 10–11.

⁶²⁸ Ibid.

⁶²⁹ Ibid., 5.

⁶³⁰ Ibid., 11.

⁶³¹ Roelofs, «China's Social Credit System: Levels of Approval of Chinese and Dutch Citizens», 42–45.

⁶³² Ibid., 56

⁶³³ Memon et al., «Sample Size for Survey Research».

a linear regression. Although it is not proven whether this difference has a significant impact on the highlighted results, it is in any case important to keep this in mind when analysing the two researches.⁶³⁴

In both researches, in relation to sociodemographic data, it is shown that level of education, income, and coming from a rural or urban background have the greatest effect among all the other explanatory variables. These elements allow us to reach some very interesting conclusions. First, the correlation of a high level of education and income with higher approval rates seem to contrast with previous research showing that individuals with these characteristics would be more likely to adopt more liberal positions.⁶³⁵ The adoption of more liberal ideological positions should result in greater sensitivity to issues of privacy and political freedom, i.e., issues in relation to which the SCS has been subject to criticism in both domestic and international contexts.⁶³⁶

Age, on the other hand, while the strong correlation between high income and high level of education and approval remains firm, seems to highlight how younger people are less likely to support the SCS. This result, in line with Pan and Xu's research on how different individuals rank on the ideological spectrum in China, was later confirmed by the research of Ohlberg who notes that approval of SCS among college students is between 41 and 57 percent.⁶³⁷

The most interesting result that emerges from Kostka's research, and which was further confirmed by Roelof, concerns citizens' perception of the SCS. The survey and semi-structured interviews conducted highlight how the SCS is perceived as a tool whose goal is to improve the quality of life of citizens and promote trust in society by acting to fill those institutional and regulatory gaps highlighted in Chapter 2.⁶³⁸ This points first to an undeniable link between the approval of the SCS and the perception about the benefits it is expected to produce. Potentially, being perceived not as an instrument of control but as a mechanism to promote social welfare explains why individuals in categories that should

⁶³⁴ Kizach, «Analyzing Likert-scale data with mixed-effects linear models: a simulation study».

⁶³⁵ Pan and Xu, «China's Ideological Spectrum», 254–73; Wang and Yu, «Privacy Trust Crisis of Personal Data in China in the Era of Big Data», 782–92.

⁶³⁶ Vanderklippe, «Chinese Blacklist an Early Glimpse of Sweeping New Social-Credit Control»; Chen and Cheung, «The Transparent Self Under Big Data Profiling», 371–76

⁶³⁷ Ohlberg, «What Do Young Chinese Think about Social Credit? ».

⁶³⁸ Kostka, «China's Social Credit Systems and Public Opinion», 18–21; Roelofs, «China's Social Credit System: Levels of Approval of Chinese and Dutch Citizens»

be more liberal strongly support the SCS. The SCS is not simply framed as part of the debate over privacy and political freedoms but in that of the policies to correct the social afflictions that China experiences.

In addition, the link between benefits and public approval seems to be a possible explanation as to why residents in urban areas, where SCS is more widespread and offers a greater range of benefits, are more supportive of this instrument.⁶³⁹ Along with this element, another explanation for this finding may be the lower internet penetration in rural areas compared to urban areas. The internet penetration rate in rural areas amounts to 57.6 percent, and this affects the ability of individuals to access and use ICTs, such as the SCS, going to affect their ability to enjoy the benefits this brings both economically and socially.⁶⁴⁰

A final element that is worth discussing concerns the link between protection of personal information and approval of the SCS. Although Kotska's analysis did not provide explicit data about the weight that privacy issues hold for citizens, some of the results allow us to infer some information. Some of the interviews conducted by Kotska highlight how privacy issues are treated with a certain level of resignation seeing access to personal information as a government prerogative that is independent of citizens' consent and, moreover, even becomes acceptable in the event that this data is used for a good reason.⁶⁴¹ This result is interesting in that it allows us to speculate in the following sections a connection between the type of policy and the weight given to privacy.

In the current scarcity of studies on public approval for the SCS, Kotska's research is certainly ground-breaking but at the same time has some shortcomings that need to be paid due attention to. The first problem that can be found is how in Kotska's analysis the SCS is treated as an undifferentiated entity. As pointed out in this thesis, this constitutes an inaccuracy given the multiplicity of forms that the SCS takes in different local and regional contexts. Therefore, the use of Likert scale-centred questions to assess the general level of approval towards the SCS does not allow for these differences to be taken into account.

⁶³⁹ Ibid., 18.

⁶⁴⁰ Luan, Zou, and Huang, «Digital Divide and Household Energy Poverty in China».

⁶⁴¹ Kostka, «China's Social Credit Systems and Public Opinion», 20.

Another criticism to consider, although Kotska highlights how support for the SCS is related to the type of benefits offered and an essentially positive view of it, is how the role played by the media in framing and shaping perceptions of the SCS is not sufficiently analysed. Previous research has largely highlighted how media manipulation by government actors operates a considerable role in generating and influencing citizen support.⁶⁴² As a function of this, it seems necessary to give adequate consideration to how the SCS has been framed in the media and how this affects the approval of the system itself. Indeed, the possible lack of adequate domestic criticism highlighting the critical aspects of the SCS may result in the system being seen as positive simply because the only elements discussed are the positive ones

Finally, although mentioned and surveyed, I believe that individual elements having a proven effect on SCS approval such as political and social trust, the weight given to social stability and security versus privacy, and how direct experiences with SCS determine changes in approval levels are under-analysed. The analysis implemented by Kostka and replicated by Roelof provide a comprehensive explanation of what influences public approval of the SCS but not as clear about why these elements influence it. For this reason, in the following sections I will go on to discuss in more detail the factors found in this early research on SCS approval, providing a more comprehensive explanation aimed at enhancing understanding about Chinese citizens' intrinsic individual motivations about SCS support.

4.2.2 Political and Social Trust: Who's Got the Data?

Lupton and Michael reveal how individuals are generally aware of how different technologies such as surveillance technologies, cell phones, social media, and search engines collect data for commercial or government purposes.⁶⁴³ At the same time, a general perception is observed among individuals that they cannot exercise any kind of control over what data is collected and how it is used.⁶⁴⁴ Turning our gaze to China, Lupton and Michael's findings find support. In a study carried out by the Nandu Personal

⁶⁴² Xu, Ye, and Zhang, «Exploring the Effects of Traditional Media, Social Media, and Foreign Media on Hierarchical Levels of Political Trust in China», 357–77; Zhang, Zhang, and Shao, «The softening of Chinese digital propaganda».

⁶⁴³ Lupton and Michael, « 'Depends on Who's Got the Data' », 261.

⁶⁴⁴ Ibid., 256.

Protection Research Center on a sample of 6100 Chinese citizens about the use of facial recognition technologies, 83 percent of respondents say they would like to exercise more control over their data.⁶⁴⁵ This statistic has extreme relevance in that it allows us to detect both that citizens are aware of the sensitive nature of the data collected and the potential risks involved in misusing this data. We can thus state how there is an awareness among Chinese citizens that the use of technologies that exploit this data can include both risks and benefits.

This conclusion is further supported by the literature on TAM and UTAUT, which shows that the perceived usefulness and reliability of a technology are powerful factors influencing the acceptance of SCSs.⁶⁴⁶ Individuals' perceptions of a technology then become a powerful determinant. These can be both negative and positive, and it is the comparison of these aspects that ultimately determines whether a technology is approved or disapproved. A technology that is perceived as extremely risky but has no benefits that offset these risks realistically will not enjoy a high level of approval.

Based on the data presented so far and the research findings on SCS approval, we know that there is awareness about the privacy risks that this tool may pose but despite this, approval maintains remarkably high levels. An initial insight into why this is the case lies in the level of trust in the government. Previous studies show that trust in political institutions can offset the perceived risks associated with adopting a new technology, thus constituting a powerful explanatory variable about levels of approval.⁶⁴⁷ In particular, individuals with higher levels of political trust are more likely to comply with the law and to grant more discretion to the government in implementing its policies.⁶⁴⁸ With regard to the Chinese context, previous analyses have clearly shown that political trust is a key

⁶⁴⁵ The Nandu Personal Information Protection Research Center, «七成受访者时常使用人脸识别·九成人会采取措施防范人脸信息被盗 (70% of the respondents often use facial recognition, and 90% will take measures to prevent facial information from being stolen.) ».

⁶⁴⁶ Davis, «Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology»; Blut et al., «Meta-Analysis of the Unified Theory of Acceptance and Use of Technology (UTAUT)»; Li and Kostka, «Accepting but Not Engaging with It», 845–74.

⁶⁴⁷ Pavone and Esposti, «Public Assessment of New Surveillance-Oriented Security Technologies», 556–72; Li, «The Role of Trust and Risk in Citizens' E-Government Services Adoption».

⁶⁴⁸ Marien and Hooghe, «Does Political Trust Matter? », 267–91; Cooper, Knotts, and Brennan, «The Importance of Trust in Government for Public Administration», 459–68.

determinant of approval both toward the use of surveillance technologies⁶⁴⁹ and toward the use of the SCS.⁶⁵⁰

We can broadly define political trust as the belief by citizens that political institutions work to produce results that are consistent with their expectations.⁶⁵¹ It is an individual rational choice based heavily on the evaluations of the institutional performance, and it is also a result of government-controlled politicization.⁶⁵² Political trust is thus influenced by macro developments such as economic growth, unemployment, corruption, and scandals. Relative to levels of political trust in China, Li says how more than 80 % of Chinese citizens consistently show high or moderate trust in the government.⁶⁵³ Other statistics confirm these results, showing that citizens' political confidence fluctuates steadily between 76% and 91% in the period between 2016 and 2023.⁶⁵⁴⁶⁵⁵ This figure is understandable in light of the incredible progress China has experienced in terms of economic growth and poverty alleviation in recent years.⁶⁵⁶ Indeed, economic performance has long been identified as the main factor influencing political confidence levels in China.⁶⁵⁷

However, political trust in China is not constituted as a homogeneous feature characterizing all political institutions but is presented as hierarchically structured.⁶⁵⁸ The pinnacle of this hierarchy is occupied by the central government, which presents itself as the political actor with the highest level of trust. Moving down this hierarchy scale we

⁶⁴⁹ Su, Xu, and Cao, «What Explains Popular Support for Government Monitoring in China? »

⁶⁵⁰ Liu, «Who Supports Expanding Surveillance? »

⁶⁵¹ Li, «Reassessing Trust in the Central Government», 100–121.

⁶⁵² Yang and Tang, «Exploring the Sources of Institutional Trust in China».

⁶⁵³ Li, «Reassessing Trust in the Central Government», 100–121.

⁶⁵⁴ Statista Research Department, «China».

⁶⁵⁵ One of the main criticisms raised against these statistics concerns the distorting effects operated by social pressure and political control that characterize an authoritarian one-party system like China. However, multiple statistical surveys have repeatedly shown that the quality of data collected on sensitive issues does not appear to be significantly affected by the political control experienced by citizens. See Shi, «Cultural Values and Political Trust», 406-07 and Tsai, «Solidary Groups, Informal Accountability, and Local Public Goods Provision in Rural China», 357.

⁶⁵⁶ Xu, Ye, and Zhang, «Exploring the Effects of Traditional Media, Social Media, and Foreign Media on Hierarchical Levels of Political Trust in China», 357–77.

⁶⁵⁷ Chen, Zhong, and Hillard, «The Level and Sources of Popular Support for China's Current Political Regime»; Wang, «Before the Emergence of Critical Citizens»; Wong, Wan, and Hsiao, «The Bases of Political Trust in Six Asian Societies»; Yang and Tang, «Exploring the Sources of Institutional Trust in China»; Hutchison e Xu, «Trust in China? »; Mitter and Johnson, «What the West Gets Wrong About China».

⁶⁵⁸ Li, «Reassessing Trust in the Central Government», 100–121.

observe how political trust decreases significantly for provincial and municipal governments.⁶⁵⁹ In relation to the SCS, these results are mirrored by Kotska's analysis which shows that 77 % of the sample analysed show confidence in data management by the central government compared to 48% and 42% for provincial and municipal governments, respectively.⁶⁶⁰ This emphasizes how who manages the data is a central issue in conditioning support for the SCS. Government is generally seen as a more trustworthy actor in data management as opposed to, for example, private companies that are viewed with suspicion and distrust by citizens.⁶⁶¹

It is clear from what has been said so far that approval toward the SCS is strongly conditioned by political trust. In China, this resides predominantly in the government, which is seen as an actor capable of maintaining high institutional performance and therefore deemed capable of managing citizens' sensitive data. This trust is not uniform across all the different institutional levels but lies primarily in the central government. As a function of this, it seems clear why the SCS is presented as an initiative launched by the latter and then subject to local implementation. In the face of local governments seen as less trustworthy and prone to scandal and corruption, the SCS exploits trust in the central government, depicted as a political actor capable of providing basic public goods and services, to gain approval.⁶⁶²

An additional element to discuss concerns social trust and how it is related to political trust. In some studies, political and social trust are united by a positive causal relationship such that an individual with a higher level of social trust will also exhibit a high level of political trust.⁶⁶³ However, other studies have instead shown an extremely weak or non-existent relationship between these two factors, which should be analysed separately through the use of social variables for social trust and political variables for political trust.⁶⁶⁴

⁶⁵⁹ Ibid.

⁶⁶⁰ Kostka, «China's Social Credit Systems and Public Opinion», 20.

⁶⁶¹ Ohlberg, Ahmed, and Lang, «Central Planning, Local Experiments: The Complex Implementation of China's Social Credit System».

⁶⁶² Liu, «Who Supports Expanding Surveillance? »

⁶⁶³ Tao et al., «How Does Political Trust Affect Social Trust? »; Wu and Shi, «Education and Social Trust in Transitional China»; Rothstein and Stolle, «The State and Social Capital»; Delhey and Newton, «Predicting Cross-National Levels of Social Trust».

⁶⁶⁴ Delhey, Newton, and Welzel, «How General Is Trust in "Most People"? »; Newton, «Social and Political Trust», 342–61.

The perspective adopted in this thesis is in line with the second stream of thought. Indeed, positively correlating social and political trust makes it impossible to explicate how high political trust in government is present in China while at the same time Chinese society is constituted as a low trust society. The SCS itself has also been developed to address the moral degeneration and crisis of interpersonal trust long highlighted by research and surveys, further disavowing the link between the two types of trust.⁶⁶⁵ In addition, recent research carried out by Zheng Su et al. shows that there is no significant statistical correlation between social trust and support toward surveillance technologies.⁶⁶⁶

Rather than on political trust, social trust seems instead to be more related to education, which, as pointed out by Kostka, is a relevant factor in supporting SCS. In particular, better educated Chinese citizens exhibit greater awareness about the societal risks they expose themselves to and therefore trust their peers less.⁶⁶⁷ As a function of this, we can argue that more educated individuals exhibit a lower level of social trustworthiness, and this makes a tool such as the SCS, one of the goals of which is to promote trustworthiness at the social level, placed in the hands of a trustworthy actor such as the government extremely desirable for solving the social risks underlying low social trust in China.

4.2.3 Balancing Security and Privacy: Safety, Social Stability, Policy Target, and Saliency of the Threat

One of the key points in the previous section is how Chinese citizens have awareness about privacy issues and express a desire to exercise more control over them. The idea that the Chinese are not interested in privacy is thus constituted as a myth. This interest is evidenced by Kostka's findings as well as by other statistical surveys such as the one conducted by the Internet Society of China where it is shown that 54 % of Internet users consider problems related to personal data breaches as major issues.⁶⁶⁸ In addition, anecdotal evidence shows how privacy issues have gained prominence in the Chinese context in recent years as evidenced by legislative developments aimed at regulating the

⁶⁶⁵ Hanser and Li, «Opting Out? », 110–28; Hanser, «Uncertainty and the Problem of Value», 307–32; Huang, «Personal Character or Social Expectation», 908–22; Yan, «The Good Samaritan's New Trouble»;

⁶⁶⁶ Su, Xu, and Cao, «What Explains Popular Support for Government Monitoring in China? »

⁶⁶⁷ Wu and Shi, «Education and Social Trust in Transitional China», 138.

⁶⁶⁸ Kostka, «China's Social Credit Systems and Public Opinion»; Yang, «How Much Do Chinese People Care about Privacy? »; Sun, «China's Citizens Do Care about Their Data Privacy, actually»; Impiombato, «Examining Chinese Citizens' Views on State Surveillance».

use of sensitive data⁶⁶⁹ (such as the adoption of the Personal Information Protection Law and the Data Security Law) that have resulted in greater public awareness of these issues.⁶⁷⁰

In the case of the SCS, political confidence in the government's ability to manage this data provides a powerful counterbalance to privacy concerns. This result is not surprising when we consider how the choice between privacy and security presents itself as influenced by the political institutions in which citizens are embedded.⁶⁷¹ However, it would be erroneous to consider this the only relevant factor. This section will therefore go on to observe how public safety, social stability, policy objective, and threat relevance are elements that condition the high support enjoyed by the SCS. This analysis will be conducted in light of insights from the privacy calculus theory literature, which states how individuals make privacy-related decisions through reasoning, which may be rational or intuitive, aimed at weighing privacy-related costs and information-sharing-related benefits.⁶⁷²

In accordance with the results of the research conducted by Zheng Su, Xu Xu, and Xun Cao, the first elements that need to be considered are the weight that safety and social stability have on SCS approval.⁶⁷³ Numerous studies, referring primarily to Western countries, however, have shown that the presence of democratic institutions correlates with greater respect for human rights and, consequently, greater attention by both citizens and political authorities to issues of privacy rights.⁶⁷⁴ Instead, citizens living in autocracies such as China have relatively lower expectations with respect to civil liberties because of a greater weakness of civil society dictated by the specific ways in which state-

⁶⁶⁹ As pointed out in Chapter 1, the privacy protections introduced by these laws appear to be directly aimed at protecting the privacy of individuals' personal data against private companies and foreign actors. There are no particular limitations on government acquisition of data.

⁶⁷⁰ Brown, Statman, and Sui, «Public Debate on Facial Recognition Technologies in China»; Liu, «China's Hyperactive Debates on Personal Data Protection»; Calzada, «Citizens' Data Privacy in China», 1129–50; Hao, «Inside China's Unexpected Quest to Protect Data Privacy».

⁶⁷¹ Pavone and Esposti, «Public Assessment of New Surveillance-Oriented Security Technologies», 556–72

⁶⁷² Meier and Krämer, «The Privacy Calculus Revisited»; Culnan and Armstrong, «Information Privacy Concerns, Procedural Fairness, and Impersonal Trust», 104–15; Dinev and Hart, «An Extended Privacy Calculus Model for E-Commerce Transactions», 61–80.

⁶⁷³ Su, Xu, and Cao, «What Explains Popular Support for Government Monitoring in China? »

⁶⁷⁴ Conrad and Moore, «What Stops the Torture? »; Davenport, *State Repression and the Domestic Democratic Peace*; Keith, Tate, and Poe, «Is The Law a Mere Parchment Barrier to Human Rights Abuse? », 644–60.

society relations unfold.⁶⁷⁵ From this it follows that issues related to privacy take on less weight than factors such as social stability and safety, and thus the comparison between these two elements will always hang in favour of the latter.⁶⁷⁶ This assessment also depends on how privacy risks often remain abstract in the face of benefits that appear more concrete and immediate such as those offered by the SCS.⁶⁷⁷ In addition, the lack of a functional legal system capable of ensuring enforcement and law compliance means that instruments such as the SCS, which aim in part to address these shortcomings, are seen as measures aimed more at ensuring security and stability than exercising control.⁶⁷⁸

Another element that needs to be considered to understand how the cost-benefit calculus between privacy and SCS tilts in favour of the latter justifying its broad support is privacy resignation or privacy cynicism.⁶⁷⁹ This term goes to indicate a feeling of resignation about the protection of one's sensitive information that is constituted as a coping mechanism to rationalize exploiting the benefits of using in this case the SCS in spite of security concerns.⁶⁸⁰ This dynamic would also seem to offer an explanation for the privacy paradox that characterizes many Chinese citizens in relation to the SCS, that is, an importance placed on privacy that is not then reflected by the behaviours assumed to protect it.⁶⁸¹ Also corroborating this dynamic in the calculations that individuals make in relation to the SCS are the results of Kostka's analysis. In fact, in one of the semi-structured interviews she conducted, one of the interviewees states how "I do not think there is any point in worrying about the Party having access to data through the SCS, because it is inevitable that all data is accessible to the CCP."⁶⁸² In essence, if access to data is unavoidable then citizens express support toward a use of this data that aims to ensure well-being, safety, and social stability.

⁶⁷⁵ Keane, *Civil Society and the State*; Xu, «Consensus Crisis and Civil Society», 91–108; Su, Xu, and Cao, «What Explains Popular Support for Government Monitoring in China? », 379.

⁶⁷⁶ Su, Xu, and Cao, «What Explains Popular Support for Government Monitoring in China? », 379.

⁶⁷⁷ Masur, *Situational Privacy and Self-Disclosure*.

⁶⁷⁸ Lin and Trevaskes, «Law–Morality Ideology in the Xi Jinping Era»; Su, Xu, and Cao, «What Explains Popular Support for Government Monitoring in China? », 379.

⁶⁷⁹ Hoffmann, Lutz, and Ranzini, «Privacy Cynicism»; Meier and Krämer, «The Privacy Calculus Revisited»,

⁶⁸⁰ Ibid.

⁶⁸¹ Li and Kostka, «Accepting but Not Engaging with It», 856.

⁶⁸² Kostka, «China's Social Credit Systems and Public Opinion», 20.

Another element to analyse in explaining the support enjoyed by the SCS is the relevance of the real or perceived threat to the problems that the SCS aims to solve.⁶⁸³ Existing research on the subject shows how this element is relevant in explaining support for counterterrorism measures and the decision to surrender civil liberties as a function of security.⁶⁸⁴ In its evolution, the SCS has changed its nature from a mere financial instrument to a means of solving a wide range of problems related to the alleged moral decadence that Chinese society is experiencing.⁶⁸⁵ From this perspective, we can understand how the magnitude of the problem related to the social trust crisis experienced by China thus becomes a powerful factor motivating the high approval of the SCS. That the crisis of trust is an extremely salient threat in China is confirmed by the numerous events described such as the Good Samaritans case or the baby milk powder scandal that have brought public attention to this issue.⁶⁸⁶

Finally, the last element to consider concerns who is the target of the SCS. Ziller and Helbling note how presenting surveillance measures as directed at a specific individual or group of individuals has a positive correlation with the approval rate enjoyed by that measure compared to others that instead subject every member of society to surveillance.⁶⁸⁷ The accumulation of sensitive data, when motivated by a desire to target only the untrustworthy, thus becomes an element that upsets the privacy-security balance in favour of the latter and diminishes the perception of the SCS as a control tool by passing it off instead as a mechanism to promote honesty and ensure social stability.⁶⁸⁸

In sum, privacy considerations of Chinese citizens are present in relation to the SCS and, more generally, with respect to any surveillance measure. What varies is the weight these take in the face of benefits such as safety and social security that assume greater relevance within Chinese society. Moreover, framing the SCS as a tool designed to punish only untrustworthy individuals offers a clear and identifiable target, namely individuals who

⁶⁸³ Ziller and Helbling, «Public Support for State Surveillance», 994–1006.

⁶⁸⁴ Davis and Silver, «Civil Liberties vs. Security»; Huddy et al., «The Consequences of Terrorism», 485–509.

⁶⁸⁵ Zhang, Kleinman, and Tu, *Governance of Life in Chinese Moral Experience*; Tong, «Morality, Benevolence, and Responsibility»; Zhai, «Traditional Values and Political Trust in China», 350–65.

⁶⁸⁶ Sina News, «两岁女童遭两车碾压_新闻中心_新浪网 (A girl who was run over by a car in Foshan, Guangdong died this morning)»; Huang, «The 2008 Milk Scandal Revisited».

⁶⁸⁷ Ziller and Helbling, «Public Support for State Surveillance», 994–1006.

⁶⁸⁸ Al-Jabri, Eid, and Abed, «The Willingness to Disclose Personal Information», 161–81.

are guilty of China's moral decay and who find themselves at the centre of scandals that embody the social ills to be eliminated in the country. The perceptions of individuals are shaped in this way to see the SCS as a panacea to many of the country's ills rather than as a possible tool of social repression and manipulation.

4.2.4 The Role of Media Framing, Information Control and Experience in Shaping SCS's Acceptance

The analysis presented so far about the factors that explain the support enjoyed by the SCS has emphasized the role of trust in government and the rational calculation between the benefits offered by the SCS and the risks it poses in terms of privacy and repression. However, in conducting this analysis we assumed that citizens were fully aware of the costs involved in the SCS and that, consequently, their support was motivated by an adequate level of information about this instrument. This comes across as a utopian expectation given the lack of information enjoyed by citizens of authoritarian regimes in which the government operates active and continuous control, manipulation and censorship of information.⁶⁸⁹ In this regard, Guriev and Treisman note how in autocracies approval levels of leaders and their policies drop significantly when censorship is acknowledged, suggesting that information control has a strong distorting impact in terms of perceptions.⁶⁹⁰

In asserting this, the intention is not to deny the benefits of SCS in terms of increasing trust, maintaining social stability, access to credit, and support for the legal system. However, the perception of the SCS as an instrument capable of producing social welfare and not as a potential tool for surveillance and repression deserves to be approached critically.⁶⁹¹ As highlighted in Chapter 2, the SCS has all the potential to constitute itself as a surveillance tool capable of targeted and almost invisible repression exercised through manipulation of the credit score rather than through physical coercion.⁶⁹² This repressive use of the SCS against journalists and dissidents is widely documented.⁶⁹³

⁶⁸⁹ Wallace, «Juking the Stats? », 11–29.

⁶⁹⁰ Guriev and Treisman, «The Popularity of Authoritarian Leaders», 601–38.

⁶⁹¹ Xu, Kostka, and Cao, «Information Control and Public Support for Social Credit Systems in China», 2230–45.

⁶⁹² Ibid., 2231; Xu, «To Repress or to Co-opt? », 309–25.

⁶⁹³ Wang, «China's Chilling 'Social Credit' Blacklist»; Gan, «The Complex Reality of China's Social Credit System: Hi-Tech Dystopian Plot or Low-Key Incentive Scheme? »

Against this, one must carefully consider whether the public has the adequate information to assess the potential political costs of this instrument or whether the high approval of the SCS is partly the result of the censorship that the CCP is known to put in place.

A first element to consider is how the SCS is framed by the media. Media framing indicates a process of selection by the media aimed at highlighting certain elements considered salient to a particular social or political issue.⁶⁹⁴ Through this selection process, the media shape the understanding and perception of an issue.⁶⁹⁵ Numerous analyses about the media framing of the SCS in China, such as those conducted by Ohlberg and Xu et al, point out that the SCS is generally framed in a positive light, presenting it as aimed at "promoting integrity in government affairs," "ensuring a transparent and corruption-free government," "building trust in the law," "promoting the creation of a culture of integrity and social trust," and as "the solution to many of the country's economic problems".⁶⁹⁶ From their analysis of about 650 television reports and newspaper articles from state-run media such as Chinese Central Television, People's Daily, and Global Times, Xu et al. show that only 2.9 % of these contained paragraphs or sentences that could be considered negative.⁶⁹⁷⁶⁹⁸ Moreover, even when the national media express critical judgments of the SCS, these are limited to possible excesses in implementation by local governments, shortcomings of the SCS in terms of data island, and problems related to the quality of the data collected.⁶⁹⁹ Hence, the criticisms expressed at the national level are constructive in nature and aimed at emphasizing improvements to be implemented about the SCS rather than highlighting its possible repressive uses. Differently, Western media tend instead to emphasize the authoritarian,

⁶⁹⁴ Nelson, Oxley, and Clawson, «Toward a Psychology of Framing Effects», 221–46.

⁶⁹⁵ Entman, «Framing», 51–58.

⁶⁹⁶ Ohlberg, Ahmed, and Lang, «Central Planning, Local Experiments: The Complex Implementation of China's Social Credit System»; Xu, Kostka, and Cao, «Information Control and Public Support for Social Credit Systems in China», 2230–45.

⁶⁹⁷ Xu, Kostka, and Cao, «Information Control and Public Support for Social Credit Systems in China», 2232.

⁶⁹⁸ The analysis of these sources was conducted by Xu et al. through sentiment analysis which aims to determine whether the emotional tone of the message presented in a digital text is positive, negative or neutral. Such an approach thus aims to determine opinions and emotions through a process of linguistic analysis. See Medhat, Hassan, and Korashy, «Sentiment Analysis Algorithms and Applications».

⁶⁹⁹ Ohlberg, Ahmed, and Lang, «Central Planning, Local Experiments: The Complex Implementation of China's Social Credit System»; Xu, Kostka, and Cao, «Information Control and Public Support for Social Credit Systems in China», 2230–45; Xu et al., «Media Framing and Public Support for China's Social Credit System».

repressive features and privacy issues of the SCS by drawing a picture of this tool that is often extremely reductive and dystopian.⁷⁰⁰

Based on these elements, numerous researches have verified how perceptions and approval of the SCS were determined or changed depending on the consumption of information from different sources or exposure to the most negative elements of the SCS. Chuncheng Liu highlights how the consumption of information from domestic media (liberal or official) had a positive correlation with support for the SCS while the consumption of information from foreign media was negatively correlated with support for the SCS.⁷⁰¹ However, these results can be explained, on the one hand, as a function of the generally positive media framing of the SCS in the domestic sphere and, on the other hand, in light of the fact that individuals who consume foreign media (access to which is conditioned on the frequent use of VPNs to circumvent government control) commonly present more critical attitudes toward policies implemented by the government.⁷⁰² A further study carried out by Ping Xu et al, seems to confirm these findings by going on to find that exposure to Western media framing in relation to the behavioural monitoring characteristics of the SCS cause a decrease in SCS approval.⁷⁰³ Finally, the most significant contributions about the impact of information on support for SCS come from research conducted by Ohlberg and Xu Xu et al. These highlight how presenting information to individuals framing SCS in a more neutral manner, highlighting both the benefits and risks of this technology, results in a decrease in support.⁷⁰⁴ Specifically, Xu Xu et al. note how, from an average level of support of 7.5 out of 10, presenting information that provides an adequate understanding of the political costs associated with the SCS results in a decrease in individual support of 12%.⁷⁰⁵ In contrast, Ohlberg's results show an even more significant decrease from 53% positive rating for SCS to 23% after exposure to more balanced information about the costs and benefits associated with this

⁷⁰⁰ Xu et al., «Media Framing and Public Support for China's Social Credit System», 7; Zou, «Disenchanted Trust», 140–49.

⁷⁰¹ Liu, «Who Supports Expanding Surveillance? », 401–7

⁷⁰² Ibid.

⁷⁰³ Xu et al., «Media Framing and Public Support for China's Social Credit System».

⁷⁰⁴ Xu, Kostka, and Cao, «Information Control and Public Support for Social Credit Systems in China»; Ohlberg, Ahmed, and Lang, «Central Planning, Local Experiments: The Complex Implementation of China's Social Credit System»; Ohlberg, «What Do Young Chinese Think about Social Credit? »

⁷⁰⁵ Xu, Kostka, and Cao, «Information Control and Public Support for Social Credit Systems in China», 2238.

measure.⁷⁰⁶⁷⁰⁷ These results show that one of the factors explaining the high approval level of the SCS is the effects of media framing and government manipulation of information.

In addition to exposure to more balanced information in terms of benefits and costs of the SCS, direct experience with this system also affects the level of approval.⁷⁰⁸ Lupton and Micheal highlight how individuals' perceptions about surveillance technologies do not necessarily correspond with direct experience with these.⁷⁰⁹ Although information disseminated about the SCS at the national level produces a positive perception of this instrument that conditions approval levels, this perception may not necessarily persist following direct contact with SCSs themselves. In this regard, Chuncheng Liu points out that direct contact of individuals with the SCS, in spite of whether the SCS is governmental or private, results in a decrease about approval levels.⁷¹⁰ Direct experience with SCS has shown in many cases a reassessment about the extent and convenience of the benefits offered in relation to the potential risks associated with this technology.⁷¹¹ However, it must be noted that in fact this element does not significantly affect the overall approval of the SCS. In fact, active interaction with SCSs, especially governmental ones implemented at the local level, is still limited with low participation rates that do not reflect the support expressed by individuals.⁷¹² This discrepancy is justifiable as a result of the fact that the SCS is still going through a development and implementation phase. However, it is legitimate to expect a greater impact of direct experience on approval if the government succeeds (as it seems intent on doing) in implementing the SCS more uniformly nationwide.

⁷⁰⁶ Ohlberg, «What Do Young Chinese Think about Social Credit? », 7.

⁷⁰⁷ Relative to the results obtained by Ohlberg, it should be pointed out that this analysis was carried out on college students. This would explain why the average level of positive judgment is considerably lower than that found by other research such as Kostka's. Generally, in fact, young people are more critical about surveillance measures proposed by the government.

⁷⁰⁸ The impact of experience on approval is one of the predictive elements described within the TAM and UTAUT models. Although this element in relation to SCS is under-explored in the literature, the value of experience on approval is widely documented academically. This factor has, for example, been shown to be highly relevant in understanding approval levels in relation to HCAs. See Kostka and Habich-Sobiegalla, «In Times of Crisis».

⁷⁰⁹ Lupton and Michael, « 'Depends on Who's Got the Data' ».

⁷¹⁰ Liu, «Who Supports Expanding Surveillance? », 404–7.

⁷¹¹ Li and Kostka, «Accepting but Not Engaging with It», 845–74.

⁷¹² Ibid.

4.3 Societal Factors Influencing SCS Approval

In the previous section, the individual reasons contributing to the widespread approval of the Social Credit System were investigated. However, confining the analysis to individual factors alone is insufficient to fully grasp the deep roots that explain this approval. In this section, I will explore how the "comfort" shown by citizens toward the SCS, and more generally the multiple surveillance and control systems in China, is influenced not only by individual factors but by a more intricate complex of cultural, historical, and social factors that shape Chinese society itself.

Based on the analysis conducted by Jun Liu and Hui Zhao, we can identify three specific aspects on which the analysis will focus.⁷¹³ The first crucial element to consider is what is called the "guardian model of governance," that is, the philosophy that justifies the Chinese power structure. Under this model, the government is seen as a benevolent protector of the nation, guarantor of the security and welfare of the people. It is in this historical and cultural element, operating, however, at the societal level, that many of the determinants of SCS approval highlighted in the section previously find their basis.

The second determinant operating at the societal level is to be found in the cultural link between technological development and national rejuvenation. Chinese history has always been characterized by periods of rapid technological advancement coupled with phases of nation renewal and empowerment.⁷¹⁴ In this deep connection between technological progress and national pride lies the predisposition toward initiatives such as the SCS, perceived as tools to keep China up to speed with modernity and ensure its preeminent role on the global stage.⁷¹⁵

Finally, China's strongly rooted community tradition, which has always placed the good of the community above the needs and wishes of individuals. The SCS, in its desire to ensure social welfare and stability, resonates with this collective vision. Therefore, the SCS can be seen as an embodiment of the will to sacrifice the individual for the common good.

⁷¹³ Liu and Zhao, «Privacy Lost», 743–56.

⁷¹⁴ Law, «Re-envisioning Chinese education».

⁷¹⁵ Chinese Consulate General in Penang, «Chinese Consul General in Penang Zhou Youbin Publishes a Signed Article Titled “The Chinese Path to Modernization - A Bright Path Towards the Great Rejuvenation of the Chinese Nation” ».

This last point needs further discussion as it constitutes itself as an important interpretive key for the following section. The communitarian tradition starts from assumptions diametrically opposed to those that characterize the liberal tradition and constitutes itself as a critique of the latter. For if the liberal tradition regards man as an "individual," communitarianism sees him as a "social animal".⁷¹⁶ It is from this element that communitarianism makes its main criticism of liberalism, namely that liberal doctrine fails to create a sense of community among its citizens.⁷¹⁷ In affirming the pre-eminence of the pursuit of individual interests, which are to be limited only when they clash with the interests of other individuals, liberal ideology places the interest of the self above any other value.⁷¹⁸ In this regard, Mill points out how liberalism identifies certain minimum standards of conduct such as not harming people or property.⁷¹⁹

However, such a narrow definition of the common good constitutes a tacit denial of the need for collective concepts that can at best be constituted as a set of individual transactions.⁷²⁰ On the basis of this, liberalism is presented as unable to identify a clear morality and value system that is applicable to the community and that serves as a means to guide and at the same time harmonize the conduct of the individual.⁷²¹ Differently, communitarianism, according to different interpretations, succeeds in building the common good through the collective bonds that result from the acceptance of a common authority by individuals whose essence is derived from a common cultural, religious, moral, or political horizon.⁷²² Submission to this authority is seen not only as the path to the realization of collective prosperity but also as the way through which the individual, who has meaning only within the community, realizes himself.⁷²³ These elements allow us to understand how in approaching instruments such as the SCS there is a gulf in terms of norms, systems and values between Chinese and Western observers.⁷²⁴

⁷¹⁶ Weixi, «On Confucian communitarianism», 475–79.

⁷¹⁷ Fox, «Confucian and Communitarian Responses to Liberal Democracy», 565–66.

⁷¹⁸ Etzioni, «Communitarianism Revisited», 241–60.

⁷¹⁹ Fox, «Confucian and Communitarian Responses to Liberal Democracy», 567.

⁷²⁰ Etzioni, «A Moderate Communitarian Proposal», 168

⁷²¹ Gutmann, «Communitarian Critics of Liberalism», 308–22.

⁷²² Etzioni, «Communitarianism».

⁷²³ Fox, «Confucian and Communitarian Responses to Liberal Democracy»

⁷²⁴ Li, «“Confucian Revival” From Both Chinese and Western, Ancient and Modern Perspectives»; Thompson, «Whatever Happened to “Asian Values”?»

4.3.1 The Guardian Model of Governance

In the previous section, it was pointed out that one of the main individual factors explaining the broad support true the SCS is to be found in the political trust expressed by citizens in the central government. This has been presented as the result of individual evaluation based on considerations related to government performance based on parameters that give primary weight to the government's economic achievements. In this section I want to go beyond this conception, highlighting how the support the central government enjoys is not only the result of its performance but also the result of a broader substratum of elements related to China's culture and political tradition.

The Asian Barometer Surveys in comparing the demand for democracy with its perceived supply highlights how the majority of Asian countries demonstrate a strong interest in democracy.⁷²⁵ One of the most surprising results of this survey is how, among all Asian countries, China ranked second in terms of desire for democracy.⁷²⁶ This result appears extremely surprising. How is it possible that citizens of an authoritarian government express a strong desire for democracy but at the same time high support for a government that is distant from the image of democracy that we in the West are accustomed to have?

Jie Lu and Tianjian Shi argue how the reason for this apparent contradiction lies in how different discourses about democracy are able to be adopted even by authoritarian governments to shape the expectations and behaviours of individuals.⁷²⁷ According to this perspective, the third wave of democratization that occurred in the 1990s led the concept of democracy to become a strong element of legitimacy within political discourse resulting in the establishment of a Western liberal hegemony.⁷²⁸ At the same time, every stage of democratic transition is characterized by the need for citizens to learn the concepts proper to democracies and those practices that are contrary to them.⁷²⁹ It is from this need to confront the concept of democracy as a legitimizing element that led many authoritarian governments to develop their own alternative conceptualization and

⁷²⁵ Shi and Lu, «The Meanings of Democracy», 123–25.

⁷²⁶ Ibid.

⁷²⁷ Lu and Shi, «The Battle of Ideas and Discourses before Democratic Transition», 20–24.

⁷²⁸ Haggard and Kaufman, «Democratization During the Third Wave», 125–44; Huntington, *The Third Wave*; Lu and Shi, «The Battle of Ideas and Discourses before Democratic Transition».

⁷²⁹ Larry Diamond, «Promoting Democracy in Post-Conflict and Failed States Lessons and Challenges».

promote an alternative discourse about democracy that would allow them to identify themselves as genuinely democratic.⁷³⁰

Societies with limited experience about the normative elements and institutional practices that distinguish democracy in its liberal conceptualization would then have reworked the meaning of democracy based on their historical and cultural traditions to appropriate it. Embracing this perspective, it becomes clear why influential Chinese leaders from Mao Zedong to Xi Jinping have always differentiated Chinese democracy from Western democracy.⁷³¹ Discourses such as that on democratic centralism, democracy with Chinese characteristics, "Three Represents," and "Harmonious Society" would thus go to constitute several examples of the forms taken by the discourse on democracy in China.⁷³²

Going beyond formalizations and looking at the content, this has led in the country to the adoption and promotion of a democracy model that coincides with the concept of guardian government, or what Robert Dahl refers to as "a perennial alternative to democracy."⁷³³ This concept, which was already present in Plato but according to Dahl finds its highest expression in Confucius, seeks the quality of good governance in the selection of rulers who constitute themselves as guardians of society by virtue of their superior moral qualities.⁷³⁴ In this perspective, it is the supposed morality of the leader that ensures how the leader's actions benefit the people and ensure the public interest. A corollary of this is how the leader's power and authority must be unconstrained so that the leader can guarantee the good of the people without any obstacles to his or her actions. This model is thus going to be constituted as a paternalistic meritocracy that is constituted in China as the real essence of democracy.⁷³⁵

The Chinese guardian model of governance would historically go to find its essence in the Confucian matrix concept of *minben* that is, the doctrine that people's welfare constitutes the basis of state wealth and power.⁷³⁶ This concept is perfectly encapsulated

⁷³⁰ Bilodeau, «Is Democracy the Only Game in Town? », 359–81; Lu and Shi, «The Battle of Ideas and Discourses before Democratic Transition».

⁷³¹ Nathan, *Chinese democracy*; Lorenzo, *Conceptions of Chinese Democracy*.

⁷³² Zheng, *An Ideological History of the Communist Party of China*; Ngok and Zhu, «In Search of Harmonious Society in China».

⁷³³ Dahl, *Democracy and its critics*.

⁷³⁴ Ibid.; Lu and Shi, «The Battle of Ideas and Discourses before Democratic Transition», 25.

⁷³⁵ Lu and Shi, «The Battle of Ideas and Discourses before Democratic Transition», 25.

⁷³⁶ Li, «Minben (民本) as an Alternative to Liberal Democracy».

by the words of Mencius, one of the most important philosophers of orthodox Confucianism, who states how:

“The people are the most important element in a nation; the spirits of the land and grain come next; the sovereign counts for the least.”⁷³⁷

The welfare of the people is thus of primary importance, but not to guarantee their rights or political participation, but to keep rulers in power. The legacy of the Confucian *minben* later intersected with Chinese Leninist doctrine. In particular, the latter's emphasis on the role played by the elite, the assumption of a common harmony and common goals in terms of social interests, and the pre-eminence of socioeconomic outcomes over the granting of political rights constitute powerful points of contact between the two doctrines that now form the framework on which the Chinese guardian model of governance hinges.⁷³⁸

The guardian model of governance constitutes itself as the Chinese equivalent of what liberal doctrine means by democracy. However, there are important distinctions that need to be emphasized. First, both doctrines emphasize how ensuring the welfare of the people is the outcome to be achieved but the ways in which this is accomplished differ considerably. Where liberal democracy achieves this through specific procedural arrangements and the presence of institutions that safeguard the rights of citizens, acquires legitimacy through the presence of regular elections, and political participation is seen as the basis on which the social contract that binds state and individuals is founded, the guardian model of governance, on the other hand, places emphasis on the need for politically virtuous leaders who demonstrate their legitimacy through the results of the policies implemented.⁷³⁹ Political participation according to this model is not contemplated because of what Schumpeter would describe as the “infantilism” of citizens.⁷⁴⁰ Citizens do not have the knowledge and skills to participate in political life,

⁷³⁷ Mei, Ames, and Stefon, «Mencius | Chinese Confucianism & Moral Philosophy »; Perry, «Chinese Conceptions of “Rights” », 37–50.

⁷³⁸ Nathan, *Chinese democracy*; Munro, *The concept of man in contemporary China*; Perry, «Chinese Conceptions of “Rights” », 37–50.

⁷³⁹ Lu and Shi, «The Battle of Ideas and Discourses before Democratic Transition»; Shi and Lu, «The Meanings of Democracy»; Körösnéyi, «Political Leadership: Between Guardianship and Classical Democracy».

⁷⁴⁰ Schumpeter, *Capitalism, socialism, and democracy*, 258–62; Körösnéyi, «Political Leadership: Between Guardianship and Classical Democracy».

this scenario is only contemplated in case the ruler loses the "Mandate of Heaven".⁷⁴¹⁷⁴² This does not mean that citizens cannot express their opinions to leaders or that leaders are allowed to ignore the will of the people, but only that ordinary citizens are not considered capable of making right policy decisions on important issues.

In short, China is based on a guardian governance model that is developed as a democratic alternative to the traditional liberal view of democracy itself. This view emphasizes the decision-making role of the virtuous and enlightened leader in ensuring the welfare of the people, without allowing them to actively participate in the political life of the country. Such a model, established historically and culturally in China and still traceable within the CCP today, is a powerful explanatory factor as to why measures such as the SCS are supported. The SCS is presented as a measure designed to ensure the well-being of the population within a context in which performance becomes the main indicator of government legitimacy. Thus, the people are not legitimized to express their dissent to the measure but only in case the measure proves unable to achieve its intended results.

4.3.2 The Cultural Importance of Technology

Technological development has always been a process dictated not only by the technical and economic factors that characterize a given society in a certain historical period but can more broadly be framed in a certain social and cultural space. Adopting a constructivist perspective about technological development, Feenberg suggests a connection between technology and cultural factors according to which technologies are not exclusively the result of technical choice but take on a precise shape in response to cultural norms emanating from economics, religion, politics, business and tradition.⁷⁴³ In other words, technology arises from and is shaped by a specific cultural horizon, that is, the general cultural assumptions that constitute the ground in which a technology is put in place.⁷⁴⁴

⁷⁴¹ Ahana, «THE MANDATE OF HEAVEN».

⁷⁴² The concept of "Mandate of Heaven" is originally traced back to 1046 BCE as a product of the Zhou dynasty. Originally conceived as a concept of ruler legitimacy determined by performance, it is further enriched with a moral component related to the virtues of the ruler during the Qin dynasty period. This concept still survives today in Xi's China as can be seen from the still-present correlation between legitimacy and performance. See Ahana, "THE MANDATE OF HEAVEN" available at <https://orcasia.org/public/the-mandate-of-heaven-then-and-now>.

⁷⁴³ Feenberg, «Subversive Rationalization», 309.

⁷⁴⁴ Ibid.

Under this perspective any technology, SCS included, falls under a specific sociotechnical imaginary. This term, traceable to the work of Jasanoff and Kim, indicates “collectively imagined forms of social life and social order reflected in the design and fulfilment of nation-specific scientific and/or technological projects”.⁷⁴⁵ The technology thus encapsulates not only technical or political yearnings but presents itself as the embodiment of what are the ideals and inspirations of the people. Understanding why the SCS enjoys such widespread public support, in spite of the threats it poses, therefore means going beyond analysing the characteristics that affect approval at the individual level to understanding how Chinese citizens view technological progress itself.

Historically, we can see how China's socio-technical imaginary has been characterized by the association between technical and scientific progress and the idea of the country's rejuvenation and modernization.⁷⁴⁶ The first appearance of such a conception of technology can be observed beginning with the First Opium War in 1842.⁷⁴⁷ The defeat against British forces would become a collective trauma for China of that era, leading it to begin the long journey toward national "rejuvenation" (*fixing*).⁷⁴⁸ China's subsequent defeat during the Sino-Japanese War of 1894 would go on to reinforce these feelings of revenge and modernization, leading to the emergence of the concept of "self-strengthening" (*zhiqiang*), or that process devoted to regaining the "wealth and strength" (*fu-ch'iang*) lost by growing and overcoming the technological backwardness in which China found itself.⁷⁴⁹ The obvious material disparity between China and the West would thus become part of a shared memory that can still be observed today.

The desire to rejuvenate the country and regain wealth and strength has remained throughout the various historical periods that the country has gone through, gradually becoming enriched in content and being re-presented in multiple forms within the thinking of successive leaders at the helm of the country. In this regard, Yang Lihua points out how the connection between technology and the rejuvenation of the nation, to be understood as a nation-building process aimed at asserting China's primacy, can be traced in national development strategies ranging from Mao's "march toward science," to the

⁷⁴⁵ Jasanoff and Kim, *Dreamscapes of Modernity*, 4;

⁷⁴⁶ Elman, *A Cultural History of Modern Science in China*.

⁷⁴⁷ Kuo and Liu, «Self-strengthening: the pursuit of Western technology», 491–542.

⁷⁴⁸ Stevens, «China's Long March to National Rejuvenation», 46–63.

⁷⁴⁹ Kuo and Liu, «Self-strengthening: the pursuit of Western technology», 491–492.

conceptualization "science and technology is the first productive force" during the Deng Xiaoping era and the strategy of "relying on science and education to rejuvenate the nation" under Jiang Zemin, all the way to "national innovation system construction" during Hu Jintao.⁷⁵⁰ We thus see how technology has always played an important role, linked to the very growth and affirmation of the nation as a means of ensuring economic development, stability, and social prosperity.

Nowadays, this connection between technology and national revival has been propagated and reinforced through institutions and the mass media, being increasingly internalized within society.⁷⁵¹ This rhetoric has assumed an increasingly prominent role than in the past under Xi Jinping's leadership. Under Xi, national rejuvenation has been framed as the "Chinese Dream" of achieving strength and prosperity and has been framed in propaganda to fuel nationalist sentiments that also justify a more assertive and muscular foreign policy.⁷⁵² This is exemplified by a recent speech given by Xi during a session of the Political Bureau of the CPC Central Committee on strengthening basic research in which research and technological progress were framed as imperative to ensure the country's economic and social development, making China a world leader in science and technology.⁷⁵³

In sum, we can hypothesize that technology for China constitutes itself as an integral part of a sociotechnical imaginary in which technology and nation-building become one process aimed at the rejuvenation of the nation. It is in the light of this interpretation that one must look not only at the SCS but more generally at the increasing use of ICTs in Chinese governance. Technology becomes a means of ensuring the country's greatness, and as a function of this, the public appears to be more accepting of supporting technologies such as the SCS because, in spite of the risks involved, they are seen as the way forward to achieve the longed-for rejuvenation of the country that has been coveted for more than a century.

⁷⁵⁰ Lihua, «Implementation of China's rejuvenation through knowledge», 53–60.

⁷⁵¹ Na, «Chinese Premier on National Rejuvenation Through Science, Technology-».

⁷⁵² Stevens, «China's Long March to National Rejuvenation», 46–63; Tang, «China Must Be a World Leader in Science and Tech or Risk Being 'Strangled'»; Tobin, Shepherd, and Kuo, «China's Xi Promises to Build 'Great Wall of Steel' in Rivalry with West».

⁷⁵³ Ministry of Education of the People's Republic of China, «Xi Jinping calls for strengthening basic research to solidify self-reliance in science and technology ».

4.3.3 The Chinese Communitarian Tradition

One of the main victims of the SCS is certainly privacy understood as an individual right of citizens, yet this does not hinder its implementation but, rather, it seems that the sacrifice of privacy is framed by citizens as a small price to pay in the face of the societal good that the SCS promises. As stated several times throughout this thesis, explaining this in light of the type of regime that China is constitutes itself as a weak justification. At the same time, in order to justify such widespread support that seems to transcend classes and internal divisions within society, it is possible to trace a common cultural heritage among Chinese citizens that allows us to understand how and why the collective always seems to come before the individual. This common cultural heritage is, in my view, traceable to the communitarian tradition that has historically characterized China and the connection it has with the values of Confucianism that society has internalized and that under Xi Jinping are increasingly resurrecting as a powerful element of legitimacy regarding the government's actions.

First and foremost, communitarianism is constituted as a political and social philosophy where emphasis goes to the importance of community and the realization of the common good over individual rights and freedom.⁷⁵⁴ In this sense, communitarianism preaches the existence of a connection between individuals belonging to the same sociocultural context that creates a responsibility to the community as a whole.⁷⁵⁵ These elements constitute the main differences with the liberal conception of individualism. This can be clearly expressed through the thought of Michael Sandel, one of the leading intellectuals contributing to the development of the concept of communitarianism, who notes how the communitarian critique of liberalism lies in how the latter is incapable of formulating an idea of good that is globally accepted within the context in which the individual operates, thus leaving the definition of good to the evaluations of individuals.⁷⁵⁶ The good according to the liberal conception is in a sense neutral, that is, it is formulated without regard to criteria of community membership and without external influences.⁷⁵⁷ Through individualism we can only arrive at a notion of the common social good if we see it as the

⁷⁵⁴ Etzioni, «Communitarianism», 1–8; Etzioni, «Communitarianism Revisited», 241–60.

⁷⁵⁵ Janoski, «Citizenship in China», 365–85.

⁷⁵⁶ Sandel, «The Procedural Republic and the Unencumbered Self», 81–96.

⁷⁵⁷ Etzioni, «The Responsive Community».

aggregation and alignment of individual goods.⁷⁵⁸ In contrast, the good according to communitarianism is based on the recognition of a collective metaphysical entity that is the beneficiary of that good, namely the community itself.⁷⁵⁹ The latter then, having recognized common values, employs its energies to realize them.

A further difference between communitarianism and individualism is to be found in the balance there is between rights and responsibilities. According to individualism, the primary focus is the protection of individual rights and freedom even when this means prioritizing personal autonomy over communal obligations.⁷⁶⁰ In this respect, communitarianism presents a radically opposite view. Based on the Aristotelian conception that man is a social animal, communitarianism sees the formation of one's preferences during the process of socialization itself, and this implies the deep internalization of the values of which the community is the bearer, which then become a part of the individual's own.⁷⁶¹ In this way, acting for the common good does not mean sacrificing oneself but realizing one's own values.

In China the communal tradition takes the form of Confucianism thus enriching itself with the foundational values of this doctrine, which preaches as its cornerstone the idea of group interests above those of any individual.⁷⁶² Classical Confucianism in China fits the traditional Chinese social structure, namely a patriarchal system based on blood ties in which the connections between individuals, and consequently the entire social system, are based on the degree of kinship.⁷⁶³ Within the Social System, the state (*guo*) is presented as the highest form assumed by the family (*jia*) and, based on this, the filial piety (*yi xiao zuo zhong*) of sons toward their father is translated in the state political sphere into loyalty (*zhou*) to the ruler who in change treats his subjects with benevolence (*ren*).⁷⁶⁴ In this respect, we can see how Confucian communitarianism constructs the community as hierarchical which, starting from the basic unity of the family, comes down to the State, which is constituted as the pillar of Confucian communitarianism.⁷⁶⁵ From

⁷⁵⁸ Taylor, «Cross-Purposes», 195.

⁷⁵⁹ Etzioni, «Communitarianism Revisited», 246.

⁷⁶⁰ Realo et al., «Three Components of Individualism», 163–84.

⁷⁶¹ Etzioni, «Communitarianism», 5; Aristotle, «Politics».

⁷⁶² Shi, «Cultural Values and Political Trust»; Tianjian, Shi and Jie Lu, «The Shadow of Confucianism».

⁷⁶³ Weixi, «On Confucian communitarianism», 475–76.

⁷⁶⁴ Ibid.

⁷⁶⁵ Slote and De Vos, *Confucianism and the family*.

this we can understand how Confucianism comes to be constituted as a political and social philosophy that sees as its primary goal explaining how to administer the state, and consequently the state becomes the very centre of Confucian communitarianism.

The ideological basis of Confucian communitarianism can be reconstructed from the so-called "four books," one of the foundational texts of Confucian thought, which ask questions such as the essence of man, the nature of community, and how man can achieve in and through community his fulfilment.⁷⁶⁶⁷⁶⁷ The Analects stands as one of the firm heads of the entire doctrine in that it allows us to reconstruct what in Confucius' eyes constitutes the essence of man. This is to be found not in his biological characteristics but in the social elements that characterize him namely benevolence (*ren*) and rituals (*li*).⁷⁶⁸ It is through rituals, that is, the performance of tasks to which the individual is subjected according to his or her role in the community, that benevolence is realized and finds expression.⁷⁶⁹ We then see how on the basis of this Confucianism presents clear and sound principles of behaviour that characterize family and political ethics and that men must carry out in their actions within the community. Through public rituals, which may be religious, cultural, or political, men's social existence is created and intertwined.⁷⁷⁰

Another essential point of classical Confucianism is to be found in the interaction between the community and the individual. Confucianism presents itself as hostile to the very notion of the individual and autonomy. However, it would be wrong to see the value of the individual and that of the community as opposed. The individual, by completing others (i.e., by serving the community) completes itself.⁷⁷¹ Schwartz in this regard points out that although some currents of Confucianism such as the Wang Yang-Ming school saw self-realization as the end point of the doctrine, it is not to be understood as freedom and attainment of individual rights.⁷⁷² Full realization and excellence is nothing more than achieving moral perfection, to be understood as full conformity with cultural norms and

⁷⁶⁶ Gardner, *The Four books*.

⁷⁶⁷ The "four books" consists of two books, The Analects (*Lunyu*) and Mencius (*Menzi*), and two articles, the Great Learning (*Daxue*) and The Doctrine of Mean (*Zhongyong*), which are derived from the Book of Rites (*Liji*). See Weixi, "On Confucian Communitarianism».

⁷⁶⁸ Weixi, «On Confucian communitarianism; Gardner, *The Four books*; Fox, «Confucian and Communitarian Responses to Liberal Democracy».

⁷⁶⁹ Ibid.

⁷⁷⁰ Fox, «Confucian and Communitarian Responses to Liberal Democracy».

⁷⁷¹ Weixi, «On Confucian communitarianism

⁷⁷² Schwartz, *The World of Thought in Ancient China*.

community values.⁷⁷³ At the same time, the supremacy of moral perfection understood as self-realization as a member of a community implies that the immoral, those who harm society instead, are to be humiliated.⁷⁷⁴ This resonates with the logic of the naming and shaming mechanisms present in the SCS.

Within this framework and according to these elements the relationship between the state and individuals is shaped. From the perspective of Confucianism, the state as the guarantor of the community has no duties to individuals but only the obligation to provide for the realization of the common good.⁷⁷⁵ The state, in return for the community's loyalty and thanks to its inherent moral superiority, offers benevolence in the form of prosperity which, however, in classical Confucianism is not to be understood solely as wealth.⁷⁷⁶ This creates a scenario in which consensus is superior to political struggle, moral principles are superior to laws, community stands above the individual, and respect for hierarchy and authority stands above all.⁷⁷⁷ The communitarian tradition of Confucianism and the resulting way of interpreting society and state-individual relations, although they have faced periods of ups and downs, have never disappeared entirely. A particularly difficult phase was Mao's communist turn when Confucianism (but not the communitarian substratum on which it was based) was seen not only as an obstacle to the country's growth but as a veritable bourgeois and reactionary belief system that kept the people in check.⁷⁷⁸

The elements highlighted here offer a plausible explanation as to why Chinese society proves more malleable to the compression of its individual rights. Faced with the realization of the common good, that is, the realization of the values that distinguish the community, the individual disappears. This traces the underlying mindset of the SCS and stands as a useful key as to why this instrument is interpreted and perceived in a distinctly positive light by the majority of the public.

⁷⁷³ Pye, «The State and the Individual», 445–48.

⁷⁷⁴ Fox, «Confucian and Communitarian Responses to Liberal Democracy», 583.

⁷⁷⁵ Pye, «The State and the Individual», 445–48.

⁷⁷⁶ Fox, «Confucian and Communitarian Responses to Liberal Democracy», 561-92.

⁷⁷⁷ Yi-Huah, «Asian Values and Communitarian Democracy».

⁷⁷⁸ Maclean, «Negotiating the Gap»; The Economist, «How did Confucianism win back the Chinese Communist Party? »

4.4 Why did the HCAs “fall” while the SCS is still standing?

In the previous sections, it was provided a detailed analysis of individual factors of societal factors, which influence and shape high approval towards the SCS. These factors include both a rational calculation between risks and benefits based on perceptions of the SCS, trust in government, and the impact that the media's control of information and representation of this system has in influencing individuals' perceptions. These elements go within a broader political and cultural historical context, in which technology is seen as a means of national development capable of generating social welfare and in which the legacy of Confucianism and communal tradition lead the community to put the good of the community before the selfish needs of the individual. In this context, the Sovereign i.e., the CCP, is constituted as a benevolent father whose actions are seen as aimed at the realization of this good and therefore desirable by the community.

The elements identified here are not unique to the SCS but can be generalized and extended to all surveillance technologies that operate social control and behavioural manipulation. Indicative in this regard is the research conducted by Xu Xu et al. which shows that approval for different surveillance technologies such as closed-circuit television (CCTV), email and Internet surveillance, and more intrusive policies such as large-scale intelligence acquisition are explicable in light of the same factors I have highlighted.⁷⁷⁹ Such elements can also be traced in other research where the endorsement of technologies such as HCAs, SCS, DNA samples, and the use of facial recognition are explored.⁷⁸⁰ While the explanatory factors are common, the level of public support enjoyed by specific initiatives is not. Starting from a common social and cultural horizon, individual factors then exert a specific role depending on the policy being analysed.

This section will first provide an analysis about the level of approval of HCAs in China. This analysis will be the starting point for making a comparison between the SCS and health apps. The two systems will be considered in their similarities and differences, and based on this, an attempt will be made to understand why HCAs eventually lost the

⁷⁷⁹ Su, Xu, and Cao, «What Explains Popular Support for Government Monitoring in China? », 377–92.

⁷⁸⁰ Impiombato, «Examining Chinese Citizens' Views on State Surveillance»; Kostka, «China's Social Credit Systems and Public Opinion»; Kostka, «Covid-19 Contact Tracing Apps»; Kostka and Habich-Sobiegalla, «In Times of Crisis»; Chen, Huang, and Hu, «Red, Yellow, Green or Golden», 618–33; Liu, «Who Supports Expanding Surveillance? », 391–412; Liu and Graham, «Making Sense of Algorithms»; Liu and Zhao, «Privacy Lost», 743–56.

support they enjoyed while the SCS remains steadfast in its approval. Such an analysis has two main objectives. First, a comparison of this kind allows us to frame the specificities of the SCS that, beyond the factors highlighted, seem to currently ensure its success in the Chinese context thus allowing us to debate the future of this instrument. Second, this analysis allows us to understand the limitations of support toward the use of digital tools in China that place stress on privacy and individual rights. These two elements, although less salient in China than in Western countries, are still present, and the events of the A4 Movement have highlighted their weight.

4.4.1 Comparing Factors Influencing Public Opinion Between HCAs and SCSs

As stated in Chapter 3, COVID-19 posed an unprecedented challenge for China that required the massive mobilization of resources and technologies to avoid potentially devastating damage to the country's public health and economy. During the pandemic, health apps became a symbol of the challenge to be faced, often being framed as an ingenious technological solution to win the "war" against the virus.⁷⁸¹ The adoption of health apps during the pandemic was not unique to China. In fact, the covid saw the proliferation, as reported by Howell et al., of at least 49 different incarnations of HCAs each with their own specificities depending on the countries' social and political preferences.⁷⁸²

The proliferation of HCAs was accompanied in many of these countries by a strong debate about the possible privacy violations that these apps implied..⁷⁸³ Countries such as France, Italy, Australia, Germany, and the United States have seen protests against the alleged control applied by HCAs which, although presented as essential to protect the lives and health of citizens, often failed to convince the public that safeguarding public health was worth the risk of control, oppression, and sanitary dictatorship that they seemed to bring.⁷⁸⁴ In this regard, Sussman points out how even culturally distant countries have faced similar difficulties in getting health tracking apps accepted by

⁷⁸¹ Jiang, «A Question of Human Rights or Human Left? », 491–504.

⁷⁸² Howell, Ryan-Mosley, and Johnson, «A Flood of Coronavirus Apps Are Tracking Us. Now It's Time to Keep Track of Them. »

⁷⁸³ Bradford, Aboy, and Liddell, «COVID-19 Contact Tracing Apps», 1–21.

⁷⁸⁴ Mensurati, «Coronavirus, le polemiche su Immuni lanciano la app concorrente»;

citizens.⁷⁸⁵ The result was a generally low degree of adoption of HCAs in most countries with percentages ranging from 10% to 40% on average.⁷⁸⁶

In this landscape, China stands out as an exception seeing a high penetration rate of HCAs associated with support from citizens estimated at around 80%.⁷⁸⁷ If the high penetration rate appears explicable in the face of the de facto mandatory nature of HCAs in order to make even simple movements, the same cannot be said for the support this enjoyed. The factors behind this support largely trace those already traced for the SCS. Jun Liu and Hui Zhao in analysing the societal factors that explain the support highlight the importance of the aforementioned guardianship discourse in legitimizing the government's actions and the promotion made by it about HCAs.⁷⁸⁸ At the same time, these authors highlight the importance of the communal tradition of Confucianism and the perception of a common cultural horizon that brings together technology and national rejuvenation.⁷⁸⁹

In relation to factors conditioning individual support, several authors show a positive correlation between factors such as perceived financial risks, risks to personal health, and the dangerousness of the virus and its effects, and increased support toward the adoption of HCAs.⁷⁹⁰ Hargittai and Redmiles highlight how individuals who present a higher level of risk to their health as a result of infection, such as those who have already contracted the virus or have pre-existing respiratory conditions, are more likely to use HCAs.⁷⁹¹ A similar argument applies to those who have seen their financial and economic situation being deeply impacted by the pandemic.⁷⁹² Chopdar confirms in this regard how, through the use of the UTAUT model, performance expectancy, social influence, and facilitating conditions positively influenced users' intention to adopt the app thus drawing a clear link between risk perception and support.⁷⁹³ Moreover, in the face of the risk posed by the pandemic, a key role in determining the acceptance of HCAs has been played by the

⁷⁸⁵ Sussman, «Economic Incentives and Regulation to Increase COVID-19 App Effectiveness».

⁷⁸⁶ Howell, Ryan-Mosley, and Johnson, «A Flood of Coronavirus Apps Are Tracking Us. Now It's Time to Keep Track of Them.»

⁷⁸⁷ Kostka and Habich-Sobiegalla, «In Times of Crisis»;

⁷⁸⁸ Liu and Zhao, «Privacy Lost», 743–56.

⁷⁸⁹ Ibid.

⁷⁹⁰ Kostka and Habich-Sobiegalla, «In Times of Crisis», 1–39; Villius Zetterholm, Lin, and Jokela, «Digital Contact Tracing Applications during COVID-19».

⁷⁹¹ Hargittai and Redmiles, «Will Americans Be Willing to Install COVID-19 Tracking Apps?»

⁷⁹² Zhang, Kreps, and McCurry, «Contact-Tracing Apps Face Serious Adoption Obstacles».

⁷⁹³ Chopdar, «Adoption of Covid-19 Contact Tracing App by Extending UTAUT Theory».

government, which has once again constituted itself as the most valuable stakeholder in the management of data collected from HCAs and the entity considered most capable of handling COVID-19 and its consequences on the country.⁷⁹⁴

In addition to the rational calculation based on risk perception, an important role in justifying support toward HCAs is played by the emotions that COVID-19 aroused in individuals. Specifically, fear and anxiety were identified as the factors causing positive behavioural changes that prompted the individual to adopt risk-averse behaviours associated with support of HCAs.⁷⁹⁵⁷⁹⁶ Although emotions had a connection with support toward HCAs, considerations related to potential privacy abuses or government surveillance, on the other hand, seem to have little relevance. In analysing Chinese citizens' attitudes about contact tracing apps, Kostka and Habich-Sobiegalla highlight how concerns about privacy and approval have a weak statistical correlation in line with what was said about the SCS.⁷⁹⁷

Finally, research such as that carried out by Chen et al. and Gui underscores the importance of media framing about the pandemic in shaping support for HCAs.⁷⁹⁸ In relation to the pandemic contrast, we see how this has been framed figuratively by the Chinese media, presenting it as the "People's War" against the virus.⁷⁹⁹ Framing the pandemic as a war, as reflected in numerous speeches given by Xi Jinping, goes first and foremost to constitute a clear reference to Mao's military theories.⁸⁰⁰ Moreover, such a narrative relies on a common historical and cultural basis that drives individuals to sacrifice their freedoms to ensure the well-being of the community in the face of a potentially fatal threat to the country⁸⁰¹. In this way, support for the means used to counter

⁷⁹⁴ Villius Zetterholm, Lin, and Jokela, «Digital Contact Tracing Applications during COVID-19»; Habich-Sobiegalla and Genia, «Covid-19 Contact Tracing Apps».

⁷⁹⁵ Harper et al., «Functional Fear Predicts Public Health Compliance in the COVID-19 Pandemic», 1875–88; Shiina et al., «Relationship between Perception and Anxiety about COVID-19 Infection and Risk Behaviors for Spreading Infection».

⁷⁹⁶ Feelings of anxiety and fear should not be understood solely as anxiety and fear of being infected but also of being able to infect someone else. In this light, anxiety and fear can then become a symptom of a heightened concern for collective well-being.

⁷⁹⁷ Kostka and Habich-Sobiegalla, «In Times of Crisis», 18-19.

⁷⁹⁸ Chen, Huang, and Hu, «Red, Yellow, Green or Golden»; Gui, «Media Framing of Fighting COVID-19 in China».

⁷⁹⁹ Gui, «Media Framing of Fighting COVID-19 in China», 1–5.

⁸⁰⁰ Ibid.

⁸⁰¹ Lyu and Carroll, «Cultural Influences on Chinese Citizens' Adoption of Digital Contact Tracing», 1–17.

the virus do not merely become the will of the government but are constituted as actions in which the population plays an active role through the sacrifice of their freedoms and rights to ensure the realization of the common good.⁸⁰²

4.4.2 Comparing the SCS and the HCAs

From what has been shown so far, SCS and HCAs share similarly high levels of approval motivated by the presence of the same factors. At the societal level, both instruments are based on a cultural tradition based on collectivism and the ethical and moral values of Confucianism. Here the state is seen from a paternalistic perspective as the guardian of the community to whom citizens entrust their direction, sacrificing individual selfishness, in virtue of the realization of the common good. The authority of the state is unquestionable unless the state fails in its duties. Finally, both the social credit system and health code apps rely on and find legitimacy within a common sociotechnical imaginary that, developed historically and established through national rhetoric, has led to the creation of an indissoluble link between technological progress and the development of the nation.

Beyond these elements, however, it seems appropriate to conduct a more thorough analysis that brings these two tools into communication in order to understand what they have in common in terms of operation and objective. Although they belong to the same domain, that of digital governance, it is necessary to clarify how the basic assumptions, modes of operation, and goals pursued by these two are related. This section will then go about making such a comparison in order to put back together the pieces that bind SCS and HCAs, thus allowing us to understand how the path of one allows us to make assumptions about the future of the other.

The first element to consider for this purpose is what constitutes the beating heart of the two mechanisms, namely data. The functioning of both the SCS and HCAs depends entirely on the ability to extrapolate data and interpret it algorithmically to integrate it within the decision-making process by automating it, thereby creating data-driven social dynamics.⁸⁰³ Obviously, the nature of the data considered differs between the two instruments. The SCS collects a variety of data of both financial and non-financial nature,

⁸⁰² Reuters, «In “People’s War” on Coronavirus, Chinese Propaganda Faces Pushback».

⁸⁰³ Liang et al., «Constructing a Data-Driven Society», 415–53.

from both public and private sources, which subsequently become the object of evaluation and surveillance.⁸⁰⁴ Financial data are mainly taxes, loans, transactions, and bank statement while non-financial data include a variety of personal information related to the individual's employment, education, criminal record, and even social media use.⁸⁰⁵ In comparison, the data collected by HCAs have a smaller scope by limiting themselves to health data and data on the individuals' location.⁸⁰⁶

However, despite these differences, the underlying rationality is to encapsulate the individual as a function of the data that collects its essence in order to act on it. Individuals have no consciousness or control over what data is collected and how it is aggregated and used. The algorithm, which constitutes the mind of these tools, appears as a black box of which individuals possess a collective imagination that, however, does not necessarily correspond to factual reality but is constituted as a socio-cognitive process in that is negotiated and renegotiated based on past experiences and future expectations.⁸⁰⁷ This loss of control about one's data also goes on to shape, along with socio-cultural structure and individual preferences, the different approaches to privacy that can be traced in Chinese citizens. These, according to Liu and Graham, take the form of tradeoffism (when privacy is bartered for public or private security), fatalism (the resignation of many individuals about the impossibility that privacy can be a real right of individuals), to the rarer protectionism (represented by that small minority of individuals in China who give real weight to privacy such as young people).⁸⁰⁸

The second element of contact between SCS and HCAs lies in the fact that both operate and find support by offering clear social benefits. In fact, although China's social credit system and health apps are different from each other, the former offers benefits in the form of improved access to credit and the incentives that follow from being a trustworthy individual while the latter conditions access to public spaces and the exercise of freedom

⁸⁰⁴ Ibid.; Backer, «China's Social Credit System», 209–14.

⁸⁰⁵ Meissner, «China's Social Credit System | Merics»; Meissner and Wübbecke, «IT-backed authoritarianism: Information technology enhances central authority and control capacity under Xi Jinping».

⁸⁰⁶ Chinese National Standardization Administration, «个人健康信息码参考模型 (Personal health information code - reference model) ».

⁸⁰⁷ Bucher, «The Algorithmic Imaginary», 30–44; Lupton and Michael, « 'Depends on Who's Got the Data' », 254–68; Pasquale, *The black box society*.

⁸⁰⁸ Liu and Graham, «Making Sense of Algorithms», 5–6.

of movement on the possession of a green code.⁸⁰⁹ What health code apps seem to lack instead is a firm enforcement mechanism equal to the SCS blacklisting. However, this lack has been partially filled through the extension during the pandemic of SCS "sticks" in order to ensure compliance with anti-COVID-19 rules.⁸¹⁰ In spite of this, both mechanisms share the attempt to promote a certain code of conduct cloaked in an inherent conception of what is and is not moral. In fact, the category of untrustworthy is extended by means of the narrative promoted by the government in order to cover, not only those already envisioned by the SCS, but also those who, by not adhering to the norms promulgated during the pandemic, go on to constitute themselves as individuals who endanger the harmony and stability of society. Freedom of action thus has to be sacrificed in virtue of safety.⁸¹¹

Finally, the most important characteristic shared by the two instruments lies in their ability to constitute themselves not only as tools to surveil citizens but as means of modifying their behaviour. This behavioural change is thus induced by artificial factors external to society that encapsulate within themselves specific institutional goals and dynamics.⁸¹² Individuals are then manipulated at the social level without having any knowledge that the manipulation is taking place.⁸¹³ According to Etzioni, social manipulation can occur through three modes:

1. Coercive power-the use or threat of using physical sanctions designed to produce an alteration in the behaviour of individuals.
2. Material power - the use of material resources or incentives that prompt individuals to alter their behaviour by presenting this as a choice dictated by the realization of their own interests.
3. Symbolic power-the use of symbols, appreciations, and exaltation of individuals that alter their behaviour according to the social standard that is to be promoted.⁸¹⁴

⁸⁰⁹ Kostka and Habich-Sobiegalla, «In Times of Crisis», 22.

⁸¹⁰ Knight and Creemers, «Going Viral».

⁸¹¹ Liu and Graham, «Making Sense of Algorithms»

⁸¹² Ibid.

⁸¹³ Esposti, «When Big Data Meets Dataveillance», 220.

⁸¹⁴ Etzioni, *A Comparative Analysis of Complex Organizations*, 5–6.

These elements are fully traceable in both the SCS and HCAs. In fact, the use of sanctions operating through blacklisting for untrustworthy individuals, the incentives promoted through mechanisms such as that of redlisting, and the exaltation of virtuous individuals in the face of the naming and shaming to which the untrustworthy are subjected, fully trace these modes described.⁸¹⁵ Depending on the elements presented, social credit system and health code apps sit within the same continuum that aims to change the behaviours of individuals and at the same time operate constant dataveillance on them.⁸¹⁶

4.4.3 Where is it that HCAs have failed?

So far we have seen how there are numerous points of contact between social credit systems and health code apps. First, these share an equally high level of support. This support can be justified on the basis of considerations related both to a common base of factors operating at the societal level that facilitates the adoption and acceptance of these two tools and state surveillance mechanisms more generally, and by common factors operating at the individual level that support approval in the face of perceived risks, threat salience, the role of media framing, and political trust in institutions. Second, both of these instruments are related to the provision of societal benefits. However, in the face of this, how can we explain Movement A4 and the subsequent criticism it has highlighted of HCAs? Furthermore, what can this tell us about the evolving support toward the SCS in the future? This section will attempt to answer these questions. In discussing the HCAs these will be treated in conjunction with the zero-COVID policy itself and the SCS. Indeed, the protests against this measure did not criticize a single element of the policy but all the instruments (HCAs included) through which it was being implemented.

The A4 Movement constitutes itself as the largest nationwide grassroots mobilization since 1989.⁸¹⁷ This, combined with the skepticism shown toward a post-pandemic future in which HCAs might continue to operate, allows us, in the absence of appropriate statistical analyses comparing approval levels of HCAs before and after the protests, to assume how support for health apps declined as a function of how much the zero-COVID

⁸¹⁵ Kostka and Antoine, «Fostering Model Citizenship», 259.

⁸¹⁶ Esposti, «When Big Data Meets Dataveillance», 209–25.

⁸¹⁷ Chan, «Unwritten Endings», 57–66.

measures became more unbearable and senseless to the population.⁸¹⁸ COVID-19 constituted a collective trauma for Chinese society. The pandemic carved a deep psychological wound in the memory of citizens that arguably amplified the perception of the existential threats to which society is exposed, but also provided important lessons about the future evolution of these threats.⁸¹⁹ We can see, for example, how events such as Hangzhou's attempt to extend its HCA by integrating it with the capabilities of the SCS and the current public debate about whether or not the use of HCAs should be extended beyond the end of the health emergency show that the public seems to be becoming more critically aware of the potential consequences that technologies of this type have.⁸²⁰ It is possible that issues related to the consequences that certain technologies may have will become more frequent in the coming years within the Chinese public debate, however, a key element that can be derived from the analysis so far is how this debate will come across as extremely pragmatic. The Chinese do not approach issues related to digital technologies on the basis of a hypothetical misuse of them but according to the concrete benefits they provide to society. The HCAs ceased to be beneficial because they were located within a policy that had now failed to provide the promised social benefits. This is not the case with the SCS.

It is unrealistic to expect that there will be towards the SCS a popular response comparable to that unleashed in relation to the Zero-COVID policy and the instruments that characterized it. Indeed, Zero-COVID has had a profound impact on public trust in political institutions, which, as we have seen, is one of the cornerstones on which approval toward surveillance technologies rests.⁸²¹ In particular, the government's poor performance during the last phase of Zero-COVID implementation can be read as a reason for the breakdown of the balance that binds citizens and state within the guardian model of governance. Pandemic management has been incapable of ensuring social stability and

⁸¹⁸ Yu, «健康码又要回来了? | 联合早报 (Is the health code coming back again? | United Daily News)»; Zheng, «The Messy Afterlife of China's Covid Health Codes»; Yang, «China's collective memories of the pandemic deserve to be preserved».

⁸¹⁹ Hirschberger, «Collective Trauma and the Social Construction of Meaning», 1–11.

⁸²⁰ Duan, «1651家村镇银行现在怎么样? 鲁冀豫数量最多 · 全国122家为高风险 (How are the 1,651 rural banks doing now? Shandong, Hebei and Henan have the largest number, with 122 high-risk companies across the country)»; Koetse, «The Curious Case of the Henan Bank Depositors and the Changing Health QR Codes».

⁸²¹ Li and Hong, «Confidence in China's Political System Is Linked to Attitudes Toward Dynamic Zero-COVID Policy».

has had harmful effects on the country's economy. About the latter element, the country's economic growth rate in the first half of 2022 was estimated to have dropped to 2.5 %, one of the lowest seen by the country in the past three decades.⁸²² Another important element to note is how Zero-COVID and the technologies it used were quickly framed as an expression of central government and not local governments.⁸²³ This has taken away Xi Jinping's ability to redistribute blame on local governments for poor policy performance, thus giving the population a clear target on which to direct their anger. This cannot be the case for the SCS, at least under current conditions, because this is still an instrument whose implementation is still largely up to local governments despite the fact that the policy guidelines are being progressively standardized by the central government.⁸²⁴ Moreover, the SCS is an instrument that is too convenient and too integrated into society to become an object of complaints, suffice it to say how the SCS is needed even to open a bank account.⁸²⁵ A protest against the SCS is likely only from those who lose credit points but this will not result in a social movement comparable to that against zero-COVID. In fact, should individuals who lose their points protest against the SCS, the system itself is designed to identify these as untrustworthy individuals generating, as evidenced by Kostka's own research, a estrangement by the rest of society that tends to distance itself from individuals identified as socially undesirable on the basis of their credit score.⁸²⁶

Another element that explains why HCAs have been extremely criticized while the SCS retains its status is to be found in the way these two instruments have held true to their spirit and goals. So far the SCS, although in its limited implementation, has shown that it can provide access to credit and target untrustworthy individuals to promote a specific moral vision within the country. Criticisms of the SCS do not focus on the inadequacy of the system per se but aim to highlight the improvements that need to be made to perfect

⁸²² Bradsher, «China's Economy Stumbled Last Year with Covid Lockdowns Hobbling Growth».

⁸²³ Chotiner, «Why Xi Jinping Changed His Mind on “Zero COVID” »; Guo, «Human Security and the Party-State-Society Triangle».

⁸²⁴ The future horizon of the SCS inevitably implies greater control by the central government, but as things stand at present this still seems a distant prospect. The inability to perfectly match the SCS with the will of the central government is to be seen as one of the reasons why the government itself does not feel the same pressure that it has felt as a result of the failures of the zero-covid policy. The allocation of blame among the various levels of the government is a resource that the zero-covid policy did not have.

⁸²⁵ Chipman Koty and Huld, «China's Social Credit System».

⁸²⁶ Kostka, «China's Social Credit Systems and Public Opinion», 1–28; Kostka and Antoine, «Fostering Model Citizenship», 256–89.

the SCS. In the case of HCAs, the situation is different. These constituted an integral part of the measures aimed at stemming and defeating the pandemic is, therefore, the promise they held was that they would be able to limit contagions thus ensuring the safeguarding of public health and the protection of the economy.⁸²⁷ After initial extraordinary internationally recognized successes, the omicron variant has caused an exponential increase in contagions, demonstrating the limitations of disease control measures and imposing severe costs on the country's economy.⁸²⁸ Faced with the multiplication of events such as food shortages and the disastrous situation experienced in Shanghai during the long lockdown periods and, even more so, the costs in terms of human lives caused by the same anti covid measures exemplified by the disastrous fires in Urumqi have challenged the government narrative that zero-COVID was the only measure to protect citizens.⁸²⁹

Finally, the last element that explains why acceptance of HCAs has faltered while that toward SCS is likely to remain stable in the future is to be found in how zero-COVID policy has primarily enabled mass social mobilization on a national scale. Social mobilization processes require the accumulation of resources, the dissemination of information, and the presentation of a political opportunity.⁸³⁰ In China, the weakness of civil society and the firm control and monitoring of dissent exercised by the party make it difficult for these conditions to materialize by hindering the realization of structured social movements. The covid experience as a collective trauma temporarily managed to

⁸²⁷ Gui, «Media Framing of Fighting COVID-19 in China», 966–70; Guo, «Human Security and the Party-State-Society Triangle».

⁸²⁸ Burki, «China's Successful Control of COVID-19», 1240–41.

⁸²⁹ Davidson, «Outcry in Shanghai as Person Declared Dead and Put in Body Bag Found to Be Alive»; Davidson and Yu, «Clashes in Shanghai as Protests over Zero-Covid Policy Grip China»; Zhang and Zheng, «“社区守护者”，他们是上海抗疫的平凡之光_浦江头条_澎湃新闻 (“Community Guardians”, they are ordinary people's lights in Shanghai's fight against the epidemic)»; Erdem, Watson, and Wright, «“I Hold China Accountable” »; FitzGerald and Williams, «China Xinjiang»; Qin, «乌鲁木齐火灾天怒人怨·全国数十所高校学生抗议·上海乌鲁木齐中路悼念聚会喊出罕见政治口号·不自由 毋宁死！习近平下台！共产党下台！ (The fire in Urumqi has made people angry. Students from dozens of colleges and universities across the country have protested. A rare political slogan was shouted at the memorial gathering on Urumqi Middle Road in Shanghai: Give me freedom or die! Xi Jinping steps down! The Communist Party steps down!) »; Xinhua News Agency, «乌鲁木齐市一高层住宅楼发生火灾造成10人死亡-新华网 (Fire in a high-rise residential building kills 10 in Urumqi - Xinhua) ».

⁸³⁰ McCarthy and Zald, «Resource Mobilization and Social Movements», 1212–41; McAdam, *Political process and the development of Black insurgency, 1930-1970*.

circumvent these limitations by going on to create a spirit of mutual assistance through the sharing of an event that involved the entire population indiscriminately.⁸³¹ The cost of the restrictions imposed was not limited to a specific category of individuals as in the case of the untrustworthy in the SCS but to the entire population indiscriminately.⁸³² This created a fertile ground in which dissent could blossom.

In sum, HCAs lost their support as they were embedded within a policy, desired by the central government, that proved to go against the "Mandate of Heaven" with which the government is traditionally vested. The trauma of the pandemic, it is especially the costs associated with it, have slowly but undeniably eroded confidence about the correctness of the government's actions as this has resulted in open criticism of all pandemic measures, HCAs included. Such an eventuality is implausible in relation to the SCS as this instrument can rely on its greater flexibility and invisibility to conceal its shortcomings while at the same time offering the government the opportunity to allocate blame by ensuring that it does not explode against the central government itself. Moreover, the SCS continues to demonstrate that it holds true to its goals in terms of performance unlike HCAs. About the future, we can certainly expect more attention to digital monitoring tools from the population, but as long as they succeed in outweighing the benefits offered over the costs, it is implausible to expect an expression of popular dissent such as those that occurred during the pandemic. Finally, the future of HCAs is still in question.⁸³³ Considerable resources have been invested in their creation and the debate is still open as to what form they will take in the future. One possibility could be the integration of health information within the SCS although the Hangzhou experience seems to defeat this hypothesis. However, what can be said is that the need to develop infrastructure that can aggregate and share the data needed for HCAs to function will probably be an important legacy for the SCS. It is likely that this will go a long way toward accelerating the development of the SCS in the future.

⁸³¹ Chan, «Unwritten Endings», 61–62.

⁸³² Ibid.

⁸³³ Zheng, «The Messy Afterlife of China's Covid Health Codes».

CONCLUSION

The central question of this thesis was to understand the factors that allow to explain why the SCS enjoys such a high rate of approval by Chinese citizens. This element appears inexplicable if one adopts a Western perspective in light of which the SCS appears as a surveillance technology tool having great repressive potential in terms of the individual's freedom. However, when analysed within the Chinese cultural, value and political system this contradiction blurs. Certainly, the SCS has implications in terms of privacy and individual freedoms that in the eyes of a Westerner appear as incompatible with the very foundations of liberal society. These certainly do not vanish in China but are interpreted in accordance with the greater Chinese pragmatism.

Chinese citizens tend to adopt considerations operating at the individual level that give greater weight to the benefits brought by the SCS in terms of social stability, access to credit, and security. These elements intersect with the public's trust in the CCP, which is seen as a stakeholder that advocates for the interests of the entire community and whose policies are therefore generally supported by citizens. In relation to the SCS, it is not only the benefits offered by it and trust in the central government that condition its support. In fact, we can see how the government's manipulation of the media has succeeded in framing the SCS in a distinctly positive light that minimizes the community risks and shortcomings of this instrument. At the same time, the SCS stands as the government's response to the perceived moral decay the country seems to be facing. In its ambition to punish the untrustworthy wherever they are found, the SCS provides a remedy to the social mistrust rampant in China by going on to create a distinction between individuals of trust and untrustworthy that allows the majority of the population to see this instrument as aimed at punishing not the community but only those who harm the community itself.

However, factors operating at the individual level are insufficient to explain the deep roots that motivate support for SCS. These are in fact to be found in the ideological, cultural, and value substratum that distinguish Chinese society from Western societies. In China, the government is seen as the guardian of the community, and by virtue of this, policies such as that of the SCS should be framed as being part of those prerogatives that the state has as a paternal figure placed in defence of the nation. The SCS is not seen as suppressing individual rights but as realizing the common good. At the same time, the SCS is

constituted as an embodiment of the socio-technological collective imaginary that sees technology as the means of ensuring prosperity and progress. By virtue of this, technology itself is intrinsically linked to the idea of national rejuvenation that is aimed at ensuring China's development and affirmation in the international arena. Finally, one must look for the reasons for support toward the SCS within that Confucian communal tradition that ascribe to society a strongly hierarchical structure in which the state is constituted as the apex of the community itself. Individual fulfilment can only occur through and within society, by means of compliance with those rituals that are contingent on the individual's role. It is in this way that approval toward the SCS is constituted first and foremost as respect toward the will of the state, which is called upon to grant benevolence to its citizens, and at the same time as respect toward the community to which the individual must submit his or her particularistic urges.

The elements tracked regarding the endorsement of the SCS are not unique to this tool but, more broadly, allow us to explain the support in China toward surveillance technologies. To consider this support as unconditional, however, would be a mistake. Indeed, through the example of HCAs, it has been observed how approval ceases the moment the instrument in question is no longer able to deliver the promised social benefits. Movement A4 presents itself precisely as an example of what are the limitations of Chinese support toward digital governance tools that are becoming increasingly prevalent in recent years. However, replicating this outcry against the SCS does not present itself as a viable proposition. Indeed, the zero-COVID policy was an exception caused by an unprecedented health emergency that required swift and incisive measures to be taken. This dictated the impossibility of developing tools that demonstrated the same effectiveness, flexibility, and sophistication of the SCS. When the zero-COVID measures, HCAs included, failed, popular discontent began to mount and due to the underestimation of this by the CCP eventually exploded. The SCS presents itself as too convenient and too integrated into society to face the same fate.

However, COVID has provided an opportunity to begin a process that has the potential to eliminate some of the obstacles that are still present in the implementation of the SCS on a national scale. First, the pandemic has created the need for greater and more effective unification of data to be used for pandemic countermeasure. This partially addresses the problem of data islands and interdepartmental data sharing, which to date is one of the

main obstacles faced by the SCS. Second, the pandemic has been a stress test for the SCS that has shown how the tool can adapt to challenges beyond those for which it was originally designed. This demonstrates an almost limitless potential in terms of judicial enforcement and financial applications of this tool.

In relation to the SCS debate, this thesis has contributed to a greater understanding of the factors underlying the support it enjoys. Previous analyses in fact had often been limited to highlighting legislative developments of SCS or its implications in processes of social transformation and behavioural modification. The scant analyses directly aimed at understanding the motivations behind support toward SCS are limited to analysing individual factors. This allows for a partial view of the problem, which instead presents itself as inextricably linked to the listed factors operating at the societal level. Future analyses on the topic should focus on the evolution of the SCS in terms of implementation and how the evolution of the SCS itself will influence Chinese public opinion. In addition, a further research perspective could go on to investigate whether and how the pandemic experience has changed the perception of digital governance tools such as the SCS, thus seeing if it is possible to detect an evolution of China's national debate on issues related to the privacy of individuals. Finally, a further research question might concern whether the SCS is constituted as a model that can be imitated by other states on the global stage and then exported by the Beijing government.

In conclusion, the Chinese SCS presents itself as a complex and multifaceted project that is constantly evolving. The SCS is constituted as a social and cultural product, the embodiment of a specific vision of technology, a political solution to the tensions that run through Chinese society, a panacea for moral decay, an essential financial tool, and at the same time as a threat and a problem for human rights. In the years ahead, monitoring the development of the SCS presents itself as an interesting activity to understand the ramifications of this tool and evaluate its achievements.

BIBLIOGRAPHY

- 6th Plenum of the 17th Central Committee of the Chinese Communist Party. "Central Committee of the Chinese Communist Party Decision Concerning Deepening Cultural Structural Reform." *China Copyright and Media* (blog), October 17, 2011. <https://chinacopyrightandmedia.wordpress.com/2011/10/18/central-committee-of-the-chinese-communist-party-decision-concerning-deepening-cultural-structural-reform/>.
- Abadi, Martin, Andy Chu, Ian Goodfellow, H. Brendan McMahan, Ilya Mironov, Kunal Talwar, and Li Zhang. "Deep Learning with Differential Privacy." In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security*, 308–18. Vienna Austria: ACM, 2016. <https://doi.org/10.1145/2976749.2978318>.
- Acquisti, A., and J. Grossklags. "Privacy and Rationality in Individual Decision Making." *IEEE Security and Privacy Magazine* 3, no. 1 (January 2005): 26–33. <https://doi.org/10.1109/MSP.2005.22>.
- Ahana, Roy. "The Mandate of Heaven: Then and Now - Political Legitimacy of the CCP Under Xi Jinping." Accessed February 23, 2024. <https://orcasia.org/public/the-mandate-of-heaven-then-and-now>.
- Alford, William P. "Chinese Law: History, Principles & Reforms." Accessed March 4, 2024. <https://www.britannica.com/topic/Chinese-law>.
- Al-Jabri, Ibrahim M., Mustafa I. Eid, and Amer Abed. "The Willingness to Disclose Personal Information: Trade-off between Privacy Concerns and Benefits." *Information & Computer Security* 28, no. 2 (August 26, 2019): 161–81. <https://doi.org/10.1108/ICS-01-2018-0012>.
- Al-Jabri, Ibrahim, Eid Mustafa I., and Amer Abed. "The Willingness to Disclose Personal Information: Trade-off between Privacy Concerns and Benefit." SSRN Scholarly Paper. Rochester, NY, 2020. <https://papers.ssrn.com/abstract=3759731>.
- Alsana, Marcella, Luca Braghieri, Sarah Eichmeyer, Minjeong Joyce Kim, Stefanie Stantcheva, and David Yang. "Civil Liberties in Times of Crisis." Cambridge, MA: National Bureau of Economic Research, October 2020. <https://doi.org/10.3386/w27972>.
- AlTakarli, Nourah S. "China's Response to the COVID-19 Outbreak: A Model for Epidemic Preparedness and Management." *Dubai Medical Journal* 3, no. 2 (May 19, 2020): 44–49. <https://doi.org/10.1159/000508448>.

- Annaka, Susumu. “Political Regime, Data Transparency, and COVID-19 Death Cases.” *SSM - Population Health* 15 (September 2021): 100832. <https://doi.org/10.1016/j.ssmph.2021.100832>.
- Anshan Municipal Development and Reform Commission. “关于2020年法治政府建设工作报告-文件资料-鞍山市发展改革委员会 (2020 Work Report on the Construction of a Rule of Law Government).” Accessed February 6, 2024. <http://fgw.anshan.gov.cn/html/FGW/202012/0163512656851466.html>.
- AP News. “EXPLAINER: China’s Relaxed ‘zero-COVID’ Brings Big Changes.” AP News, December 8, 2022. <https://apnews.com/article/health-china-covid-government-and-politics-fb77c852a1ab66b0827863c26939cc0f>.
- Aristotle. “Politics.” Accessed February 24, 2024. <https://www.goodreads.com/quotes/183896-man-is-by-nature-a-social-animal-an-individual-who>.
- Arsène, Sèverine. “China’s Social Credit System: A Chimera with Real Claws.” Accessed February 13, 2024. <https://www.ifri.org/en/publications/notes-de-lifri/asi-evisions/chinas-social-credit-system-chimera-real-claws>.
- Backer, Larry Catá. “China’s Social Credit System: Data-Driven Governance for a ‘New Era.’” *Current History* 118, no. 809 (September 1, 2019): 209–14. <https://doi.org/10.1525/curh.2019.118.809.209>.
- Bader, Julia. “China, Autocratic Patron? An Empirical Investigation of China as a Factor in Autocratic Survival.” *International Studies Quarterly* 59, no. 1 (March 2015): 23–33. <https://doi.org/10.1111/isqu.12148>.
- Bakken, Børge. “Norms, Values and Cynical Games with Party Ideology.” In *Critical Readings on the Communist Party of China (4 Vols. Set)*, edited by Kjeld Erik Brodsgaard, 816–48. BRILL, 2017. https://doi.org/10.1163/9789004302488_030.
- . *The Exemplary Society: Human Improvement, Social Control, and the Dangers of Modernity in China*. Studies on Contemporary China. Oxford [England] New York: Oxford University Press, 2000.
- Bannister and Connolly. “Defining E-Governance.” *E-Service Journal* 8, no. 2 (2012): 3. <https://doi.org/10.2979/eservicej.8.2.3>.
- Barnes, Susan B. “A Privacy Paradox: Social Networking in the United States.” *First Monday*, September 4, 2006. <https://doi.org/10.5210/fm.v11i9.1394>.

- Barth, Susanne, and Menno D.T. De Jong. “The Privacy Paradox – Investigating Discrepancies between Expressed Privacy Concerns and Actual Online Behavior – A Systematic Literature Review.” *Telematics and Informatics* 34, no. 7 (November 2017): 1038–58. <https://doi.org/10.1016/j.tele.2017.04.013>.
- BBC. “Henan: China to Repay Customers after Mass Bank Protests,” July 12, 2022. <https://www.bbc.com/news/business-62130744>.
- Beijing Research Center for Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. “新时代马克思主义科技观的创新发展--理论-人民网 (The Innovative Development of the Marxist View of Science and Technology in the New Era).” Accessed March 4, 2024. <http://theory.people.com.cn/n1/2018/0921/c40531-30306669.html>.
- Beijing Shijingshan District People’s Government Office. “进京、返京，哪些人必须隔离？ (Who Must Be Quarantined When Entering or Returning to Beijing?),” n.d. <https://www.bjsjs.gov.cn/ywdt/sjsdt/20200413/14720753.shtml>.
- Berger, Loic, Nicolas Berger, Valentina Bosetti, Itzhak Gilboa, Lars Peter Hansen, Christopher Jarvis, Massimo Marinacci, and Richard Smith. “Uncertainty and Decision-Making During a Crisis: How to Make Policy Decisions in the COVID-19 Context?” *SSRN Electronic Journal*, 2020. <https://doi.org/10.2139/ssrn.3647188>.
- Bevir, Mark. *Governance: A Very Short Introduction*. First edition. Very Short Introductions 333. Oxford, United Kingdom: Oxford University Press, 2012.
- Bilodeau, Antoine. “Is Democracy the Only Game in Town? Tension between Immigrants’ Democratic Desires and Authoritarian Imprints.” *Democratization* 21, no. 2 (February 23, 2014): 359–81. <https://doi.org/10.1080/13510347.2012.712515>.
- Bloomberg Law. “China Personal Information Protection Law (PIPL).” Accessed March 10, 2024. <https://www.bloomberglaw.com/external/document/X1EM5EJ0000000/international-data-privacy-compliance-overview-china-personal-in>.
- Blut, Markus, Durham University Business School, UK, Alain Yee Loong Chong, Nottingham University Business School–Ningbo, China, Zayyad Tsigna, Nottingham University Business School–Ningbo, China, Viswanath Venkatesh, and Pamplin College of Business, Virginia Tech, USA. “Meta-Analysis of the Unified Theory of Acceptance and Use of Technology (UTAUT): Challenging Its Validity and Charting a Research Agenda

- in the Red Ocean.” *Journal of the Association for Information Systems* 23, no. 1 (2022): 13–95. <https://doi.org/10.17705/1jais.00719>.
- Booth, Ken. *Theory of World Security*. 1st ed. Cambridge University Press, 2007. <https://doi.org/10.1017/CBO9780511840210>.
- Bradford, Laura, Mateo Aboy, and Kathleen Liddell. “COVID-19 Contact Tracing Apps: A Stress Test for Privacy, the GDPR, and Data Protection Regimes.” *Journal of Law and the Biosciences* 7, no. 1 (July 25, 2020): Isaa034. <https://doi.org/10.1093/jlb/Isaa034>.
- Bradsher, Keith. “China’s Economy Stumbled Last Year With Covid Lockdowns Hobbling Growth.” *The New York Times*, January 17, 2023, sec. Business. <https://www.nytimes.com/2023/01/16/business/china-gdp-fourth-quarter-2022.html>.
- Branigan, Tania. “China’s Good Samaritans Count the Cost of Their Altruism.” *The Guardian*, September 8, 2011, sec. World news. <https://www.theguardian.com/world/2011/sep/08/chinas-good-samaritans-count-cost>.
- Brown, Barry A. T. “Studying the Internet Experience,” 2001. <https://www.semanticscholar.org/paper/Studying-the-Internet-Experience-Brown/563a300a287ff45eb897d100f26d59d4d87c62c2>.
- Brown, Kerry, and Ruby Congjiang Wang. “POLITICS AND SCIENCE: THE CASE OF CHINA AND THE CORONAVIRUS.” *Asian Affairs* 51, no. 2 (March 14, 2020): 247–64. <https://doi.org/10.1080/03068374.2020.1752567>.
- Brown, Tristan G., Alexander Statman, and Celine Sui. “Public Debate on Facial Recognition Technologies in China.” *MIT Case Studies in Social and Ethical Responsibilities of Computing*, no. Summer 2021 (August 10, 2021). <https://doi.org/10.21428/2c646de5.37712c5c>.
- Bucher, Taina. “The Algorithmic Imaginary: Exploring the Ordinary Affects of Facebook Algorithms.” *Information, Communication & Society* 20, no. 1 (January 2, 2017): 30–44. <https://doi.org/10.1080/1369118X.2016.1154086>.
- Burki, Talha. “China’s Successful Control of COVID-19.” *The Lancet Infectious Diseases* 20, no. 11 (November 2020): 1240–41. [https://doi.org/10.1016/S1473-3099\(20\)30800-8](https://doi.org/10.1016/S1473-3099(20)30800-8).
- . “Dynamic Zero COVID Policy in the Fight against COVID.” *The Lancet Respiratory Medicine* 10, no. 6 (June 2022): e58–59. [https://doi.org/10.1016/S2213-2600\(22\)00142-4](https://doi.org/10.1016/S2213-2600(22)00142-4).

- Cai, Vanessa. “How Will China Deal with the Mountain of Covid-19 Health Code Data?” *South China Morning Post*, February 20, 2023. <https://www.scmp.com/news/china/politics/article/3210683/what-does-china-plan-do-mountain-personal-health-code-data-amassed-during-zero-covid>.
- Calzada, Igor. “Citizens’ Data Privacy in China: The State of the Art of the Personal Information Protection Law (PIPL).” *Smart Cities* 5, no. 3 (September 8, 2022): 1129–50. <https://doi.org/10.3390/smartcities5030057>.
- Cameron, David. *The next Age of Government*, 1266243780. https://www.ted.com/talks/david_cameron_the_next_age_of_government.
- Cao, T. “让老人开心扫码、潇洒亮码_澎湃新闻评论_澎湃新闻 (Let the Elderly Scan the Code Happily and Show the Code in a Cool Way).” Accessed February 1, 2024. https://www.thepaper.cn/newsDetail_forward_7164112.
- Cao, Zhengnan, and Ning Wang. “统体制的内在矛盾与条块关系 (The Inherent Contradictions of Authoritarian Regime and the Tiao-kuai Relationship in China).” *社会杂志* 40, no. 4 (July 18, 2020): 77–110. <https://www.society.shu.edu.cn/CN/abstract/abstract17543.shtml>.
- Carlitz, Robert D, and Rosemary W Gunn. “Online Rulemaking: A Step toward E-Governance.” *Government Information Quarterly* 19, no. 4 (January 2002): 389–405. [https://doi.org/10.1016/S0740-624X\(02\)00118-1](https://doi.org/10.1016/S0740-624X(02)00118-1).
- Castells, Manuel. *Networks of Outrage and Hope: Social Movements in the Internet Age*. Cambridge, UK; Malden, MA: Polity Press, 2012.
- CBNEditor. “The Credit Reference Center of the People’s Bank of China - China Banking News,” September 6, 2019. <https://www.chinabankingnews.com/wiki/the-credit-reference-center-of-the-peoples-bank-of-china/>.
- CCP Central Committee and State Council. “国资委发布推广全国企业管理现代化创新成果通知 (The State-Owned Assets Supervision and Administration Commission Issued a Notice to Promote the Innovative Achievements of Modern Enterprise Management across the Country).” Accessed March 10, 2024. https://www.gov.cn/gzdt/2011-01/21/content_1789953.htm.
- Cellan-Jones, Rory, and Leo Kelion. “Coronavirus: The Great Contact-Tracing Apps Mystery,” July 21, 2020. <https://www.bbc.com/news/technology-53485569>.

- Central Committee of the Communist Party of China. “Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform- China.Org.Cn.” Accessed March 10, 2024. http://www.china.org.cn/china/third_plenary_session/2014-01/16/content_31212602.htm.
- . “中共中央关于全面推进依法治国若干重大问题的决定_中央有关文件_中国政府网 (Decision of the Central Committee of the Communist Party of China on Several Major Issues Concerning Comprehensively Promoting the Rule of Law).” Xinhua News Agency, October 23, 2014. https://www.gov.cn/zhengce/2014-10/28/content_2771946.htm.
- . “中共中央关于全面深化改革若干重大问题的决定 (Decision of the Central Committee of the Communist Party of China on Several Major Issues Concerning Comprehensively Deepening Reform).” Xinhua News Agency, November 12, 2013. https://www.gov.cn/jrzq/2013-11/15/content_2528179.htm.
- . “中共中央关于坚持和完善中国特色社会主义制度 推进国家治理体系和治理能力现代化若干重大问题的决定_中央有关文件_中国政府网 (Decision of the Central Committee of the Communist Party of China on Several Major Issues Regarding Upholding and Improving the Socialist System with Chinese Characteristics and Advancing the Modernization of the National Governance System and Governance Capabilities).” Xinhua News Agency, October 31, 2019. https://www.gov.cn/zhengce/2019-11/05/content_5449023.htm.
- Chan, Kin-Man. “Unwritten Endings: Revolutionary Potential of China’s A4 Protest.” *Sociologica*, July 24, 2023, 57-66 Pages. <https://doi.org/10.6092/ISSN.1971-8853/16877>.
- Chaturvedi, Aditya. “The China Way: Use of Technology to Combat Covid-19.” *Geospatial World* (blog), May 11, 2020. <https://www.geospatialworld.net/prime/technology-and-innovation/the-sino-approach-use-of-technology-to-combat-covid-19/>.
- Che, Chang, and Amy Chang Chien. “Memes, Puns and Blank Sheets of Paper: China’s Creative Acts of Protest.” *The New York Times*, November 28, 2022, sec. World. <https://www.nytimes.com/2022/11/28/world/asia/china-protests-blank-sheets.html>.
- Cheibub, Jose A., Ji Yeon Jean Hong, and Adam Przeworski. “Rights and Deaths: Government Reactions to the Pandemic.” *SSRN Electronic Journal*, 2020. <https://doi.org/10.2139/ssrn.3645410>.

- Chen, Lingyao. “农工党中央：将医疗消费纳入个人信用系统，建立有效惩戒机制_财经上下游_澎湃新闻 (Central Committee of the Peasants and Workers Party: Incorporate Medical Consumption into the Personal Credit System and Establish an Effective Punishment Mechanism).” Accessed February 3, 2024. https://www.thepaper.cn/newsDetail_forward_7458591.
- Chen, Huirong, and Sheena Chestnut Greitens. “Information Capacity and Social Order: The Local Politics of Information Integration in China.” *Governance* 35, no. 2 (April 2022): 497–523. <https://doi.org/10.1111/gove.12592>.
- Chen, Jie. *Popular Political Support in Urban China*. Washington, D.C.: Stanford, Calif: Woodrow Wilson Center Press; Stanford University Press, 2004.
- Chen, Jie, Yang Zhong, and Jan William Hillard. “The Level and Sources of Popular Support for China’s Current Political Regime.” *Communist and Post-Communist Studies* 30, no. 1 (1997): 45–64. <https://www.jstor.org/stable/45301999>.
- Chen, Jihong, and Jiabin Sun. “Understanding the Chinese Data Security Law.” *International Cybersecurity Law Review* 2, no. 2 (December 1, 2021): 209–21. <https://doi.org/10.1365/s43439-021-00038-3>.
- Chen, Ji-Ming, and Yi-Qing Chen. “China Can Prepare to End Its Zero-COVID Policy.” *Nature Medicine* 28, no. 6 (June 2022): 1104–5. <https://doi.org/10.1038/s41591-022-01794-3>.
- Chen, Joy, Zijun Cheng, Robin Kaiji Gong, and Jinlin Li. “Riding out the COVID-19 Storm: How Government Policies Affect SMEs in China.” *China Economic Review* 75 (October 2022): 101831. <https://doi.org/10.1016/j.chieco.2022.101831>.
- Chen, Tianxiang, Ying Wang, and Lei Hua. “‘Pairing Assistance’: The Effective Way to Solve the Breakdown of Health Services System Caused by COVID-19 Pandemic.” *International Journal for Equity in Health* 19, no. 1 (December 2020): 68. <https://doi.org/10.1186/s12939-020-01190-8>.
- Chen, Wenhong, Gejun Huang, and An Hu. “Red, Yellow, Green or Golden: The Post-Pandemic Future of China’s Health Code Apps.” *Information, Communication & Society* 25, no. 5 (April 4, 2022): 618–33. <https://doi.org/10.1080/1369118X.2022.2027502>.
- Chen, Yongxi, and Anne S. Y. Cheung. “The Transparent Self Under Big Data Profiling: Privacy and Chinese Legislation on the Social Credit System.” *SSRN Electronic Journal*, 2017. <https://doi.org/10.2139/ssrn.2992537>.

- Chen, Zhenkai, and Yuanqing Zhang. “以诚为荣看荣成（诚信中国）--时政--人民网 (Take Pride in Honesty and See Rongcheng (Integrity China)).” Accessed March 11, 2024. <http://politics.people.com.cn/n/2014/0827/c1001-25544866.html>.
- Cheng, Zhangkai Jason, Zhiqing Zhan, Mingshan Xue, Peiyan Zheng, Jiali Lyu, Jing Ma, Xiaohua Douglas Zhang, et al. “Public Health Measures and the Control of COVID-19 in China.” *Clinical Reviews in Allergy & Immunology* 64, no. 1 (September 18, 2021): 1–16. <https://doi.org/10.1007/s12016-021-08900-2>.
- Cheung, Anne S. Y., and Yongxi Chen. “From Datafication to Data State: Making Sense of China’s Social Credit System and Its Implications.” SSRN Scholarly Paper. Rochester, NY, July 15, 2021. <https://papers.ssrn.com/abstract=3997747>.
- Chin, Josh. “‘Rule of Law’ or ‘Rule by Law’? In China, a Preposition Makes All the Difference.” *Wall Street Journal*, October 20, 2014.
- China Government Network. “刘鹤主持召开国务院促进中小企业发展工作领导小组第一次会议_国务院副总理刘鹤_中国政府网 (Liu He Presided over the First Meeting of the State Council’s Leading Group on Promoting the Development of Small and Medium-Sized Enterprises).” Accessed February 5, 2024. https://www.gov.cn/guowuyuan/2018-08/20/content_5315204.htm.
- China Internet Joint Rumour Refutation Platform. “正常使用花呗会影响个人信用？关于个人征信的这些谣言你中招了吗？--社会·法治--人民网 (Will Normal Use of Huabei Affect Personal Credit? Have You Fallen for These Rumors about Personal Credit Reporting?).” Accessed March 11, 2024. <http://society.people.com.cn/n1/2020/0827/c1008-31839437.html>.
- China Internet Network Information Center. “CNNIC发布第44次《中国互联网络发展状况统计报告》-中国信息化中国信息协会 (CNNIC Releases the 44th ‘Statistical Report on China’s Internet Development’),” 2019. <http://www.ciiia.org.cn/news/9179.cshtml>.
- . “CNNIC发布第47次《中国互联网络发展状况统计报告》_部门政务_中国政府网 (CNNIC Releases the 47th ‘Statistical Report on China’s Internet Development’).” Accessed February 1, 2024. https://www.gov.cn/xinwen/2021-02/03/content_5584518.htm.
- China Law Translate. “Data Security Law of the People’s Republic of China.” *China Law Translate* (blog), June 10, 2021. <https://www.chinalawtranslate.com/datasecuritylaw/>.

- . “Law of the PRC on the Establishment of the Social Credit System (Draft Released for Solicitation of Public Comments).” *China Law Translate* (blog), November 14, 2022. <https://www.chinalawtranslate.com/social-credit-law/>.
- . “National List of Basic Penalty Measures for Untrustworthiness (2021 Edition).” *China Law Translate* (blog), January 3, 2022. <https://www.chinalawtranslate.com/sc-punishment-list/>.
- China News Network. “专访王广发：我依然认为疫情‘可防可控’-中新网视频 (Exclusive Interview with Wang Guangfa: I Still Believe the Epidemic Is “preventable and Controllable”).” Accessed March 11, 2024. <https://www.chinanews.com.cn/sh/shipin/cns/2020/01-23/news845730.shtml>.
- Chinese Consulate General in Penang. “Chinese Consul General in Penang Zhou Youbin Publishes A Signed Article Titled ‘The Chinese Path to Modernization - A Bright Path Towards the Great Rejuvenation of the Chinese Nation.’” Accessed February 22, 2024. https://www.mfa.gov.cn/eng/wjb_663304/zwjg_665342/zwbd_665378/202211/t20221128_10981454.html.
- Chinese National Standardization Administration. “个人健康信息码国家标准发布_滚动新闻_中国政府网 (Personal Health Information Code - Reference Model).” Accessed March 11, 2024. https://www.gov.cn/xinwen/2020-05/02/content_5508190.htm.
- Chipman Koty, Alexander, and Arendse Huld. “China’s Social Credit System: What Businesses Need to Know.” *China Briefing News*, March 24, 2023. <https://www.china-briefing.com/news/chinas-social-credit-system-how-it-works/>.
- Chongqing Daily. “落实‘新十条’ 现行不一致的防控措施不再执行_重庆市人民政府网 (Implement the ‘New Ten Articles’ and the Existing Inconsistent Prevention and Control Measures Will No Longer Be Implemented).” Accessed February 10, 2024. http://www.cq.gov.cn/ywdt/jrcq/202212/t20221208_11365398.html.
- Chopdar, Prasanta Kr. “Adoption of Covid-19 Contact Tracing App by Extending UTAUT Theory: Perceived Disease Threat as Moderator.” *Health Policy and Technology* 11, no. 3 (September 2022): 100651. <https://doi.org/10.1016/j.hlpt.2022.100651>.
- Chotiner, Isaac. “Why Xi Jinping Changed His Mind on ‘Zero COVID.’” *The New Yorker*, December 9, 2022. <https://www.newyorker.com/news/q-and-a/why-xi-jinping-changed-his-mind-on-zero-covid>.

- Civil Aviation Administration of China. “民航局关于调整国际客运航班熔断措施的通知 (Notice from the Civil Aviation Administration of China on Adjusting Circuit Breaker Measures for International Passenger Flights).” Accessed March 11, 2024. http://www.caac.gov.cn/XXGK/XXGK/TZTG/202012/t20201216_205607.html#:~:text=%E5%85%B7%E4%BD%93%E5%A6%82%E4%B8%8B%EF%BC%9A,%E5%91%A81%E7%8F%AD%E8%88%AA%E7%8F%AD%E8%AE%A1%E5%88%92%E3%80%82.
- Clarke, Donald C. “The Execution of Civil Judgments in China.” *The China Quarterly*, no. 141 (1995): 65–81. <https://www.jstor.org/stable/655091>.
- Clausewitz, Carl von, Michael Howard, Peter Paret, Bernard Brodie, Rosalie West, and Carl von Clausewitz. *On War*. First paperback printing. Princeton, N.J: Princeton University Press, 1989.
- Cong, Wanshu. “From Pandemic Control to Data-Driven Governance: The Case of China’s Health Code.” *Frontiers in Political Science* 3 (April 14, 2021): 627959. <https://doi.org/10.3389/fpos.2021.627959>.
- Conrad, Courtenay Ryals, and Will H. Moore. “What Stops the Torture?” *American Journal of Political Science* 54, no. 2 (April 2010): 459–76. <https://doi.org/10.1111/j.1540-5907.2010.00441.x>.
- Cooper, Christopher A., H. Gibbs Knotts, and Kathleen M. Brennan. “The Importance of Trust in Government for Public Administration: The Case of Zoning.” *Public Administration Review* 68, no. 3 (2008): 459–68. <https://www.jstor.org/stable/25145624>.
- Cottrill, Caitlin D., and Piyushimita “Vonu” Thakuria. “Location Privacy Preferences: A Survey-Based Analysis of Consumer Awareness, Trade-off and Decision-Making.” *Transportation Research Part C: Emerging Technologies* 56 (July 2015): 132–48. <https://doi.org/10.1016/j.trc.2015.04.005>.
- Credit Division of Zhejiang Provincial Development and Reform Commission. “我省积极推进长三角信用一体化建设 (Our Province Actively Promotes the Construction of Credit Integration in the Yangtze River Delta).” Accessed February 3, 2024. https://fzggw.zj.gov.cn/art/2019/5/27/art_1621003_35396559.html.
- Credit Nanjing. “《长三角地区深化推进国家社会信用体系建设区域合作示范区建设行动方案（2018-2020年）》 (‘Action Plan for Deepening and Promoting the Construction of a Regional Cooperation Demonstration Zone for the Construction of a National Social

- Credit System in the Yangtze River Delta Region (2018-2020)’.” Accessed February 3, 2024. http://njcredit.nanjing.gov.cn/zcfg/wsfq/201807/t20180705_2073154.html.
- Creemers, Rogier. “China’s Social Credit System: An Evolving Practice of Control.” *SSRN Electronic Journal*, 2018. <https://doi.org/10.2139/ssrn.3175792>.
- . “Cyber China: Upgrading Propaganda, Public Opinion Work and Social Management for the Twenty-First Century.” *Journal of Contemporary China* 26, no. 103 (January 2, 2017): 85–100. <https://doi.org/10.1080/10670564.2016.1206281>.
- Croissant, Aurel. *Comparing Autocracies in the Early Twenty-First Century*. Democratization Special Issues. London; New York: Routledge, 2014.
- Culnan, Mary J., and Pamela K. Armstrong. “Information Privacy Concerns, Procedural Fairness, and Impersonal Trust: An Empirical Investigation.” *Organization Science* 10, no. 1 (February 1999): 104–15. <https://doi.org/10.1287/orsc.10.1.104>.
- Cyber Policy. “Honest Shanghai: The App the Chinese Government Uses to Track ‘Honest’ Citizens.” Accessed March 11, 2024. <https://www.cyberpolicy.com/cybersecurity-education/honest-shanghai-the-app-the-chinese-government-uses-to-track-honest-citizens>.
- Dahl, Robert A. *Democracy and Its Critics*. New Haven: Yale University Press, 1989.
- Dai, Xin. “Toward a Reputation State: The Social Credit System Project of China.” *SSRN Electronic Journal*, 2018. <https://doi.org/10.2139/ssrn.3193577>.
- Dale, Gareth. “China’s ‘White Paper’ Protest Movement Echoes Freedom Struggles across Asia and the World.” *The Conversation*, November 2022.
- Davenport, Christian. *State Repression and the Domestic Democratic Peace*. 1st ed. Cambridge University Press, 2007. <https://doi.org/10.1017/CBO9780511510021>.
- Davidson, Helen. “China Covid Protests Explained: Why Are People Demonstrating and What Will Happen Next?” *The Guardian*, November 28, 2022, sec. World news. <https://www.theguardian.com/world/2022/nov/28/china-protests-explained-why-are-people-demonstrating-blank-piece-white-paper-a4-what-will-happen-next-zero-covid-policy-protest>.
- . “Outcry in Shanghai as Person Declared Dead and Put in Body Bag Found to Be Alive.” *The Guardian*, May 3, 2022, sec. World news. <https://www.theguardian.com/world/2022/may/03/outcry-in-shanghai-as-person-declared-dead-and-put-in-body-bag-found-to-be-alive>.

- . “Xi Jinping Attacks ‘Doubters’ as He Doubles down on China’s Zero-Covid Policy.” *The Guardian*, May 6, 2022, sec. World news. <https://www.theguardian.com/world/2022/may/06/xi-jinping-attacks-doubters-as-he-doubles-down-on-chinas-zero-covid-policy>.
- Davidson, Helen, and Verna Yu. “Anti-Lockdown Protests Spread in China as Anger Rises over Zero-Covid Strategy.” *The Guardian*, November 27, 2022, sec. World news. <https://www.theguardian.com/world/2022/nov/27/anti-lockdown-protests-spread-across-china-amid-growing-anger-at-zero-covid-strategy>.
- . “Clashes in Shanghai as Protests over Zero-Covid Policy Grip China.” *The Guardian*, November 28, 2022, sec. World news. <https://www.theguardian.com/world/2022/nov/28/clashes-in-shanghai-as-protests-over-zero-covid-policy-grip-china>.
- Davis, Darren W., and Brian D. Silver. “Civil Liberties vs. Security: Public Opinion in the Context of the Terrorist Attacks on America.” *American Journal of Political Science* 48, no. 1 (January 2004): 28–46. <https://doi.org/10.1111/j.0092-5853.2004.00054.x>.
- Davis, Fred D. “Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology.” *MIS Quarterly* 13, no. 3 (September 1989): 319. <https://doi.org/10.2307/249008>.
- Dawes, Sharon S. “The Evolution and Continuing Challenges of E-Governance.” *Public Administration Review* 68 (2008): S86–102. <https://www.jstor.org/stable/25145732>.
- De Vries, Hanna, Victor Bekkers, and Lars Tummars. “INNOVATION IN THE PUBLIC SECTOR: A SYSTEMATIC REVIEW AND FUTURE RESEARCH AGENDA.” *Public Administration* 94, no. 1 (March 2016): 146–66. <https://doi.org/10.1111/padm.12209>.
- Delhey, Jan, and Kenneth Newton. “Predicting Cross-National Levels of Social Trust: Global Pattern or Nordic Exceptionalism?” *European Sociological Review* 21, no. 4 (September 1, 2005): 311–27. <https://doi.org/10.1093/esr/jci022>.
- Delhey, Jan, Kenneth Newton, and Christian Welzel. “How General Is Trust in ‘Most People’? Solving the Radius of Trust Problem.” *American Sociological Review* 76, no. 5 (October 2011): 786–807. <https://doi.org/10.1177/0003122411420817>.
- Deloitte China. “The China Personal Information Protection Law (PIPL).” Accessed March 10, 2024. <https://www2.deloitte.com/cn/en/pages/risk/articles/personal-information-protection-law.html>.

- Deng, Jun, and Craig A. Smith. "The Rise of New Confucianism and the Return of Spirituality to Politics in Mainland China." *China Information* 32, no. 2 (July 2018): 294–314. <https://doi.org/10.1177/0920203X18764041>.
- Department of Public Technical Service. "【全国信用信息共享平台项目（二期）（国家信息中心建设部分）顺利通过竣工验收】-国家发展和改革委员会（The National Credit Information Sharing Platform Project (Phase II) (National Information Center Construction Part) Successfully Passed the Completion Acceptance)." Accessed March 11, 2024. https://www.ndrc.gov.cn/wsdwhfz/202101/t20210112_1264809.html.
- Diamond, Larry. "Liberation Technology." *Journal of Democracy* 21, no. 3 (July 2010): 69–83. <https://doi.org/10.1353/jod.0.0190>.
- . *The Spirit of Democracy: The Struggle to Build Free Societies throughout the World*. 1. Holt paperbacks ed. New York/N. Y: Holt Paperbacks, 2009.
- Dinev, Tamara, and Paul Hart. "An Extended Privacy Calculus Model for E-Commerce Transactions." *Information Systems Research* 17, no. 1 (March 2006): 61–80. <https://doi.org/10.1287/isre.1060.0080>.
- Dong, Bin, and Benno Torgler. "Causes of Corruption: Evidence from China." *China Economic Review* 26 (September 2013): 152–69. <https://doi.org/10.1016/j.chieco.2012.09.005>.
- Dong, Joy. "A Chinese City May Have Used a Covid App to Block Protesters, Drawing an Outcry." *The New York Times*, June 16, 2022, sec. Business. <https://www.nytimes.com/2022/06/16/business/china-code-protesters.html>.
- Dourish, Paul, and Ken Anderson. "Collective Information Practice: Exploring Privacy and Security as Social and Cultural Phenomena." *Human-Computer Interaction* 21, no. 3 (September 1, 2006): 319–42. https://doi.org/10.1207/s15327051hci2103_2.
- Du, Hu. "杭州推行渐变色健康码，涉嫌侵犯市民隐私_疫情 (Hangzhou Implements Gradient Colour Health Code, Suspected of Infringing on Citizens' Privacy)." Accessed March 11, 2024. https://www.sohu.com/a/www.sohu.com/a/397531243_665455.
- Du, Junfeng, Gwendolyn Mayer, Svenja Hummel, Neele Oetjen, Nadine Gronewold, Ali Zafar, and Jobst-Hendrik Schultz. "Mental Health Burden in Different Professions During the Final Stage of the COVID-19 Lockdown in China: Cross-Sectional Survey Study." *Journal of Medical Internet Research* 22, no. 12 (December 2, 2020): e24240. <https://doi.org/10.2196/24240>.

- Duan , Siyu. “1651家村镇银行现在怎么样？鲁冀豫数量最多，全国122家为高风险 (How Are the 1,651 Rural Banks Doing Now? Shandong, Hebei and Henan Have the Largest Number, with 122 High-Risk Companies across the Country).” *China Business News*. Accessed January 31, 2024. <https://www.yicai.com/news/101450297.html>.
- Dzandu, Michael D., Buddhi Pathak, and Sergio De Cesare. “Acceptability of the COVID-19 Contact-Tracing App – Does Culture Matter?” *Government Information Quarterly* 39, no. 4 (October 2022): 101750. <https://doi.org/10.1016/j.giq.2022.101750>.
- El-Ebiary, Yousef A.Baker, Samer Bamansoor, Waheeb Abu-Ulbeh, Wan Mohd Amir, Syarilla Iryani A. Saany, and M. Hafiz Yusoff. “A Prognosis of Chinese E-Governance.” *International Journal of Engineering Trends and Technology*, October 25, 2020, 86–89. <https://doi.org/10.14445/22315381/CATI1P215>.
- Elman, Benjamin A. *A Cultural History of Modern Science in China*: Harvard University Press, 2006. <https://doi.org/10.4159/9780674036482>.
- Eltahawy, Mona. “Facebook, YouTube and Twitter are the new tools of protest in the Arab world.” *Revista de Prensa* (blog), August 7, 2010. <https://www.almendron.com/tribuna/facebook-youtube-and-twitter-are-the-new-tools-of-protest-in-the-arab-world/>.
- Encyclopaedia Britannica. “Wuhan | History, Economy & Culture | Britannica,” February 8, 2024. <https://www.britannica.com/place/Wuhan>.
- Engelmann, Severin, Mo Chen, Felix Fischer, Ching-yu Kao, and Jens Grossklags. “Clear Sanctions, Vague Rewards: How China’s Social Credit System Currently Defines ‘Good’ and ‘Bad’ Behavior.” In *Proceedings of the Conference on Fairness, Accountability, and Transparency*, 69–78. Atlanta GA USA: ACM, 2019. <https://doi.org/10.1145/3287560.3287585>.
- Entman, Robert M. “Framing: Toward Clarification of a Fractured Paradigm.” *Journal of Communication* 43, no. 4 (December 1, 1993): 51–58. <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>.
- Erdem, Enwer, Ivan Watson, and Rebecca Wright. “‘I Hold China Accountable’: Uyghur Families Demand Answers over Fire That Triggered Protests.” CNN, December 1, 2022. <https://www.cnn.com/2022/12/01/china/china-protests-urumqi-fire-deaths-covid-dst-intl-hnk/index.html>.

- Esposti, Sara Degli. “When Big Data Meets Dataveillance: The Hidden Side of Analytics.” *Surveillance & Society* 12, no. 2 (May 9, 2014): 209–25. <https://doi.org/10.24908/ss.v12i2.5113>.
- Etzioni, Amitai. *A Comparative Analysis of Complex Organizations: On Power, Involvement, and Their Correlates*. Rev. and Enlarged ed. New York: Macmillan Free Pr, 1975.
- . “A Moderate Communitarian Proposal.” *Political Theory* 24, no. 2 (1996): 155–71. <https://www.jstor.org/stable/192113>.
- . “Communitarianism.” In *The Blackwell Encyclopedia of Sociology*, edited by George Ritzer, 1st ed., 1–8. Wiley, 2016. <https://doi.org/10.1002/9781405165518.wbeos0701>.
- . “Communitarianism Revisited.” *Journal of Political Ideologies* 19, no. 3 (September 2, 2014): 241–60. <https://doi.org/10.1080/13569317.2014.951142>.
- . “The Responsive Community: A Communitarian Perspective.” *American Sociological Review* 61, no. 1 (February 1996): 1. <https://doi.org/10.2307/2096403>.
- Eubanks, Virginia. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. St. Martin’s Press, 2018.
- Fasulo, Filippo, and Paola Morselli. “Dealing With an Autocratic China.” *ISPI* (blog). Accessed March 3, 2024. <https://www.ispionline.it/en/publication/dealing-autocratic-china-36594>.
- Favaretto, Maddalena, Eva De Clercq, Christophe Olivier Schneble, and Bernice Simone Elger. “What Is Your Definition of Big Data? Researchers’ Understanding of the Phenomenon of the Decade.” Edited by Florian Fischer. *PLOS ONE* 15, no. 2 (February 25, 2020): e0228987. <https://doi.org/10.1371/journal.pone.0228987>.
- Feenberg, Andrew. “Subversive Rationalization: Technology, Power, and Democracy.” *Inquiry* 35, no. 3–4 (September 1992): 301–22. <https://doi.org/10.1080/00201749208602296>.
- Feng, Coco. “China Launches Coronavirus ‘Close Contact Detector’ Platform.” *South China Morning Post*, February 12, 2020. <https://www.scmp.com/tech/apps-social/article/3050054/china-launches-coronavirus-close-contact-detector-effort-reassure>.
- Feng, Yang. “The Future of China’s Personal Data Protection Law: Challenges and Prospects.” *Asia Pacific Law Review* 27, no. 1 (January 2, 2019): 62–82. <https://doi.org/10.1080/10192557.2019.1646015>.

- Ferretti, Luca, Chris Wymant, Michelle Kendall, Lele Zhao, Anel Nurtay, Lucie Abeler-Dörner, Michael Parker, David Bonsall, and Christophe Fraser. “Quantifying SARS-CoV-2 Transmission Suggests Epidemic Control with Digital Contact Tracing.” *Science* 368, no. 6491 (May 8, 2020): eabb6936. <https://doi.org/10.1126/science.abb6936>.
- Finder, Susan. “Supreme People’s Court & 43 Other Central Institutions Commit to Punishing Judgment Debtors.” *Supreme People’s Court Monitor* (blog), April 27, 2016. <https://supremepeoplescourtmonitor.com/2016/04/27/supreme-peoples-court-43-other-central-institutions-commit-to-punishing-judgment-debtors/>.
- FitzGerald, James, and Sophie Williams. “China Xinjiang: Urumqi Rocked by Covid Lockdown Protests after Deadly Fire,” November 26, 2022. <https://www.bbc.com/news/world-asia-china-63766125>.
- Fox, Russell Arben. “Confucian and Communitarian Responses to Liberal Democracy.” *The Review of Politics* 59, no. 3 (1997): 561–92. <https://doi.org/10.1017/S0034670500027728>.
- France 24. “Corruption Scandal Deals New Blow to Xi’s Chinese Football Dream,” February 17, 2023. <https://www.france24.com/en/live-news/20230217-corruption-scandal-deals-new-blow-to-xi-s-chinese-football-dream>.
- Frantz, Erica. “Autocracy.” In *Oxford Research Encyclopedia of Politics*, by Erica Frantz. Oxford University Press, 2016. <https://doi.org/10.1093/acrefore/9780190228637.013.3>.
- French, Howard W. “Shenzhen’s Public Humiliation of Sex Workers Provokes a Backlash - Asia - Pacific - International Herald Tribune.” *The New York Times*, December 8, 2006, sec. World. <https://www.nytimes.com/2006/12/08/world/asia/08iht-shenzhen.3830259.html>.
- Friend, Celeste. “Social Contract Theory | Internet Encyclopedia of Philosophy.” Accessed March 10, 2024. <https://iep.utm.edu/soc-cont/>.
- Fu, Zhengyuan. *Autocratic Tradition and Chinese Politics*. Cambridge [England] ; New York: Cambridge University Press, 1993.
- Fukuyama, Francis. “Reflections on Chinese Governance.” *Journal of Chinese Governance* 1, no. 3 (July 2, 2016): 379–91. <https://doi.org/10.1080/23812346.2016.1212522>.
- . *Trust: The Social Virtues and the Creation of Prosperity*. 1. Free Press paperback ed. A Free Press Paperbacks Book. New York: Free Press, 1996.

- . “What Is Governance?” *Governance* 26, no. 3 (July 2013): 347–68. <https://doi.org/10.1111/gove.12035>.
- Gan, Nectar. “The Complex Reality of China’s Social Credit System: Hi-Tech Dystopian Plot or Low-Key Incentive Scheme?” *South China Morning Post*, February 7, 2019. <https://www.scmp.com/news/china/politics/article/2185303/hi-tech-dystopia-or-low-key-incentive-scheme-complex-reality>.
- Gardner, Daniel K., ed. *The Four Books: The Basic Teachings of the Later Confucian Tradition*. Indianapolis: Hackett Pub. Company, 2007.
- General Administration of Customs. “《海关总署关于调整健康申报有关要求的公告》解读_政策解读_中国政府网 (Interpretation of ‘Announcement of the General Administration of Customs on Adjusting Requirements for Health Declaration’).” Accessed February 10, 2024. https://www.gov.cn/zhengce/202309/content_6901728.htm.
- General Office of the People’s Government of Fujian Province. “福建省人民政府办公厅关于印发2020年数字福建工作要点的通知_网络信息_福州市鼓楼区政府 (Notice from the General Office of the Fujian Provincial People’s Government on Issuing the Key Points of Digital Fujian Work in 2020).” Accessed February 11, 2024. https://www.gl.gov.cn/xjwz/ztl/hqzc/sszc/wlxx/202011/t20201110_3622139.htm.
- Germanò, Marco André, Ava Liu, Jacob Skebba, and Bulelani Jili. “Digital Surveillance Trends and Chinese Influence in Light of the COVID-19 Pandemic.” *Asian Journal of Comparative Law* 18, no. 1 (April 2023): 91–115. <https://doi.org/10.1017/asjcl.2022.31>.
- Gigler, Christina. “China’s Social Credit System in the Light of Covid-19.” Accessed February 6, 2024. <https://www.roedl.com/insights/covid-19/coronavirus-china-social-credit-system>.
- Global Times. “关于部分村镇银行储户被赋红码问题调查问责情况的通报 (Notice on the Investigation and Accountability Situation of the Issue of Red Codes Assigned to Some Village Bank Depositors).” Accessed January 31, 2024. https://passport.weibo.com/visitor/visitor?entry=miniblog&a=enter&url=https%3A%2F%2Fweibo.com%2F1974576991%2FLyUZJoEdJ%3Fprefer_flag%3D1001030103_&domain=weibo.com&ua=Mozilla%2F5.0%20%28Macintosh%3B%20Intel%20Mac%20OS%20X%2010_15_7%29%20AppleWebKit%2F537.36%20%28KHTML%2C%20like

%20Gecko%29%20Chrome%2F120.0.0.0%20Safari%2F537.36&_rand=1706722241844&sudaref=.

Golden Sheep Net - Yangcheng Evening News. “广东佛山称小悦悦事件发生后曾在网上引导舆论 ((Foshan, Guangdong, said it had guided public opinion online after the Little Yueyue incident)).” 环球网. Accessed March 11, 2024. <https://www.huanqiu.com/article/9CaKrnJuHCj>.

Gore, Lance. “Heritage, CCP Traditions & Liberalism: Three Fundamentals of China’s New Social Contract, Politics News - ThinkChina,” December 28, 2020. <https://www.thinkchina.sg>.

Graham-Harrison, Emma, and Lily Kuo. “China’s Coronavirus Lockdown Strategy: Brutal but Effective.” *The Guardian*, March 19, 2020, sec. World news. <https://www.theguardian.com/world/2020/mar/19/chinas-coronavirus-lockdown-strategy-brutal-but-effective>.

Grigalashvili, Vepkhvia. “E-Government and E-Governance: Various or Multifarious Concepts.” *International Journal of Scientific and Management Research* 05, no. 01 (2022): 183–96. <https://doi.org/10.37502/IJSMR.2022.5111>.

Gu, Edward, and Lantian Li. “Crippled Community Governance and Suppressed Scientific/Professional Communities: A Critical Assessment of Failed Early Warning for the COVID-19 Outbreak in China.” *Journal of Chinese Governance* 5, no. 2 (April 2, 2020): 160–77. <https://doi.org/10.1080/23812346.2020.1740468>.

Guan, Ting, Lan Xue, and Jing Zhao. “技术赋能的治理创新：基于中国环境领域的实践案例 (Technology-Enabled Governance Innovation: An Empirical Study of China’s Environmental Action).” *China Public Administration*, no. 4 (2019): 58–65. <https://doi.org/10.19735/j.issn.1006-0863.2019.04.07>.

Guangming Daily. “山东荣成：让信用成为城市 ‘金字招牌’-新华网 (Shandong Rongcheng: Let Credit Become the City’s ‘Golden Sign’).” Accessed March 11, 2024. http://www.xinhuanet.com/politics/2018-09/27/c_1123488320.htm.

Gui, Lili. “Media Framing of Fighting COVID-19 in China.” *Sociology of Health & Illness* 43, no. 4 (May 2021): 966–70. <https://doi.org/10.1111/1467-9566.13271>.

Guo, Hai. “Human Security and the Party-State-Society Triangle: Rethinking the CCP’s Legitimacy Management in COVID-19.” In *Human Security in China*, edited by Chi

- Zhang, 47–75. Singapore: Springer Singapore, 2022. https://doi.org/10.1007/978-981-16-4675-1_3.
- Guriev, Sergei, and Daniel Treisman. “The Popularity of Authoritarian Leaders: A Cross-National Investigation.” *World Politics* 72, no. 4 (October 2020): 601–38. <https://doi.org/10.1017/S0043887120000167>.
- Gutmann, Amy. “Communitarian Critics of Liberalism.” Edited by Michael Sandel, Alasdair MacIntyre, Benjamin Barber, Charles Taylor, Akis Kontos, Amartya Sen, Bernard Williams, Roberto Mangabeira Unger, and Michael Walzer. *Philosophy & Public Affairs* 14, no. 3 (1985): 308–22. <https://www.jstor.org/stable/2265353>.
- Haasbroek, Michiel. “Coronavirus Crisis Impacts China’s Credit System.” *Merics*, July 10, 2020. <https://merics.org/en/comment/coronavirus-crisis-impacts-chinas-credit-system>.
- Habermas, Jürgen. “How Is Legitimacy Made Possible via Legality?” *Revus*, no. 50 (June 5, 2023). <https://doi.org/10.4000/revus.9668>.
- Habich-Sobiegalla, Sabrina, and Kostka Genia. “Covid-19 Contact Tracing Apps: Why They Are so Popular in China | Merics,” March 5, 2021. <https://merics.org/en/comment/covid-19-contact-tracing-apps-why-they-are-so-popular-china>.
- Habich-Sobiegalla, Sabrina, and Genia Kostka. “Sharing Is Caring: Willingness to Share Personal Data through Contact Tracing Apps in China, Germany, and the US.” *Information, Communication & Society* 26, no. 14 (October 26, 2023): 2797–2824. <https://doi.org/10.1080/1369118X.2022.2113421>.
- Hacklin, Fredrik, Vicente Raurich, and Christian Marxt. “IMPLICATIONS OF TECHNOLOGICAL CONVERGENCE ON INNOVATION TRAJECTORIES: THE CASE OF ICT INDUSTRY.” *International Journal of Innovation and Technology Management* 02, no. 03 (September 2005): 313–30. <https://doi.org/10.1142/S0219877005000526>.
- Haggard, Stephan, and Robert R. Kaufman. “Democratization During the Third Wave.” *Annual Review of Political Science* 19, no. 1 (May 11, 2016): 125–44. <https://doi.org/10.1146/annurev-polisci-042114-015137>.
- Hall, Casey, Josh Horwitz, and Martin Quin Pollard. “Clashes in Shanghai as COVID Protests Flare across China.” *Reuters*, November 27, 2022, sec. China. <https://www.reuters.com/world/china/shanghai-hit-by-covid-protests-anger-spreads-across-china-2022-11-27/>.

- Hangzhou Municipal People's Government. "杭州市人民政府门户网站 市政府专题会议 (Municipal Government Special Meeting)." Accessed March 11, 2024. <https://www.hangzhou.gov.cn/col/col1229137259/index.html?uid=6798241&pageNum=8>.
- Hanisch, Marvin, Curtis M. Goldsby, Nicolai E. Fabian, and Jana Oehmichen. "Digital Governance: A Conceptual Framework and Research Agenda." *Journal of Business Research* 162 (July 2023): 113777. <https://doi.org/10.1016/j.jbusres.2023.113777>.
- Hanser, Amy. "Uncertainty and the Problem of Value: Consumers, Culture and Inequality in Urban China." *Journal of Consumer Culture* 10, no. 3 (November 2010): 307–32. <https://doi.org/10.1177/1469540510376906>.
- Hanser, Amy, and Jialin Camille Li. "Opting Out? Gated Consumption, Infant Formula and China's Affluent Urban Consumers." *The China Journal* 74 (July 2015): 110–28. <https://doi.org/10.1086/681662>.
- Hao, Karen. "Inside China's Unexpected Quest to Protect Data Privacy." MIT Technology Review. Accessed February 20, 2024. <https://www.technologyreview.com/2020/08/19/1006441/china-data-privacy-hong-yanqing-gdpr/>.
- Hargittai, Eszter, and Elissa Redmiles. "Will Americans Be Willing to Install COVID-19 Tracking Apps?" Scientific American Blog Network. Accessed February 25, 2024. <https://blogs.scientificamerican.com/observations/will-americans-be-willing-to-install-covid-19-tracking-apps/>.
- Harper, Craig A., Liam P. Satchell, Dean Fido, and Robert D. Latzman. "Functional Fear Predicts Public Health Compliance in the COVID-19 Pandemic." *International Journal of Mental Health and Addiction* 19, no. 5 (October 2021): 1875–88. <https://doi.org/10.1007/s11469-020-00281-5>.
- Hashem, Ibrahim Abaker Targio, Victor Chang, Nor Badrul Anuar, Kayode Adewole, Ibrar Yaqoob, Abdullah Gani, Ejaz Ahmed, and Haruna Chiroma. "The Role of Big Data in Smart City." *International Journal of Information Management* 36, no. 5 (October 2016): 748–58. <https://doi.org/10.1016/j.ijinfomgt.2016.05.002>.
- Hatton, Celia. "China's Internet Vigilantes and the 'Human Flesh Search Engine.'" *BBC News*, January 28, 2014, sec. Magazine. <https://www.bbc.com/news/magazine-25913472>.

- He, Alex, and Robert Fay. “Digital Governance in China: Data, AI and Emerging Technologies, and Digital Trade.” Centre for International Governance Innovation, 2022.
- He, Alex Jingwei, Yuda Shi, and Hongdou Liu. “Crisis Governance, Chinese Style: Distinctive Features of China’s Response to the Covid-19 Pandemic.” *Policy Design and Practice* 3, no. 3 (July 2, 2020): 242–58. <https://doi.org/10.1080/25741292.2020.1799911>.
- Heeks, Richard. “Understanding E-Governance for Development.” *SSRN Electronic Journal*, 2001. <https://doi.org/10.2139/ssrn.3540058>.
- Hegarty, Stephanie. “The Chinese Doctor Who Tried to Warn Others about Coronavirus,” February 4, 2020. <https://www.bbc.com/news/world-asia-china-51364382>.
- Heilmann, Sebastian, and Elizabeth J. Perry. “Embracing Uncertainty: Guerrilla Policy Style and Adaptive Governance in China.” In *Mao’s Invisible Hand*, edited by Sebastian Heilmann and Elizabeth J. Perry, 1–29. Harvard University Asia Center, 2011. https://doi.org/10.1163/9781684171163_002.
- Henan Provincial Department of Transportation. “河南省交通运输厅关于加强实名公交卡与健康码信息整合的通知 (Notice from the Henan Provincial Department of Transportation on Strengthening the Integration of Real-Name Bus Cards and Health Code Information).” Accessed February 11, 2024. <https://ncp.pkulaw.com/epidemiclar/4ee53bf54107e21fced279634c2c3b26bdfb.html>.
- Hirschberger, Gilad. “Collective Trauma and the Social Construction of Meaning.” *Frontiers in Psychology* 9 (August 10, 2018): 1441. <https://doi.org/10.3389/fpsyg.2018.01441>.
- Ho, Selina. *Thirsty Cities: Social Contracts and Public Goods Provision in China and India*. 1st ed. Cambridge University Press, 2019. <https://doi.org/10.1017/9781108580373>.
- Hobbes, Thomas, and Christopher Brooke. *Leviathan*. Penguin Classics. Harmondsworth, Meddlessex: Penguin Books, 2017.
- Hoffmann, Christian Pieter, Christoph Lutz, and Giulia Ranzini. “Privacy Cynicism: A New Approach to the Privacy Paradox.” *SSRN Electronic Journal*, 2016. <https://doi.org/10.2139/ssrn.3319830>.
- Howard, Mark. “E-Government Across the Globe: How Will ‘e’ Change Government. - Free Online Library.” *Government Finance Review*, August 1, 2001. <https://www.thefreelibrary.com/e-Government+Across+the+Globe%3A+How+Will+%22e%22+Change+Government.-a078902832>.

- Howell, O'Neill, Tate Ryan-Mosley, and Bobbie Johnson. "A Flood of Coronavirus Apps Are Tracking Us. Now It's Time to Keep Track of Them." MIT Technology Review. Accessed February 25, 2024. <https://www.technologyreview.com/2020/05/07/1000961/launching-mittr-covid-tracing-tracker/>.
- Hu Xijin. "国家最近对互联网行业的一系列治理行动，不应被误读 (Hu Xijin: The Country's Recent Series of Governance Actions on the Internet Industry Should Not Be Misunderstood)," July 10, 2021. <https://finance.sina.cn/tech/2021-07-09/detail-ikqcfnc5953378.d.html>.
- Huang, Haifeng. "Personal Character or Social Expectation: A Formal Analysis of 'Suzhi' in China." *Journal of Contemporary China* 25, no. 102 (November 2016): 908–22. <https://doi.org/10.1080/10670564.2016.1186363>.
- Huang, Haifeng, Serra Boranbay-Akan, and Ling Huang. "Media, Protest Diffusion, and Authoritarian Resilience." *Political Science Research and Methods* 7, no. 1 (January 2019): 23–42. <https://doi.org/10.1017/psrm.2016.25>.
- Huang, Joyce. "China's Virus Tracking Technology Sparks Privacy Concerns." Voice of America, June 22, 2020. https://www.voanews.com/a/covid-19-pandemic_chinas-virus-tracking-technology-sparks-privacy-concerns/6191538.html.
- Huang, Qixuan. "地缘政治的复兴与大国间的技术竞争 (The Revival of Geopolitics and Technological Competition among Great Powers)." *The Journal of International Studies*, no. 6 (2023): 54–75.
- Huang, S. "对话 | 段勇：如火如荼的博物馆数字化建设，还需兼顾老者_艺术评论_澎湃新闻 (Dialogue | Duan Yong: The Digital Construction of Museums Is in Full Swing, but We Still Need to Take Care of the Elderly)." Accessed February 1, 2024. https://m.thepaper.cn/kuaibao_detail.jsp?contid=8038420&from=kuaibao.
- Huang, Yanzhong. "The 2008 Milk Scandal Revisited." Forbes. Accessed March 11, 2024. <https://www.forbes.com/sites/yanzhonghuang/2014/07/16/the-2008-milk-scandal-revisited/>.
- Huang, Yasheng. "Opinion | Xi Broke the Social Contract That Helped China Prosper." *The New York Times*, December 1, 2022, sec. Opinion. <https://www.nytimes.com/2022/12/01/opinion/china-covid-protests.html>.

- Huddy, Leonie, Stanley Feldman, Theresa Capelos, and Colin Provost. "The Consequences of Terrorism: Disentangling the Effects of Personal and National Threat." *Political Psychology* 23, no. 3 (2002): 485–509. <https://www.jstor.org/stable/3792589>.
- Human Rights Watch. "China's Chilling 'Social Credit' Blacklist | Human Rights Watch," December 12, 2017. <https://www.hrw.org/news/2017/12/12/chinas-chilling-social-credit-blacklist>.
- Hung, Ho-fung. *Protest with Chinese Characteristics: Demonstrations, Riots, and Petitions in the Mid-Qing Dynasty*. New York: Columbia University Press, 2011.
- Huntington, Samuel P. *The Third Wave: Democratization in the Late Twentieth Century*. Nachdr. The Julian J. Rothbaum Distinguished Lecture Series, Vol. 4. Norman, Okla.: Univ. of Oklahoma Press, 1993.
- Hutchison, Marc L, and Ping Xu. "Trust in China? The Impact of Development, Inequality, and Openness on Political Trust across China's Provinces, 2001–2012." *Asian Journal of Comparative Politics* 2, no. 2 (June 2017): 176–95. <https://doi.org/10.1177/2057891116676409>.
- Idzi, Francis M., and Ricardo Corrêa Gomes. "Digital Governance: Government Strategies That Impact Public Services." *Global Public Policy and Governance* 2, no. 4 (December 2022): 427–52. <https://doi.org/10.1007/s43508-022-00055-w>.
- Impiombato, Daria. "Examining Chinese Citizens' Views on State Surveillance." *The Strategist*, October 11, 2023. <https://www.aspistrategist.org.au/examining-chinese-citizens-views-on-state-surveillance/>.
- Inner Mongolia Autonomous Region Novel Coronavirus Pneumonia Epidemic Prevention and Control Headquarters. "内蒙古自治区新型冠状病毒感染肺炎防控工作指挥部医疗防控组关于印发以医联体为载体做好新冠肺炎分级诊疗工作实施方案的通知 (Notice from the Medical Prevention and Control Team of the Inner Mongolia Autonomous Region New Coronavirus Infection Pneumonia Prevention and Control Headquarters on Issuing an Implementation Plan for Hierarchical Diagnosis and Treatment of New Coronavirus Pneumonia Using the Medical Consortium as a Carrier)." Accessed February 11, 2024. <https://ncp.pkulaw.com/epidemiclar/1a141702161261d4f71069c581dbe266bdfb.html>.
- Intelligence Online. "CHINA: Xi Jinping Invites Foreign Experts into Closed-Door Meetings on China's Challenges - 24/01/2023," January 24, 2023.

<https://www.intelligenceonline.com/government-intelligence/2023/01/24/xi-jinping-invites-foreign-experts-into-closed-door-meetings-on-china-s-challenges,109905846-art>.

Isachenkov, Vladimir, and Kim Tong-hyung. “Xi Awarded 3rd Term as China’s President, Extending Rule.” AP News, March 10, 2023. <https://apnews.com/article/xi-jinping-china-president-vote-5e6230d8c881dc17b11a781e832accd1>.

ISPI. “The Great Escape: How China’s Zero-Covid Boosted Emigration.” Accessed February 9, 2024. <https://www.ispionline.it/en/publication/the-great-escape-how-chinas-zero-covid-boosted-emigration-119317>.

Jakovljevic, Mihajlo, Hanyu Chang, Jay Pan, Chao Guo, Jin Hui, Hao Hu, Danko Grujic, Zhong Li, and Lizheng Shi. “Successes and Challenges of China’s Health Care Reform: A Four-Decade Perspective Spanning 1985—2023.” *Cost Effectiveness and Resource Allocation* 21, no. 1 (August 30, 2023): 59. <https://doi.org/10.1186/s12962-023-00461-9>.

Janoski, Thomas. “Citizenship in China: A Comparison of Rights with the East and West.” *Journal of Chinese Political Science* 19, no. 4 (December 2014): 365–85. <https://doi.org/10.1007/s11366-014-9303-5>.

Jao, Nicole. “Virus Tracking Apps Aren’t Helping Fight Panic · TechNode.” TechNode, February 26, 2020. <http://technode.com/2020/02/26/virus-tracking-apps-arent-helping-fight-panic/>.

Jasanoff, Sheila, and Sang-Hyun Kim. *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. University of Chicago Press, 2015. <https://doi.org/10.7208/chicago/9780226276663.001.0001>.

———. “Sociotechnical Imaginaries and National Energy Policies.” *Science as Culture* 22, no. 2 (June 2013): 189–96. <https://doi.org/10.1080/09505431.2013.786990>.

Jay Chen, Chih-Jou. “A Protest Society Evaluated: Popular Protests in China, 2000–2019.” *Mobilization: An International Quarterly* 25, no. SI (September 1, 2020): 641–60. <https://doi.org/10.17813/1086-671X-25-5-641>.

Jiang, Jue. “A Question of Human Rights or Human Left? – The ‘People’s War against COVID-19’ under the ‘Gridded Management’ System in China.” *Journal of Contemporary China* 31, no. 136 (July 4, 2022): 491–504. <https://doi.org/10.1080/10670564.2021.1985827>.

- Jiangsu Provincial Development and Reform Commission Office. “江苏省发展改革委关于应对新冠肺炎疫情影响切实加强信用管理和服务工作的通知-无锡市发展和改革委员会 (Notice of the Jiangsu Provincial Development and Reform Commission on Effectively Strengthening Credit Management and Services in Response to the Impact of the COVID-19 Epidemic).” Accessed February 6, 2024. <https://dpc.wuxi.gov.cn/doc/2020/02/20/2784745.shtml>.
- Jiangxi Provincial Development and Reform Commission. “【江西省发展改革委全力以赴做好生活必需品保供稳价、重点防疫物资调配和稳定经济增长工作】-国家发展和改革委员会 (The Jiangxi Provincial Development and Reform Commission Has Gone All out to Ensure the Supply and Price of Daily Necessities, Allocate Key Epidemic Prevention Materials, and Stabilize Economic Growth).” Accessed February 6, 2024. https://www.ndrc.gov.cn/xwdt/dt/dfdt/202002/t20200213_1220410.html.
- Joint Prevention and Control Mechanism of the State Council 国务院联防联控机制印发《关于进一步强化责任落实 做好防治工作的通知》_最新政策_中国政府网 (The Joint Prevention and Control Mechanism of the State Council issued the “Notice on Further Strengthening the Implementation of Responsibilities and Effective Prevention and Control Work”). “国务院联防联控机制印发《关于进一步强化责任落实 做好防治工作的通知》_最新政策_中国政府网 (The Joint Prevention and Control Mechanism of the State Council Issued the ‘Notice on Further Strengthening the Implementation of Responsibilities and Effective Prevention and Control Work’).” Accessed March 11, 2024. https://www.gov.cn/zhengce/2020-02/07/content_5475951.htm.
- Junck, Ryan D., Bradley A. Klein, Akira Kumaki, Ken D. Kumayama, Steve Kwok, Stuart D. Levi, James S. Talbot, Eve-Christie Vermynck, and Siyu Zhang. “China’s New Data Security and Personal Information Protection Laws: What They Mean for Multinational Companies.” Accessed March 10, 2024. <https://www.skadden.com/insights/publications/2021/11/chinas-new-data-security-and-personal-information-protection-laws>.
- Juneau, Carl-Etienne, Anne-Sara Briand, Pablo Collazzo, Uwe Siebert, and Tomas Pueyo. “Effective Contact Tracing for COVID-19: A Systematic Review.” *Global Epidemiology* 5 (December 2023): 100103. <https://doi.org/10.1016/j.gloepi.2023.100103>.

- Juneau, Carl-Etienne, Tomas Pueyo, Matt Bell, Genevieve Gee, Pablo Collazzo, and Louise Potvin. “Lessons from Past Pandemics: A Systematic Review of Evidence-Based, Cost-Effective Interventions to Suppress COVID-19.” *Systematic Reviews* 11, no. 1 (December 2022): 90. <https://doi.org/10.1186/s13643-022-01958-9>.
- Kaldor, Mary. *Human Security: Reflections on Globalization and Intervention*. Cambridge, UK; Malden, MA: Polity, 2007.
- Kaubisch, Lea Teresa, Corinna Reck, Alexandra Von Tettenborn, and Christian Franz Josef Woll. “The COVID-19 Pandemic as a Traumatic Event and the Associated Psychological Impact on Families – A Systematic Review.” *Journal of Affective Disorders* 319 (December 2022): 27–39. <https://doi.org/10.1016/j.jad.2022.08.109>.
- Keane, John, ed. *Civil Society and the State: New European Perspectives*. Repr. London: Univ. of Westminster Press, 1998.
- Keane, Michael. “Great Adaptations: China’s Creative Clusters and the New Social Contract.” *Continuum* 23, no. 2 (April 2009): 221–30. <https://doi.org/10.1080/10304310802691597>.
- Keith, Linda Camp, C. Neal Tate, and Steven C. Poe. “Is The Law a Mere Parchment Barrier to Human Rights Abuse?” *The Journal of Politics* 71, no. 2 (April 2009): 644–60. <https://doi.org/10.1017/S0022381609090513>.
- Keng, Shu, Lingna Zhong, and Fang Xie. “Why Did China’s Zero-COVID Policy Persist? Decision Urgency, Regime Type, and Political Opportunity Structures.” *Journal of Contemporary China* 33, no. 146 (March 3, 2024): 206–22. <https://doi.org/10.1080/10670564.2023.2193143>.
- Kennedy, John James, and Dan Chen. “State Capacity and Cadre Mobilization in China: The Elasticity of Policy Implementation.” *Journal of Contemporary China* 27, no. 111 (May 4, 2018): 393–405. <https://doi.org/10.1080/10670564.2018.1410971>.
- Kennedy, Scott, Logan Wright, John L. Holden, and Claire Reade. “Experts React: China’s Economic Slowdown: Causes and Implications,” August 30, 2023. <https://www.csis.org/analysis/experts-react-chinas-economic-slowdown-causes-and-implications>.
- Khalil, Lydia. “Digital Authoritarianism, China and COVID.” Lowy Institute for International Policy, 2020. <https://www.jstor.org/stable/resrep27665>.
- Khosrow-Pour, Mehdi, ed. *Practicing E-Government: A Global Perspective*. Hershey, PA: Idea Group Pub, 2005.

- Kitchin, Rob. “Civil Liberties *or* Public Health, or Civil Liberties *and* Public Health? Using Surveillance Technologies to Tackle the Spread of COVID-19.” *Space and Polity* 24, no. 3 (September 1, 2020): 362–81. <https://doi.org/10.1080/13562576.2020.1770587>.
- Kizach, Johannes. “Analyzing Likert-Scale Data with Mixed-Effects Linear Models: A Simulation Study.” Poster Presented at Linguistic Evidence, 2014.
- Klinkenberg, Don, Christophe Fraser, and Hans Heesterbeek. “The Effectiveness of Contact Tracing in Emerging Epidemics.” Edited by Wayne Getz. *PLoS ONE* 1, no. 1 (December 20, 2006): e12. <https://doi.org/10.1371/journal.pone.0000012>.
- Kluver, Randolph. “The Architecture of Control: A Chinese Strategy for e-Governance.” *Journal of Public Policy* 25, no. 1 (2005): 75–97. <https://www.jstor.org/stable/4007786>.
- Knight, Adam. “Basket Case: Reform and China’s Social Credit Law.” *China Law and Society Review* 6, no. 2 (March 17, 2023): 181–210. <https://doi.org/10.1163/25427466-06020003>.
- . “Technologies of Risk and Discipline in China’s Social Credit System.” In *Law and the Party in China*, edited by Rogier J. E. H. Creemers and Susan Trevaskes, 1st ed., 237–62. Cambridge University Press, 2020. <https://doi.org/10.1017/9781108864596.011>.
- Knight, Adam, and Rogier Creemers. “Going Viral: The Social Credit System and COVID-19.” *SSRN Electronic Journal*, 2021. <https://doi.org/10.2139/ssrn.3770208>.
- Koetse, Manya. “‘Guarding the Green Horse’ – How China’s Health Code System Provided Solutions and Generated Problems,” October 4, 2022. <https://www.whatsonweibo.com/guarding-the-green-horse-how-chinas-health-code-system-provided-solutions-and-generated-problems/>.
- . “The Curious Case of the Henan Bank Depositors and the Changing Health QR Codes,” June 16, 2022. <https://www.whatsonweibo.com/the-curious-case-of-the-henan-bank-depositors-and-the-changing-health-qr-codes/>.
- Körösényi, András. “Political Leadership: Between Guardianship and Classical Democracy.” In *For the ECPR Workshop on “Political Leadership: A Missing Element in Democratic Theory”*. Helsinki, 2007.
- Kostka, Genia. “China’s Social Credit Systems and Public Opinion: Explaining High Levels of Approval.” *New Media & Society* 21, no. 7 (July 2019): 1–28. <https://doi.org/10.1177/1461444819826402>.

- Kostka, Genia, and Lukas Antoine. "Fostering Model Citizenship: Behavioral Responses to China's Emerging Social Credit Systems." *Policy & Internet* 12, no. 3 (September 2020): 256–89. <https://doi.org/10.1002/poi3.213>.
- Kostka, Genia, and Sabrina Habich-Sobiegalla. "In Times of Crisis: Public Perceptions toward COVID-19 Contact Tracing Apps in China, Germany, and the United States." *New Media & Society*, April 3, 2022, 146144482210832. <https://doi.org/10.1177/14614448221083285>.
- Kostka, Genia, Léa Steinacker, and Miriam Meckel. "Between Security and Convenience: Facial Recognition Technology in the Eyes of Citizens in China, Germany, the United Kingdom, and the United States." *Public Understanding of Science* 30, no. 6 (August 2021): 671–90. <https://doi.org/10.1177/09636625211001555>.
- Krutika , Pathi, and Huizhong Wu. "Police Seize on COVID-19 Tech to Expand Global Surveillance." AP News, December 21, 2022. <https://apnews.com/article/technology-police-government-surveillance-covid-19-3f3f348d176bc7152a8cb2dbab2e4cc4>.
- Krygier, Martin. "The Rule of Law and State Legitimacy." In *Legitimacy*, by Martin Krygier, 106–36. Oxford University Press, 2019. <https://doi.org/10.1093/oso/9780198825265.003.0007>.
- Kuo, Ting-yee, and Kwang-Ching Liu. "Self-Strengthening: The Pursuit of Western Technology." *The Cambridge History of China* 1, no. 10 (1978): 491–542.
- Kuran, Timur. "Now out of Never: The Element of Surprise in the East European Revolution of 1989." *World Politics* 44, no. 1 (October 1991): 7–48. <https://doi.org/10.2307/2010422>.
- Lanzhou News Network. "我市发布‘共筑诚信德润金城’抗击疫情专题诚信‘红黑榜’ (Our City Released a Special Integrity ‘Red and Black List’ on the Topic of ‘Building Integrity, Derun and Golden City Together’ to Fight the Epidemic.)," n.d. https://www.lanzhou.gov.cn/art/2020/3/2/art_122_859032.html.
- Larry Diamond. "Promoting Democracy in Post-Conflict and Failed States Lessons and Challenges." *Taiwan Journal of Democracy* 2, no. 2 (December 1, 2006). <https://doi.org/10.29654/TJD.200612.0005>.
- Laufer, Robert S., and Maxine Wolfe. "Privacy as a Concept and a Social Issue: A Multidimensional Developmental Theory." *Journal of Social Issues* 33, no. 3 (July 1977): 22–42. <https://doi.org/10.1111/j.1540-4560.1977.tb01880.x>.

- Law, Wing-Wah. "Cultivating Chinese Citizens: China's Search for Modernization and National Rejuvenation." In *Re-Envisioning Chinese Education: The Meaning of Person-Making in a New Age*, edited by Guoping Zhao and Zongyi Deng. Education and Society in China. Abingdon, Oxon; New York, NY: Routledge is an imprint of the Taylor & Francis Group, an Informa business, 2016.
- Lee, Claire Seungeun. "Datafication, Dataveillance, and the Social Credit System as China's New Normal." *Online Information Review* 43, no. 6 (October 14, 2019): 952–70. <https://doi.org/10.1108/OIR-08-2018-0231>.
- Lee, Ji-Hwan, and Chi-Hoon Song. "Effects of Trust and Perceived Risk on User Acceptance of a New Technology Service." *Social Behavior and Personality: An International Journal* 41, no. 4 (May 1, 2013): 587–97. <https://doi.org/10.2224/sbp.2013.41.4.587>.
- Lee, Michelle. "Beyond Big Brother: Implications of China's Social Credit System for Global Credit and Governance," 2019. <https://doi.org/10.13140/RG.2.2.15317.86249>.
- Lee, Yunsoo, and Zongfeng Sun. "Managed Transparency: Chinese Government Transparency." *Asian Journal of Comparative Politics*, September 11, 2023, 20578911231199162. <https://doi.org/10.1177/20578911231199162>.
- Lei, Ting, Jiabin Deng, Yubo Xie, and Yibo Tian. "Using Health QR Code to Fight Against COVID-19: Chinese Government's New Way of Collaborative Governance With Enterprises." In *Proceedings of the 2020 International Conference on Management, Economy and Law (ICMEL 2020)*. Zhengzhou, P. R. China: Atlantis Press, 2020. <https://doi.org/10.2991/aebmr.k.201111.034>.
- Levy, Jonathan. *Freaks of Fortune: The Emerging World of Capitalism and Risk in America*. First Harvard University Press paperback edition. Cambridge, Massachusetts, London, England: Harvard University Press, 2014.
- Li, Haili, and Genia Kostka. "Accepting but Not Engaging with It: Digital Participation in Local Government-run Social Credit Systems in China." *Policy & Internet* 14, no. 4 (December 2022): 845–74. <https://doi.org/10.1002/poi3.316>.
- Li, Keqiang. "李克强：建立黑名单制度，让失信者全社会寸步难行_财经上下游_澎湃新闻 (Establish a Blacklist System to Make It Difficult for the Whole Society to Move Forward with Dishonest People)." Accessed March 11, 2024. https://m.thepaper.cn/kuaibao_detail.jsp?contid=2185603&from=kuaibao.

- Li, King King, and Ying-yi Hong. “Confidence in China’s Political System Is Linked to Attitudes Toward Dynamic Zero-COVID Policy.” *SSRN Electronic Journal*, 2022. <https://doi.org/10.2139/ssrn.4294332>.
- Li, Lianjiang. “Reassessing Trust in the Central Government: Evidence from Five National Surveys.” *The China Quarterly* 225 (March 2016): 100–121. <https://doi.org/10.1017/S0305741015001629>.
- Li, Mei. “‘Confucian Revival’ From Both Chinese and Western, Ancient and Modern Perspectives: Observations and Reflections on Post-Millennium Research into Confucianism.” *International Confucian Studies* 1, no. 1 (September 5, 2022): 145–61. <https://doi.org/10.1515/icos-2022-2008>.
- Li, Rongxin. “Minben (民本) as an Alternative to Liberal Democracy.” *The Loop*, September 26, 2022. <https://theloop.ecpr.eu/minben-as-an-alternative-to-liberal-democracy/>.
- Li, Wenjuan. “The Role of Trust and Risk in Citizens’ E-Government Services Adoption: A Perspective of the Extended UTAUT Model.” *Sustainability* 13, no. 14 (July 9, 2021): 7671. <https://doi.org/10.3390/su13147671>.
- Li, Xiaoxiao. “Ant Financial Subsidiary Starts Offering Individual Credit Scores - Caixin Global.” Accessed March 11, 2024. <https://www.caixinglobal.com/2015-03-02/ant-financial-subsidiary-starts-offering-individual-credit-scores-101012655.html>.
- Liang, Fan. “COVID-19 and Health Code: How Digital Platforms Tackle the Pandemic in China.” *Social Media + Society* 6, no. 3 (July 2020): 205630512094765. <https://doi.org/10.1177/2056305120947657>.
- Liang, Fan, Vishnupriya Das, Nadiya Kostyuk, and Muzammil M. Hussain. “Constructing a Data-Driven Society: China’s Social Credit System as a State Surveillance Infrastructure.” *Policy & Internet* 10, no. 4 (December 2018): 415–53. <https://doi.org/10.1002/poi3.183>.
- Lihua, Yang. “Implementation of China’s Rejuvenation through Knowledge.” In *Innovation and Intellectual Property in China*, edited by Ken Shao and Xiaoqing Feng. Edward Elgar Publishing, 2014. <https://doi.org/10.4337/9781781001608.00008>.
- Lin, Delia, and Susan Trevaskes. “Law–Morality Ideology in the Xi Jinping Era.” In *Law and the Party in China*, edited by Rogier J. E. H. Creemers and Susan Trevaskes, 1st ed., 121–48. Cambridge University Press, 2020. <https://doi.org/10.1017/9781108864596.006>.

- Lin, Junyue. “林钧跃：为什么说社会信用体系建设起始于1999年? (Lin Junyue: Why Is It Said That the Construction of the Social Credit System Started in 1999?).” Accessed March 10, 2024. <https://m.credit100.com/xhxy/c/2019-09-09/535610.shtml>.
- Lin, Kai, Ivan Y. Sun, Yuning Wu, and Shan Shen. “Citizen Compliance with Pandemic Rules in China: Exploring the Effects of Emotional States, Peer Influence, and Policing.” *International Criminology* 2, no. 1 (March 2022): 59–69. <https://doi.org/10.1007/s43576-022-00050-5>.
- Linders, Dennis. “From E-Government to We-Government: Defining a Typology for Citizen Coproduction in the Age of Social Media.” *Government Information Quarterly* 29, no. 4 (October 2012): 446–54. <https://doi.org/10.1016/j.giq.2012.06.003>.
- Liu, Chuncheng. “Multiple Social Credit Systems in China.” *SSRN Electronic Journal*, 2019. <https://doi.org/10.2139/ssrn.3423057>.
- . “Who Supports Expanding Surveillance? Exploring Public Opinion of Chinese Social Credit Systems.” *International Sociology* 37, no. 3 (May 2022): 391–412. <https://doi.org/10.1177/02685809221084446>.
- Liu, Chuncheng, and Ross Graham. “Making Sense of Algorithms: Relational Perception of Contact Tracing and Risk Assessment during COVID-19.” *Big Data & Society* 8, no. 1 (January 2021): 205395172199521. <https://doi.org/10.1177/2053951721995218>.
- Liu, Jianan, Robert F. Stambaugh, and Yu Yuan. “Size and Value in China.” *Journal of Financial Economics* 134, no. 1 (October 2019): 48–69. <https://doi.org/10.1016/j.jfineco.2019.03.008>.
- Liu, Jie, Yan Tong, Shaoqiong Li, Zhiqiang Tian, Lu He, and Jianzhong Zheng. “Compliance with COVID-19-Preventive Behaviours among Employees Returning to Work in the Post-Epidemic Period.” *BMC Public Health* 22, no. 1 (February 21, 2022): 369. <https://doi.org/10.1186/s12889-022-12709-9>.
- Liu, Jun, and Hui Zhao. “Privacy Lost: Appropriating Surveillance Technology in China’s Fight against COVID-19.” *Business Horizons* 64, no. 6 (November 2021): 743–56. <https://doi.org/10.1016/j.bushor.2021.07.004>.
- Liu, Xiao. “China’s Hyperactive Debates on Personal Data Protection.” Accessed February 20, 2024. <https://thediplomat.com/2020/12/chinas-hyperactive-debates-on-personal-data-protection/>.

- Liu, Yu, and Richard B. Saltman. "Policy Lessons from Early Reactions to the COVID-19 Virus in China." *American Journal of Public Health* 110, no. 8 (August 2020): 1145–48. <https://doi.org/10.2105/AJPH.2020.305732>.
- Liva, Giovanni, Egidijus Barcevicus, Guonda Cibaite, Cristiano Codagnone, Vaida Gineikyte, Luka Klimaviciute, Loreta Matulevic, Gianluca Misuraca, and Irene Vanini. *Exploring Digital Government Transformation in the EU: Analysis of the State of the Art and Review of Literature*. LU: Publications Office, 2019. <https://data.europa.eu/doi/10.2760/17207>.
- Lorentzen, Peter. "China's Strategic Censorship." *American Journal of Political Science* 58, no. 2 (2014): 402–14. <https://www.jstor.org/stable/24363493>.
- Lorenzo, David. *Conceptions of Chinese Democracy*. Johns Hopkins University Press, 2013. <https://doi.org/10.1353/book.49240>.
- Lowenthal, Richard. "On " Established " Communist Party Regimes." *Studies in Comparative Communism* 7, no. 4 (1974): 335–58. <https://www.jstor.org/stable/45366758>.
- Lu, Jie, and Tianjian Shi. "The Battle of Ideas and Discourses before Democratic Transition: Different Democratic Conceptions in Authoritarian China." *International Political Science Review* 36, no. 1 (January 2015): 20–41. <https://doi.org/10.1177/0192512114551304>.
- Luan, Bingjiang, Hong Zou, and Junbing Huang. "Digital Divide and Household Energy Poverty in China." *Energy Economics* 119 (March 2023): 106543. <https://doi.org/10.1016/j.eneco.2023.106543>.
- Luo, Peixin. "会不会导致失信人被‘游街示众’？会不会搞成道德档案？有关社会信用立法的问答。” Accessed March 10, 2024. <https://www.shobserver.com/wx/detail.do?id=53298>.
- Lupton, Deborah, and Mike Michael. "'Depends on Who's Got the Data': Public Understandings of Personal Digital Dataveillance." *Surveillance & Society* 15, no. 2 (May 8, 2017): 254–68. <https://doi.org/10.24908/ss.v15i2.6332>.
- Lv, Aofei, Ting Luo, and Jane Duckett. "Centralization vs. Decentralization in COVID-19 Responses: Lessons from China." *Journal of Health Politics, Policy and Law* 47, no. 3 (June 1, 2022): 411–27. <https://doi.org/10.1215/03616878-9626908>.
- Lynch, Marc. "After Egypt: The Limits and Promise of Online Challenges to the Authoritarian Arab State." *Perspectives on Politics* 9, no. 2 (2011): 301–10. <https://www.jstor.org/stable/41479654>.

- Lyu, Yao, and John M. Carroll. "Cultural Influences on Chinese Citizens' Adoption of Digital Contact Tracing: A Human Infrastructure Perspective." In *CHI Conference on Human Factors in Computing Systems*, 1–17. New Orleans LA USA: ACM, 2022. <https://doi.org/10.1145/3491102.3517572>.
- Maclean, Sam. "Negotiating the Gap: Communism and Confucianism—What the Struggle Between China's Two Competing Social Philosophies Tells Us About the Country's Future." *Fairbank Center for Chinese Studies* (blog), November 13, 2023. <https://fairbank.fas.harvard.edu/research/blog/negotiating-the-gap-communism-and-confucianism/>.
- Mahdavi-Damghani, Babak. "Data-Driven Models & Mathematical Finance: Apposition or Opposition?" *SSRN Electronic Journal*, 2019. <https://doi.org/10.2139/ssrn.3521933>.
- Marien, Sofie, and Marc Hooghe. "Does Political Trust Matter? An Empirical Investigation into the Relation between Political Trust and Support for Law Compliance: Does Political Trust Matter?" *European Journal of Political Research* 50, no. 2 (March 2011): 267–91. <https://doi.org/10.1111/j.1475-6765.2010.01930.x>.
- Martina, Michael, and David Brunnstrom. "China's Xi Unwilling to Accept Western Vaccines, U.S. Official Says." *Reuters*, December 4, 2022, sec. China. <https://www.reuters.com/world/china/chinas-xi-unwilling-accept-vaccines-despite-threat-protests-us-intel-2022-12-04/>.
- Masur, Philipp K. *Situational Privacy and Self-Disclosure*. Cham: Springer International Publishing, 2019. <https://doi.org/10.1007/978-3-319-78884-5>.
- McAdam, Doug. *Political Process and the Development of Black Insurgency, 1930-1970*. Chicago: University of Chicago Press, 1982.
- McCarthy, John D., and Mayer N. Zald. "Resource Mobilization and Social Movements: A Partial Theory." *American Journal of Sociology* 82, no. 6 (May 1977): 1212–41. <https://doi.org/10.1086/226464>.
- McMorrow , Ryan, and Cheng Leng. "'Digital Handcuffs': China's Covid Health Apps Govern Life but Are Ripe for Abuse." Accessed February 1, 2024. <https://www.ft.com/content/dee6bcc6-3fc5-4edc-814d-46dc73e67c7e>.
- Medhat, Walaa, Ahmed Hassan, and Hoda Korashy. "Sentiment Analysis Algorithms and Applications: A Survey." *Ain Shams Engineering Journal* 5, no. 4 (December 2014): 1093–1113. <https://doi.org/10.1016/j.asej.2014.04.011>.

- Mei, Yi Pao, Roger T. Ames, and Matt Stefon. “Mencius | Chinese Confucianism & Moral Philosophy | Britannica.” Accessed February 23, 2024. <https://www.britannica.com/biography/Mencius-Chinese-philosopher>.
- Meier, Yannic, and Nicole C. Krämer. “The Privacy Calculus Revisited: An Empirical Investigation of Online Privacy Decisions on Between- and Within-Person Levels.” *Communication Research*, July 16, 2022, 009365022211021. <https://doi.org/10.1177/00936502221102101>.
- Meissner, Mirjam. “China’s Social Credit System | Merics,” May 24, 2017. <https://merics.org/en/report/chinas-social-credit-system>.
- Meissner, Mirjam, and Jost Wübbeke. “IT-Backed Authoritarianism: Information Technology Enhances Central Authority and Control Capacity under Xi Jinping.” *Merics*, 2016.
- Mello, Michelle M., and C. Jason Wang. “Ethics and Governance for Digital Disease Surveillance.” *Science* 368, no. 6494 (May 29, 2020): 951–54. <https://doi.org/10.1126/science.abb9045>.
- Memon, Mumtaz Ali, Hiram Ting, Jun-Hwa Cheah, Ramayah Thurasamy, Francis Chuah, and Tat Huei Cham. “Sample Size for Survey Research: Review and Recommendations.” *Journal of Applied Structural Equation Modeling* 4, no. 2 (June 25, 2020): i–xx. [https://doi.org/10.47263/JASEM.4\(2\)01](https://doi.org/10.47263/JASEM.4(2)01).
- Mensurati, Marco. “Coronavirus, le polemiche su Immuni lanciano la app concorrente: boom di download per Sm-Covid-19.” *la Repubblica*, April 21, 2020. https://www.repubblica.it/politica/2020/04/21/news/coronavirus_le_polemiche_su_immuni_lanciano_la_app_concorrente_boom_di_download_per_sm-covid-19-254589755/.
- Mertz, Leslie. “Saving Lives and Money with Smarter Hospitals: Streaming Analytics, Other New Tech Help to Balance Costs and Benefits.” *IEEE Pulse* 5, no. 6 (November 2014): 33–36. <https://doi.org/10.1109/MPUL.2014.2355306>.
- Miao, Michelle. “Coded Social Control: China’s Normalization of Biometric Surveillance in the Post-COVID-19 Era.” SSRN Scholarly Paper. Rochester, NY, July 13, 2023. <https://papers.ssrn.com/abstract=4631578>.
- Miller, Michael K. “Elections, Information, and Policy Responsiveness in Autocratic Regimes.” *Comparative Political Studies* 48, no. 6 (May 2015): 691–727. <https://doi.org/10.1177/0010414014555443>.

- Ministry of Education of the People's Republic of China. "Xi Jinping Calls for Strengthening Basic Research to Solidify Self-Reliance in Science and Technology." Accessed February 23, 2024. http://en.moe.gov.cn/news/media_highlights/202302/t20230224_1047553.html.
- Mitter, Rana, and Elsbeth Johnson. "What the West Gets Wrong About China." *Harvard Business Review*, May 1, 2021. <https://hbr.org/2021/05/what-the-west-gets-wrong-about-china>.
- Mo, Hong'e. "Jilin City Punishes 17 People for Quitting Military Service." Accessed March 11, 2024. <https://www.ecns.cn/cns-wire/2018/03-19/296261.shtml>.
- Monahan, Torin. *Surveillance and Security*. 0 ed. Routledge, 2006. <https://doi.org/10.4324/9780203957257>.
- Morens, David M., Gregory K. Folkers, and Anthony S. Fauci. "What Is a Pandemic?" *The Journal of Infectious Diseases* 200, no. 7 (October 2009): 1018–21. <https://doi.org/10.1086/644537>.
- Morley, Jessica, Josh Cows, Mariarosaria Taddeo, and Luciano Floridi. "Ethical Guidelines for COVID-19 Tracing Apps." *Nature* 582, no. 7810 (June 4, 2020): 29–31. <https://doi.org/10.1038/d41586-020-01578-0>.
- Mozur, Paul, Raymond Zhong, and Aaron Krolik. "In Coronavirus Fight, China Gives Citizens a Color Code, With Red Flags." *The New York Times*, March 2, 2020, sec. Business. <https://www.nytimes.com/2020/03/01/business/china-coronavirus-surveillance.html>.
- Munro, Donald J. *The Concept of Man in Contemporary China*. Michigan Classics in Chinese Studies, no. 3. Ann Arbor, Mich: Center for Chinese Studies, University of Michigan, 2000.
- Na, Chen. "Chinese Premier on National Rejuvenation Through Science, Technology-." Accessed February 23, 2024. https://english.cas.cn/newsroom/archive/china_archive/cn2003/200909/t20090923_40230.shtml.
- Nanjing Credit Office. "关于进一步加强信用管理工作 积极防控新冠肺炎疫情的实施方案_信用苏州 (Implementation Measures for Further Strengthening Credit Management and Actively Preventing and Controlling the COVID-19 Epidemic)." Accessed February 6, 2024. <https://credit.suzhou.gov.cn/news/show/368671.html>.

Nathan, Andrew J. *Chinese Democracy*. 1st pbk. ed. Berkeley: University of California Press, 1986.

National Development and Reform Commission. “**全国首批创建信用体系建设示范城市确定_滚动_新闻_中国政府网** (The First Batch of Demonstration Cities for Establishing Credit System Construction in the Country Have Been Confirmed).” Accessed March 11, 2024. https://www.gov.cn/xinwen/2015-08/11/content_2910920.htm#:~:text=%E5%9B%BD%E5%AE%B6%E5%8F%91%E5%B1%95%E6%94%B9%E9%9D%A9%E5%A7%94%E5%92%8C,%E4%BF%A1%E7%94%A8%E4%BD%93%E7%B3%BB%E5%BB%BA%E8%AE%BE%E7%A4%BA%E8%8C%83%E5%9F%8E%E5%B8%82%E3%80%82.

——. “**【关于加强信用信息共享应用推进融资信用服务平台网络建设的通知】-国家发展和改革委员会** ((The General Office of the National Development and Reform Commission and the General Office of the China Banking and Insurance Regulatory Commission Have Issued a Notice on Strengthening Credit Information Sharing Application Promotes Financing Credit Service Platform Network Construction Notice)).” Accessed March 11, 2024. https://www.ndrc.gov.cn/xwdt/tzgg/202204/t20220408_1321779.html.

——. “**关于对《信用修复管理办法（试行）（征求意见稿）》公开征求意见的公告-法治政府网** ((Announcement on the Public Solicitation of Opinions on the "Credit Repair Management Measures (Trial) (Draft for Comments))).” Accessed March 11, 2024. <http://fzzfyjy.cupl.edu.cn/info/1079/12954.htm>.

——. “**关于进一步规范公共信用信息纳入范围、失信惩戒和信用修复构建诚信建设长效机制的指导意见（征求意见稿）** (Guiding Opinions on Further Regulating the Scope of Inclusions in Public Credit Information, Punishments for Untrustworthiness, and Credit Restoration to Build Long-Term and Effective Mechanisms for Establishing Creditworthiness (Draft for Solicitation of Public Comments)) .” National Development and Reform Commission, July 21, 2020.

——. “**【首批社会信用体系建设示范城市名单公布】-国家发展和改革委员会** (List of First Batch of Demonstration Cities for Social Credit System Construction Announced).” Accessed March 11, 2024. https://www.ndrc.gov.cn/xwdt/xwfb/201801/t20180109_954771.html.

——. “**【首批社会信用体系建设示范城市名单公布】-国家发展和改革委员会** (List of First Batch of Demonstration Cities for Social Credit System Construction Announced).” Accessed March 11, 2024. https://www.ndrc.gov.cn/xwdt/xwfb/201801/t20180109_954771.html.

- National Development Reform Commission and People's Bank of China. “**互动交流-国家发展和改革委员会** (Announcement on the Public Solicitation of Opinions on the “Basic Catalogue of National Public Credit Information (2021 Edition) (Draft for Comments).” China Law Translate. Accessed March 11, 2024. <https://www.chinalawtranslate.com/en/draft-public-credit-information/>.
- National Intellectual Property Office. “**国家知识产权局办公室关于严厉打击与新冠肺炎疫情相关非正常商标申请代理行为的通知_国务院部门文件_中国政府网** (Notice of the Office of the State Intellectual Property Office on Strictly Cracking Down on Abnormal Trademark Application Agent Behavior Related to the COVID-19 Epidemic).” Accessed February 5, 2024. https://www.gov.cn/zhengce/zhengceku/2020-03/06/content_5488018.htm.
- National Ministry of Transport. “**交通运输部 国家卫生健康委关于切实简化疫情防控应急运输车辆通行证办理流程及落实对应急运输保障人员不实行隔离措施的通知_国务院部门文件_中国政府网** (Notice from the National Health Commission of the Ministry of Transport on Effectively Simplifying the Application Process for Emergency Transportation Vehicle Passes for Epidemic Prevention and Control and Implementing No Isolation Measures for Emergency Transportation Support Personnel).” Accessed February 5, 2024. https://www.gov.cn/zhengce/zhengceku/2020-02/12/content_5477648.htm.
- Nebehay, Stephanie, and Emma Farge. “WHO Lauds Chinese Response to Virus, Says World ‘at Important Juncture.’” *Reuters*, January 29, 2020, sec. World. <https://www.reuters.com/article/idUSKBN1ZS2E8/>.
- Nelson, Thomas E., Zoe M. Oxley, and Rosalee A. Clawson. “Toward a Psychology of Framing Effects.” *Political Behavior* 19, no. 3 (1997): 221–46. <https://www.jstor.org/stable/586517>.
- Newton, Kennet. “Social and Political Trust.” In *Oxford Handbook of Political Behavior*, 342–61. Oxford University Press, 2007.
- Ng, Kwai. “Is China a ‘Rule-by-Law’ Regime?” *Buffalo Law Review* 67, no. 3 (May 1, 2019): 793. <https://digitalcommons.law.buffalo.edu/buffalolawreview/vol67/iss3/17>.
- Ng, Ta-Chou, Hao-Yuan Cheng, Hsiao-Han Chang, Cheng-Chieh Liu, Chih-Chi Yang, Shu-Wan Jian, Ding-Ping Liu, Ted Cohen, and Hsien-Ho Lin. “Comparison of Estimated

- Effectiveness of Case-Based and Population-Based Interventions on COVID-19 Containment in Taiwan.” *JAMA Internal Medicine* 181, no. 7 (July 1, 2021): 913. <https://doi.org/10.1001/jamainternmed.2021.1644>.
- Ngok, Kinglun, and Yapeng Zhu. “In Search of Harmonious Society in China: A Social Policy Response.” In *Series on Contemporary China*, by Ka Ho Mok and Yeun-Wen Ku, 69–94. WORLD SCIENTIFIC, 2010. https://doi.org/10.1142/9789814291934_0003.
- Oakley, Kate. “What Is E-Governance?” E-Governance Workshop. Strabourg: Council of Europe, 2002. https://www.coe.int/t/dgap/democracy/Activities/GGIS/E-governance/Work_of_egovernance_Committee/Kate_Oakley_eGovernance_en.asp.
- Ohlberg, Mareike . “What Do Young Chinese Think about Social Credit? It’s Complicated | Merics,” March 26, 2020. <https://merics.org/en/report/what-do-young-chinese-think-about-social-credit-its-complicated>.
- Ohlberg, Mareike, Shazeda Ahmed, and Bertram Lang. “Central Planning, Local Experiments: The Complex Implementation of China’s Social Credit System,” December 12, 2017. <https://merics.org/en/report/central-planning-local-experiments>.
- Olegario, Rowena. *The Engine of Enterprise: Credit in America*. Cambridge, Massachusetts: Harvard University Press, 2016.
- O’Reilly, Tim. “Government as a Platform.” In *Open Government: Collaboration, Transparency, and Participation in Practice*, O’Reilly&Associates Inc., 2010. <https://www.oreilly.com/library/view/open-government/9781449381936/ch02.html>.
- Orts, Eric. “The Rule of Law in China.” *Vanderbilt Journal of Transnational Law* 34, no. 1 (January 1, 2001): 43. <https://scholarship.law.vanderbilt.edu/vjtl/vol34/iss1/2>.
- Ouyang, Shijia. “China’s Economy Expands 8.1% in 2021.” Accessed February 8, 2024. <https://www.chinadaily.com.cn/a/202201/17/WS61e4ce13a310cdd39bc8168f.html>.
- Oxford Analytica. “COVID-19 Tech Will Expand Surveillance State in China.” Emerald Expert Briefings, April 15, 2020.
- . “Emerald Expert Briefings.” Emerald Expert Briefings, April 15, 2020.
- Page, Jeremy, Drew Hinshaw , and Betsy McKay. “In Hunt for Covid-19 Origin, Patient Zero Points to Second Wuhan Market.” *The Wall Street Journal*, March 1, 2021.
- Palko, Hannah Catherine, and Wei-Ning Xiang. “In Fighting Common Threats, People’s Deep Commitment to Taking Collective Action Matters: Examples from China’s COVID-19

- Battle and Her Other Combats.” *Socio-Ecological Practice Research* 2, no. 3 (September 2020): 257–64. <https://doi.org/10.1007/s42532-020-00056-1>.
- Palvia, Shailendra C. Jain, and Sushil S. Sharma. “E-Government and E-Governance: Definitions/Domain Framework and Status around the World,” 2007.
- Pan, An, Li Liu, Chaolong Wang, Huan Guo, Xingjie Hao, Qi Wang, Jiao Huang, et al. “Association of Public Health Interventions with the Epidemiology of the COVID-19 Outbreak in Wuhan, China.” *JAMA* 323, no. 19 (May 19, 2020): 1915. <https://doi.org/10.1001/jama.2020.6130>.
- Pan, Jennifer, and Yiqing Xu. “China’s Ideological Spectrum.” *The Journal of Politics* 80, no. 1 (January 2018): 254–73. <https://doi.org/10.1086/694255>.
- Party Central Committee and the State Council. “银保监会有关部门负责人就《关于对中小微企业贷款实施临时性延期还本付息的通知》答记者问_政策解读_中国政府网 (The Head of the Relevant Department of the China Banking and Insurance Regulatory Commission Answered Reporters’ Questions on the ‘Notice on Implementing Temporary Delay in Principal and Interest Payment for Loans to Small, Medium and Micro Enterprises’).” Accessed February 5, 2024. https://www.gov.cn/zhengce/2020-03/02/content_5485653.htm.
- Pasquale, Frank. *The Black Box Society: The Secret Algorithms That Control Money and Information*. Cambridge: Harvard University Press, 2015.
- Pavone, Vincenzo, and Sara Degli Esposti. “Public Assessment of New Surveillance-Oriented Security Technologies: Beyond the Trade-off between Privacy and Security.” *Public Understanding of Science* 21, no. 5 (July 2012): 556–72. <https://doi.org/10.1177/0963662510376886>.
- Pei, Minxin. “Corruption Threatens China’s Future.” Carnegie Endowment for International Peace. Accessed March 10, 2024. <https://carnegieendowment.org/2007/10/09/corruption-threatens-china-s-future-pub-19628>.
- Pei, Yan. “Crisis Management of Authoritarian Regimes in the Digital Era: The Case of Epidemic Prevention and Control in China.” *Transforming Government: People, Process and Policy* 17, no. 3 (October 30, 2023): 276–87. <https://doi.org/10.1108/TG-12-2022-0160>.
- Peng, Tao. “失信联合惩戒制度的法治困境及出路: 基于对41份中央级失信惩戒备忘录的分析 (The Legal Dilemma and Solution of the Joint Punishment System for Dishonesty

- Based on the Analysis of 41 Central-Level Disciplinary Memos for Breach of Trust).” Accessed March 11, 2024. <https://www.law.pku.edu.cn/xwzx/pl/133011.htm>.
- People’s Bank of China, Ministry of Finance, Banking and Insurance Regulatory Commission, China Securities Regulatory Commission, State Administration of Foreign Exchange. “关于进一步强化金融支持防控新型冠状病毒感染肺炎疫情的通知_国务院部门文件_中国政府网 (Notice on Further Strengthening Financial Support for the Prevention and Control of the Novel Coronavirus Pneumonia Epidemic).” People’s Bank of China website. Accessed February 5, 2024. https://www.gov.cn/zhengce/zhengceku/2020-02/01/content_5473639.htm.
- People’s Daily. “加快推进国家安全体系和能力现代化 以新安全格局保障新发展格局--新闻报道-中国共产党新闻网 (Accelerate the Modernization of National Security Systems and Capabilities to Ensure a New Development Pattern with a New Security Pattern).” Accessed March 10, 2024. <http://cpc.people.com.cn/n1/2023/0531/c64094-40002769.html>.
- Perry, Elizabeth J. “Chinese Conceptions of ‘Rights’: From Mencius to Mao—and Now.” *Perspectives on Politics* 6, no. 01 (March 2008). <https://doi.org/10.1017/S1537592708080055>.
- Pieke, Frank N. *The Good Communist: Elite Training and State Building in Today’s China*. 1st ed. Cambridge University Press, 2009. <https://doi.org/10.1017/CBO9780511691737>.
- Poo, Mu-ming. “Culture and History of Chinese Science.” *National Science Review* 6, no. 4 (July 1, 2019): 607–607. <https://doi.org/10.1093/nsr/nwz074>.
- Przeworski, Adam, Michael E. Alvarez, Jose Antonio Cheibub, and Fernando Limongi. *Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990*. 1st ed. Cambridge University Press, 2000. <https://doi.org/10.1017/CBO9780511804946>.
- Pye, Lucian W. “The State and the Individual: An Overview Interpretation.” *The China Quarterly* 127 (September 1991): 443–66. <https://doi.org/10.1017/S0305741000031027>.
- Qiang, Xiao. “Chinese Digital Authoritarianism and Its Global Impact.” *Project on Middle East Political Science* (blog), August 4, 2021. <https://pomeps.org/chinese-digital-authoritarianism-and-its-global-impact>.
- Qiao, Yang, and Mingyue Zhang. “姿势 | 健康码：人员流动的健康保障 (Health Code: Health Protection for Personnel Mobility).” 微信公众平台. Accessed March 11, 2024.

http://mp.weixin.qq.com/s?__biz=MzA3NzAzMDEyNg==&mid=2650833492&idx=1&sn=ab7bcc9bb3280309b44c220cff23a40b&chksm=84ac15d5b3db9cc3a7db29a8d01f41900398f255a696a35a035b2cfc3a51c50063072b973ac7#rd.

Qin, Weiping. “乌鲁木齐火灾天怒人怨，全国数十所高校学生抗议，上海乌鲁木齐中路悼念聚会喊出罕见政治口号，不自由 毋宁死！习近平下台！共产党下台！” (The Fire in Urumqi Has Made People Angry. Students from Dozens of Colleges and Universities across the Country Have Protested. A Rare Political Slogan Was Shouted at the Memorial Gathering on Urumqi Middle Road in Shanghai: Give Me Freedom or Die! Xi Jinping Steps down! The Communist Party Steps Down!).” Accessed February 9, 2024. <https://www.chinainperspective.com/default.php?id=71323>.

Qiu, Tingting, Shuyao Liang, Monique Dabbous, Yitong Wang, Ru Han, and Mondher Toumi. “Chinese Guidelines Related to Novel Coronavirus Pneumonia.” *Journal of Market Access & Health Policy* 8, no. 1 (January 1, 2020): 1818446. <https://doi.org/10.1080/20016689.2020.1818446>.

Rabe, Wiebke, and Genia Kostka. “Perceptions of Social Credit Systems in Southeast Asia: An External Technology Acceptance Model.” *Global Policy*, January 31, 2024, 1758-5899.13337. <https://doi.org/10.1111/1758-5899.13337>.

Realo, Anu, Kati Koido, Eva Ceulemans, and Jüri Allik. “Three Components of Individualism.” *European Journal of Personality* 16, no. 3 (May 2002): 163–84. <https://doi.org/10.1002/per.437>.

Reuters. “In ‘People’s War’ on Coronavirus, Chinese Propaganda Faces Pushback.” *Voice of America*, March 13, 2020. https://www.voanews.com/a/press-freedom_peoples-war-coronavirus-chinese-propaganda-faces-pushback/6185770.html.

Riley, B. T. “Security vs. Privacy: A Comparative Analysis of Canada, the United Kingdom, and the United States.” *Journal of Business and Public Policy* 1, no. 2 (2007).

Rizvi, Hidayat. “Autocratic Leadership Vs Authoritarian Leadership: What’s the Difference? - Hidayat Rizvi,” June 22, 2023. <https://hidayatrizvi.com/autocratic-leadership-vs-authoritarian-leadership/>.

Rochot, Justine, Chao-Hsuan Peng, and Renyou Hou. “The Digital Inclusion of Older Persons in China: The Role of the COVID-19 Pandemic in the Agenda-Setting of a New ‘Social Issue.’” *Revue Des Sciences Sociales*, no. 70 (December 12, 2023): 20–29. <https://doi.org/10.4000/revss.10648>.

- Rød, Espen Geelmuyden, and Nils B Weidmann. “Empowering Activists or Autocrats? The Internet in Authoritarian Regimes.” *Journal of Peace Research* 52, no. 3 (May 2015): 338–51. <https://doi.org/10.1177/0022343314555782>.
- Roelofs, Bart. “China’s Social Credit System: Levels of Approval of Chinese and Dutch Citizens.” Master Thesis, Delft University of Technology, 2022. <https://repository.tudelft.nl/islandora/object/uuid:71323655-6aa8-4921-b8a0-c62e875e0b60>.
- Rongcheng Social Credit Center. “荣成市人民政府 营商速递 【信用建设】 荣成市以职工信用建设赋能高质量发展 ([Credit Construction] Rongcheng City Empowers High-Quality Development with Employee Credit Construction).” Accessed March 11, 2024. http://www.rongcheng.gov.cn/art/2023/11/13/art_79404_4113285.html.
- Rosenzweig, Joshua. “State, Society and the Justice Debate in Contemporary China.” In *Justice*, edited by Flora Sapio, Susan Trevaskes, Sarah Biddulph, and Elisa Nesossi, 1st ed., 26–66. Cambridge University Press, 2017. <https://doi.org/10.1017/9781108115919.002>.
- Rothstein, Bo, and Dietlind Stolle. “The State and Social Capital: An Institutional Theory of Generalized Trust.” *Comparative Politics* 40, no. 4 (July 1, 2008): 441–59. <https://doi.org/10.5129/001041508X12911362383354>.
- Rousseau, Jean-Jacques. *The Social Contract*. Lexington, KY.: Maestro Publishing Group, 2011.
- Saghai, Yashar. “Salvaging the Concept of Nudge: Table 1.” *Journal of Medical Ethics* 39, no. 8 (August 2013): 487–93. <https://doi.org/10.1136/medethics-2012-100727>.
- Sakib, Najmuj, Tahmina Akter, Fatematuz Zohra, A. K. M. Israfil Bhuiyan, Mohammed A. Mamun, and Mark D. Griffiths. “Fear of COVID-19 and Depression: A Comparative Study Among the General Population and Healthcare Professionals During COVID-19 Pandemic Crisis in Bangladesh.” *International Journal of Mental Health and Addiction* 21, no. 2 (April 2023): 976–92. <https://doi.org/10.1007/s11469-020-00477-9>.
- Salem, Fadi. “Open Governance in Authoritarian States: A Framework for Assessing Digital Participation in the Age of Mass Surveillance.” In *Electronic Participation*, edited by Efthimios Tambouris, Panos Panagiotopoulos, Øystein Sæbø, Maria A. Wimmer, Theresa A. Pardo, Yannis Charalabidis, Delfina Sá Soares, and Tomasz Janowski, 94–105.

- Lecture Notes in Computer Science. Cham: Springer International Publishing, 2016. https://doi.org/10.1007/978-3-319-45074-2_8.
- Sandel, Michael J. “The Procedural Republic and the Unencumbered Self.” *Political Theory* 12, no. 1 (1984): 81–96. <https://www.jstor.org/stable/191382>.
- Santos, Niedja de Andrade e Silva Forte dos. “Multi-Level Governance Tackling the COVID-19 Pandemic in China.” *Revista de Administração Pública* 55 (March 5, 2021): 95–110. <https://doi.org/10.1590/0034-761220200494>.
- Scharre, Paul. “The Dangers of the Global Spread of China’s Digital Authoritarianism.” Accessed March 10, 2024. <https://www.cnas.org/publications/congressional-testimony/the-dangers-of-the-global-spread-of-chinas-digital-authoritarianism>.
- Schmitz, Rob. “What’s Your ‘Public Credit Score’? The Shanghai Government Can Tell You.” *NPR*, January 3, 2017, sec. Politics & Policy. <https://www.npr.org/sections/parallels/2017/01/03/507983933/whats-your-public-credit-score-the-shanghai-government-can-tell-you>.
- Schumpeter, Joseph A. *Capitalism, Socialism, and Democracy*. 1st ed. New York: Harper Perennial Modern Thought, 2008.
- Schwartz, Benjamin I. *The World of Thought in Ancient China*. Harvard University Press, 2009. <https://doi.org/10.2307/j.ctv1smjt32>.
- Science and Technology Daily. “新时代科技创新工作的根本遵循和行动指南——深入学习贯彻习近平总书记关于科技创新的重要论述 - 深入学习贯彻习近平新时代中国特色社会主义思想主题教育 - 广西壮族自治区科学技术厅网站 (The Fundamental Compliance and Action Guide for Scientific and Technological Innovation Work in the New Era - in-Depth Study of General Secretary Xi Jinping’s Important Exposition on Scientific and Technological Innovation).” Department of Science and Technology of Guangxi Zhuang Autonomous Region. Science and Technology Daily. Accessed March 4, 2024. <http://kjt.gxzf.gov.cn/zthd/srxxgcxjpxsdzgtssshzysxztjy/t17115471.shtml>.
- SeeClickFix.com. “SeeClickFix.” Accessed March 10, 2024. <https://seeclickfix.com>.
- Shangguan, Ziheng, and Mark Yaolin Wang. “China’s Community-Based Crisis Management Model for COVID-19: A Zero-Tolerance Approach.” *Frontiers in Public Health* 10 (July 22, 2022): 880479. <https://doi.org/10.3389/fpubh.2022.880479>.
- Shanghai Municipal People’s Government. “《2022年上海市全面深化‘一网通办’改革工作要点》的政策解读 (Policy Interpretation of ‘Key Points for Shanghai to

- Comprehensively Deepen the “One-Online Service” Reform in 2022’).” Accessed February 11, 2024. <https://www.shanghai.gov.cn/202205zcyj/20220308/d65420d9db454810b13ddd54ed642c21.html>.
- Shen, Kui. “社会信用体系建设的法治之道-法治政府网 (The Rule of Law in the Construction of Social Credit System).” Accessed March 11, 2024. <http://fzfyjy.cupl.edu.cn/info/1035/11343.htm>.
- Sheridan, William, and Thomas B. Riley. “Comparing E-Government Vs. e-Governance.” *Geospatial World* (blog), December 7, 2010. <https://www.geospatialworld.net/article/comparing-e-government-vs-e-governance/>.
- Shi, Tianjian. “Cultural Values and Political Trust: A Comparison of the People’s Republic of China and Taiwan.” *Comparative Politics* 33, no. 4 (July 2001): 401. <https://doi.org/10.2307/422441>.
- Shi, Tianjian, and Jie Lu. “The Meanings of Democracy: The Shadow of Confucianism.” *Journal of Democracy* 21, no. 4 (October 2010): 123–30. <https://doi.org/10.1353/jod.2010.0012>.
- Shih, Gerry, Emily Rauhala, and Lena H. Sun. “Early Missteps and State Secrecy in China Probably Allowed the Coronavirus to Spread Farther and Faster.” *Washington Post*, November 12, 2020. <https://www.washingtonpost.com/world/2020/02/01/early-missteps-state-secrecy-china-likely-allowed-coronavirus-spread-farther-faster/>.
- Shiina, Akihiro, Tomihisa Niitsu, Osamu Kobori, Keita Idemoto, Tasuku Hashimoto, Tsuyoshi Sasaki, Yoshito Igarashi, et al. “Relationship between Perception and Anxiety about COVID-19 Infection and Risk Behaviors for Spreading Infection: A National Survey in Japan.” *Brain, Behavior, & Immunity - Health* 6 (July 2020): 100101. <https://doi.org/10.1016/j.bbih.2020.100101>.
- Simko, Lucy, Jack Chang, Maggie Jiang, Ryan Calo, Franziska Roesner, and Tadayoshi Kohno. “COVID-19 Contact Tracing and Privacy: A Longitudinal Study of Public Opinion.” *Digital Threats: Research and Practice* 3, no. 3 (September 30, 2022): 1–36. <https://doi.org/10.1145/3480464>.
- Sina News. “中央要求开展道德领域突出问题专项教育和治理_新闻中心_新浪网 (The Central Government Requires the Launch of Special Education and Governance on

- Outstanding Issues in the Field of Ethics).” Accessed March 11, 2024. <https://news.sina.com.cn/c/2011-10-25/234523361299.shtml>.
- . “小悦悦父亲回应敛财质疑 称将捐出全部善款_新闻中心_新浪网 (Little Yueyue’s Father Responded to Questions about His Money-Making and Said He Would Donate All the Money to Charity).” Accessed March 11, 2024. <https://news.sina.com.cn/s/2011-11-04/092523413952.shtml>.
- . “广东小悦悦案肇事司机被诉过失致人死亡|小悦悦|过失致人死亡|佛山_新浪新闻 (The Driver Responsible for the Xiao Yueyue Accident in Guangdong Was Charged with Negligent Causing Death).” Accessed March 11, 2024. <https://news.sina.com.cn/c/2012-05-25/211824480646.shtml>.
- . “张遇哲：小悦悦父亲担不起慈善公信之殇_新闻中心_新浪网 (Zhang Yuzhe: Little Yueyue’s Father Cannot Afford the Loss of Charity and Credibility).” Accessed March 11, 2024. <https://news.sina.com.cn/pl/2011-11-04/080823413288.shtml>.
- Sine News. “两岁女童遭两车碾压_新闻中心_新浪网 (A Girl Who Was Run over by a Car in Foshan, Guangdong Died This Morning).” Accessed March 11, 2024. <https://news.sina.com.cn/z/ntzny/>.
- Slote, Walter H., and George A. De Vos, eds. *Confucianism and the Family*. SUNY Series in Chinese Philosophy and Culture. Albany, N.Y: State University of New York Press, 1998.
- Sohu News. “健康知多少 | 预防新型冠状病毒肺炎，这些偏方很管用？别逗了_钟南山 (How Much Do You Know about health | These Folk Remedies Are Very Effective in Preventing New Coronavirus Pneumonia? Give Me a Break).” Accessed March 11, 2024. https://www.sohu.com/a/www.sohu.com/a/368631214_100196391.
- . “国家信息中心发布《中国城市信用状况监测评价报告2018》蓝皮书 (The National Information Center Released the ‘China Cities Credit Status Monitoring and Evaluation Report 2018’ Blue Book).” Accessed March 11, 2024. https://www.sohu.com/a/www.sohu.com/a/235200482_774283.
- . “实施社会信用精准管理 江苏筑起疫情防控 ‘信用战线’_企业 (Implementing Precise Social Credit Management, Jiangsu Builds a ‘Credit Front’ for Epidemic Prevention and Control).” Accessed February 6, 2024. https://www.sohu.com/a/www.sohu.com/a/381824484_120066092.

- . “就问你怕不怕！老赖：‘我马上还钱’ ((Just Asking You If You Are Afraid! Lao Lai: ‘I’ll Pay You Back Right Away!’)).” Accessed March 11, 2024. https://www.sohu.com/a/www.sohu.com/a/151108059_477879.
- . “荣成”三奖“闪耀中国城市信用建设高峰论坛福州峰会 (Rongcheng’s ‘Three Awards’ Shine at the Fuzhou Summit of the China Urban Credit Construction Summit Forum).” Accessed March 11, 2024. https://www.sohu.com/a/www.sohu.com/a/235319936_813359.
- Sopan, Awalin, PJ Rey, and Ben Shneiderman. “The Dynamics of Web-Based Community Safety Groups: Lessons Learned from the Nation of Neighbors [Social Sciences].” *IEEE Signal Processing Magazine* 30, no. 6 (November 2013): 157–62. <https://doi.org/10.1109/MSP.2013.2276513>.
- Standing Committee of the 15th Shanghai Municipal People’s Congress. “上海市人民代表大会常务委员会关于全力做好当前新型冠状病毒感染肺炎疫情防控工作的决定 (Decision of the Standing Committee of the Shanghai Municipal People’s Congress on Making Every Effort to Prevent and Control the Current Novel Coronavirus Pneumonia Epidemic).” Accessed February 6, 2024. https://www.shanghai.gov.cn/nw48635/20200826/0001-48635_63497.html.
- State Administration for Market Regulation. “市场监管总局关于依法从重从快严厉打击新型冠状病毒疫情防控期间违法行为的意见_国务院部门文件_中国政府网 (Opinions of the State Administration for Market Regulation on Crackdown on Illegal Acts During the Prevention and Control of the Novel Coronavirus Epidemic Strictly and Quickly in Accordance with the Law).” Accessed February 5, 2024. https://www.gov.cn/zhengce/zhengceku/2020-02/07/content_5475818.htm.
- State Administration for Market Regulation, Development and Reform Commission, Ministry of Finance, Ministry of Human Resources and Social Security, Ministry of Commerce, and People’s Bank of China. “【关于应对疫情影响 加大对个体工商户扶持力度的指导意见(国市监注〔2020〕38号)】-国家发展和改革委员会 (Guiding Opinion on Responding to the Impact of the Epidemic and Increasing Support for Privately – or Individually – Owned Businesses).” Accessed February 5, 2024. https://www.ndrc.gov.cn/fggz/jyysr/jysrsbxf/202003/t20200311_1222855.html.

- State Council. “20th CPC National Congress.” Accessed February 8, 2024. <https://english.www.gov.cn/2022special/20thcpccongress/>.
- . “China Establishes Credit Score Website.” Accessed March 11, 2024. https://english.www.gov.cn/news/top_news/2015/06/02/content_281475119495270.htm
- . “Constitution of the People’s Republic of China.” Accessed March 10, 2024. https://english.www.gov.cn/archive/lawsregulations/201911/20/content_WS5ed8856ec6d0b3f0e9499913.html.
- . “Planning Outline for the Construction of a Social Credit System (2014-2020).” *China Copyright and Media* (blog), June 14, 2014. <https://chinacopyrightandmedia.wordpress.com/2014/06/14/planning-outline-for-the-construction-of-a-social-credit-system-2014-2020/>.
- . “Quick View: State Council Executive Meeting on May 11.” Accessed February 8, 2024. https://english.www.gov.cn/policies/infographics/202205/12/content_WS627cd1bfc6d02e533532a986.html.
- . “国务院关于建立完善守信联合激励和失信联合惩戒制度加快推进社会诚信建设的指导意见_社会信用体系建设_中国政府网 (Guiding Opinions of the State Council on Establishing and Improving a Joint Incentive for Trustworthy and a Joint Punishment System for Untrustworthy to Accelerate the Construction of Social Integrity).” Accessed March 11, 2024. https://www.gov.cn/zhengce/content/2016-06/12/content_5081222.htm.
- . “国务院关于批转发展改革委等部门法人和其他组织统一社会信用代码制度建设总体方案的通知_社会信用体系建设_中国政府网 (Notice of the State Council on Approving and Forwarding the Overall Plan for the Construction of a Unified Social Credit Code System for Legal Persons and Other Organizations of the National Development and Reform Commission and Other Departments) .” Accessed March 11, 2024. https://www.gov.cn/zhengce/content/2015-06/17/content_9858.htm.
- . “国务院办公厅关于社会信用体系建设的若干意见 (Several Opinions of the General Office of the State Council on the Construction of the Social Credit System).” Accessed March 10, 2024. https://www.gov.cn/zwggk/2007-04/02/content_569314.htm.

- . “国务院办公厅关于进一步完善失信约束制度构建诚信建设长效机制的指导意见_社会信用体系建设_中国政府网 (Notice of the General Office of the State Council on Further Improving the Breach of Trust Restraint System Guiding Opinions on Establishing a Long-Term Mechanism for Integrity Construction).” Accessed March 11, 2024. https://www.gov.cn/gongbao/content/2021/content_5578531.htm.
- State Council. “国务院批转国家技术监督局等部门关于建立企业、事业单位和社会团体统一代码标识制度报告的通知_改革大数据服务平台 (Notice on the National Administration of Technology Supervision Report Concerning the Establishment of Unified Score System for Industry, Professions and Community Organisations),” 1989. <http://www.reformdata.org/1989/0513/24236.shtml>.
- . “李克强主持召开国务院常务会议 确定完善失信约束制度健全社会信用体系的措施等_滚动新闻_中国政府网 (Li Keqiang Presided over an Executive Meeting of the State Council to Determine Measures to Improve the Breach of Trust Restraint System and Improve the Social Credit System).” Accessed March 11, 2024. https://www.gov.cn/xinwen/2020-11/26/content_5565216.htm.
- Statista Research Department. “China: Trust in Government 2023.” Statista. Accessed February 19, 2024. <https://www.statista.com/statistics/1116013/china-trust-in-government-2020/>.
- Steinmüller, Hans. *Communities of Complicity: Everyday Ethics in Rural China*. First paperback edition. Dislocations, volume 10. New York Oxford: Berghahn, 2015.
- Stevens, Friso M. S. “China’s Long March to National Rejuvenation: Toward a Neo-Imperial Order in East Asia?” *Asian Security* 17, no. 1 (January 2, 2021): 46–63. <https://doi.org/10.1080/14799855.2020.1739651>.
- Strich, Franz, Anne-Sophie Mayer, and Marina Fiedler. “What Do I Do in a World of Artificial Intelligence? Investigating the Impact of Substitutive Decision-Making AI Systems on Employees’ Professional Role Identity.” *Journal of the Association for Information Systems* 22, no. 2 (March 9, 2021). <https://doi.org/10.17705/1jais.00663>.
- Stritzel, Holger. “Securitization Theory and the Copenhagen School.” In *Security in Translation*, by Holger Stritzel, 11–37. London: Palgrave Macmillan UK, 2014. https://doi.org/10.1057/9781137307576_2.

- Stuttgart University of Applied Science. “Unified Theory 1 & 2 & Extension (UTAUT).” *Innovation Acceptance Lab* (blog). Accessed February 15, 2024. <https://acceptancelab.com/unified-theory-utaut>.
- Su, Zhaohui, Ali Cheshmehzangi, Dean McDonnell, Junaid Ahmad, Sabina Šegalo, Yu-Tao Xiang, and Claudimar Pereira Da Veiga. “The Advantages of the Zero-COVID-19 Strategy.” *International Journal of Environmental Research and Public Health* 19, no. 14 (July 19, 2022): 8767. <https://doi.org/10.3390/ijerph19148767>.
- Su, Zheng, Xu Xu, and Xun Cao. “What Explains Popular Support for Government Monitoring in China?” *Journal of Information Technology & Politics* 19, no. 4 (October 2, 2022): 377–92. <https://doi.org/10.1080/19331681.2021.1997868>.
- Sun, Yiting. “China’s Citizens Do Care about Their Data Privacy, Actually.” MIT Technology Review. Accessed February 20, 2024. <https://www.technologyreview.com/2018/03/28/67113/chinas-citizens-do-care-about-their-data-privacy-actually/>.
- Sun, Yunchuan, Xiaoping Zeng, Han Zhao, Betty Simkins, and Xuegang Cui. “The Impact of COVID-19 on SMEs in China: Textual Analysis and Empirical Evidence.” *Finance Research Letters* 45 (March 2022): 102211. <https://doi.org/10.1016/j.frl.2021.102211>.
- Supreme People’s Court. “最高法举行依法妥善办理涉新冠肺炎疫情执行案件若干问题《指导意见》发布会 (The Supreme People’s Court Held a Press Conference on the ‘Guiding Opinions’ on Several Issues Concerning the Proper Handling of Enforcement Cases Involving the COVID-19 Epidemic in Accordance with the Law.)” Accessed February 5, 2024. http://www.scio.gov.cn/xwfb/gwyxwbgswfbh/wqfbh_2284/2020n_4408/2020n05y19rxw2/xgxwfbh_4990/202208/t20220808_308634.html.
- Sussman, Nathan. “Economic Incentives and Regulation to Increase COVID-19 App Effectiveness.” CEPR, December 18, 2020. <https://cepr.org/voxeu/columns/economic-incentives-and-regulation-increase-covid-19-app-effectiveness>.
- Tadjbakhsh, Shahrbanou, and Anuradha M. Chenoy. *Human Security: Concepts and Implications*. Routledge Advances in International Relations and Global Politics 51. London; New York: Routledge, 2007.

- Tan, Xiao, and Lei Yu. “Has Recentralisation Improved Equality? Primary Care Infrastructure Development in China.” *Asia & the Pacific Policy Studies* 9, no. 2 (May 2022): 115–33. <https://doi.org/10.1002/app5.346>.
- Tang, Frank. “China Must Be a World Leader in Science and Tech or Risk Being ‘Strangled’: Xi.” *South China Morning Post*, February 2, 2023. <https://www.scmp.com/economy/china-economy/article/3208882/xi-jinping-says-china-must-quicken-pace-tech-self-reliance-prevent-being-strangled-foreign-countries>.
- Tao, Ran, Dali L. Yang, Ming Li, and Xi Lu. “How Does Political Trust Affect Social Trust? An Analysis of Survey Data from Rural China Using an Instrumental Variables Approach.” *International Political Science Review* 35, no. 2 (March 2014): 237–53. <https://doi.org/10.1177/0192512113492599>.
- Taylor, Charles. “Cross-Purposes: The Liberal-Communitarian Debate.” In *Liberalism and the Moral Life*, edited by Nancy L. Rosenblum, 159–82. Harvard University Press, 1989. <https://doi.org/10.4159/harvard.9780674864443.c13>.
- Taylor, Linnet, Gargi Sharma, Aaron Martin, and Shazade Jameson, eds. *Data Justice and Covid-19: Global Perspectives*. London: Meatspace Press, 2020.
- Tekin, Esra. “China Records over 36,000 Corruption-Related Cases in 1st Half of 2023.” Accessed March 10, 2024. <https://www.aa.com.tr/en/asia-pacific/china-records-over-36-000-corruption-related-cases-in-1st-half-of-2023/2977912>.
- Thaler, Richard H., and Cass R. Sunstein. *Nudge: Improving Decisions about Health, Wealth, and Happiness*. Rev. and Expanded ed. New York: Penguin Books, 2009.
- The Economist. “Xi Jinping Is Trying to Fuse the Ideologies of Marx and Confucius.” *The Economist*. Accessed February 24, 2024. <https://www.economist.com/china/2023/11/02/xi-jinping-is-trying-to-fuse-the-ideologies-of-marx-and-confucius>.
- The Economist. “How Did Confucianism Win Back the Chinese Communist Party?” *The Economist*. Accessed February 24, 2024. <https://www.economist.com/the-economist-explains/2021/06/23/how-did-confucianism-win-back-the-chinese-communist-party>.
- The Nandu Personal Information Protection Research Center. “七成受访者时常使用人脸识别，九成人会采取措施防范人脸信息被盗 (70% of the Respondents Often Use Facial Recognition, and 90% Will Take Measures to Prevent Facial Information from Being Stolen.)” *Southern Metropolis Daily APP*, 2019. <https://m.mp.oeeee.com/u/808.html>.

- The New York Times. “Tracking Coronavirus in China: Latest Case Count.” *The New York Times*, February 3, 2022, sec. World. <https://www.nytimes.com/interactive/2021/world/china-covid-cases.html>.
- Thompson, Mark R. “Whatever Happened to ‘Asian Values’?” *Journal of Democracy* 12, no. 4 (October 2001): 154–65. <https://doi.org/10.1353/jod.2001.0083>.
- Thornton, Patricia. “The A4 Movement: Mapping Its Background and Impact.” *China Leadership Monitor*, March 2, 2023. <https://www.prleader.org/post/the-a4-movement-mapping-its-background-and-impact>.
- Tiezzi, Shannon. “Charities and Corruption in China.” Accessed March 11, 2024. <https://thediplomat.com/2014/08/charities-and-corruption-in-china/>.
- Tobin, Meaghan, Christian Shepherd, and Lily Kuo. “China’s Xi Promises to Build ‘Great Wall of Steel’ in Rivalry with West.” *Washington Post*, March 13, 2023. <https://www.washingtonpost.com/world/2023/03/13/xi-jinping-china-tech-self-reliance/>.
- Tong, Yanqi. “Morality, Benevolence, and Responsibility: Regime Legitimacy in China from Past to the Present.” *Journal of Chinese Political Science* 16, no. 2 (June 2011): 141–59. <https://doi.org/10.1007/s11366-011-9141-7>.
- Torrente, Maria, Pedro Ac Sousa, Ana Sánchez-Ramos, Joao Pimentao, Ana Royuela, Fabio Franco, Ana Collazo-Lorduy, Ernestina Menasalvas, and Mariano Provencio. “To Burn-out or Not to Burn-out: A Cross-Sectional Study in Healthcare Professionals in Spain during COVID-19 Pandemic.” *BMJ Open* 11, no. 2 (February 2021): e044945. <https://doi.org/10.1136/bmjopen-2020-044945>.
- Transparency International. “China.” *Transparency.org*, January 30, 2024. <https://www.transparency.org/en/countries/china>.
- . “The ABCs of the CPI: How the Corruption Perceptions Index Is....” *Transparency.org*, December 20, 2021. <https://www.transparency.org/en/news/how-cpi-scores-are-calculated>.
- Tsai, Lily L. “Solidary Groups, Informal Accountability, and Local Public Goods Provision in Rural China.” *American Political Science Review* 101, no. 2 (May 2007): 355–72. <https://doi.org/10.1017/S0003055407070153>.
- Tsamados, Andreas, Nikita Aggarwal, Josh Cowls, Jessica Morley, Huw Roberts, Mariarosaria Taddeo, and Luciano Floridi. “The Ethics of Algorithms: Key Problems and Solutions.”

- AI & SOCIETY* 37, no. 1 (March 2022): 215–30. <https://doi.org/10.1007/s00146-021-01154-8>.
- Tsang, Stella. “China Abuses Health Code App for Crowd Control.” FairPlanet. Accessed January 31, 2024. <https://www.fairplanet.org/editors-pick/china-abuses-health-code-app-for-crowd-control/>.
- Turner, Karen G., James V. Feinerman, and Robert K. Guy. *The Limits of the Rule of Law in China*. University of Washington Press, 2020.
- Tyler, Tom R., and Jonathan Jackson. “Popular Legitimacy and the Exercise of Legal Authority: Motivating Compliance, Cooperation, and Engagement.” *Psychology, Public Policy, and Law* 20, no. 1 (February 2014): 78–95. <https://doi.org/10.1037/a0034514>.
- Tyson, Ann Scott. “Why China’s COVID-Tracking QR Codes Raise Surveillance Concerns.” *Christian Science Monitor*. Accessed January 31, 2024. <https://www.csmonitor.com/World/Asia-Pacific/2022/1206/Why-China-s-COVID-tracking-QR-codes-raise-surveillance-concerns>.
- Ulbricht, Lena, and Maximilian Von Grafenstein. “Big Data: Big Power Shifts?” *Internet Policy Review* 5, no. 1 (March 31, 2016). <https://doi.org/10.14763/2016.1.406>.
- Vanderklippe, Nathan. “Chinese Blacklist an Early Glimpse of Sweeping New Social-Credit Control.” *The Globe and Mail*, January 3, 2018. <https://www.theglobeandmail.com/news/world/chinese-blacklist-an-early-glimpse-of-sweeping-new-social-credit-control/article37493300/>.
- Venkatesh, Morris, Davis, and Davis. “User Acceptance of Information Technology: Toward a Unified View.” *MIS Quarterly* 27, no. 3 (2003): 425. <https://doi.org/10.2307/30036540>.
- Venkatesh, Thong, and Xu. “Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology.” *MIS Quarterly* 36, no. 1 (2012): 157. <https://doi.org/10.2307/41410412>.
- Venkatesh, Viswanath, and Fred D. Davis. “A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies.” *Management Science* 46, no. 2 (2000): 186–204. <https://www.jstor.org/stable/2634758>.
- Venkatesh, Viswanath, Michael G. Morris, Gordon B. Davis, and Fred D. Davis. “User Acceptance of Information Technology: Toward a Unified View.” *MIS Quarterly* 27, no. 3 (2003): 425–78. <https://doi.org/10.2307/30036540>.

- Villius Zetterholm, My, Yanqing Lin, and Päivi Jokela. “Digital Contact Tracing Applications during COVID-19: A Scoping Review about Public Acceptance.” *Informatics* 8, no. 3 (July 22, 2021): 48. <https://doi.org/10.3390/informatics8030048>.
- VOA News. “What Is China’s ‘Zero-COVID’ Policy?” Voice of America, November 28, 2022. <https://www.voanews.com/a/what-is-china-s-zero-covid-policy-/6854291.html>.
- Wadle, Lisa-Marie, Noemi Martin, and Daniel Ziegler. “Privacy and Personalization: The Trade-off between Data Disclosure and Personalization Benefit.” In *Adjunct Publication of the 27th Conference on User Modeling, Adaptation and Personalization*, 319–24. UMAP’19 Adjunct. New York, NY, USA: Association for Computing Machinery, 2019. <https://doi.org/10.1145/3314183.3323672>.
- Wallace, Jeremy L. “Juking the Stats? Authoritarian Information Problems in China.” *British Journal of Political Science* 46, no. 1 (January 2016): 11–29. <https://doi.org/10.1017/S0007123414000106>.
- Walter, James. “Political Leadership.” In *The Blackwell Encyclopedia of Sociology*, edited by George Ritzer, 1st ed. Wiley, 2007. <https://doi.org/10.1002/9781405165518.wbeosp037>.
- Wang, Maya. “China: Fighting COVID-19 With Automated Tyranny.” *The Diplomat*. Accessed February 1, 2024. <https://magazine.thediplomat.com/#!/issues/-M3KZbeF4vDD2cQpvuSr/preview/-M3KZlxddtXFG1gqeOzT>.
- Wang, Xiangwei. “Opinion | China’s Health QR Code System Is Ripe for Abuse and Must Not Outlast Covid.” *South China Morning Post*, June 18, 2022. <https://www.scmp.com/week-asia/opinion/article/3182072/chinas-covid-19-health-code-system-ripe-abuse-and-must-not>.
- Wang, Fei-Yue, Daniel Zeng, James A. Hendler, Qingpeng Zhang, Zhuo Feng, Yanqing Gao, Hui Wang, and Guanpi Lai. “A Study of the Human Flesh Search Engine: Crowd-Powered Expansion of Online Knowledge.” *Computer* 43, no. 8 (August 2010): 45–53. <https://doi.org/10.1109/MC.2010.216>.
- Wang, Lu. “泛化信用十日谈：这颗子弹还要飞多久 (Generalized Credit Decameron: How Long Will This Bullet Fly?).” Accessed March 11, 2024. <https://opinion.caixin.com/m/2020-06-10/101565405.html>.
- Wang, Maya. “China’s Chilling ‘Social Credit’ Blacklist.” *Wall Street Journal*, December 11, 2017.

- Wang, Tiantian, and Fei Jia. “The Impact of Health QR Code System on Older People in China during the COVID-19 Outbreak.” *Age and Ageing* 50, no. 1 (January 8, 2021): 55–56. <https://doi.org/10.1093/ageing/afaa222>.
- Wang, Yuxia, Lei Dong, Ye Liu, Zhou Huang, and Yu Liu. “Migration Patterns in China Extracted from Mobile Positioning Data.” *Habitat International* 86 (April 2019): 71–80. <https://doi.org/10.1016/j.habitatint.2019.03.002>.
- Wang, Zhengxu. “Before the Emergence of Critical Citizens: Economic Development and Political Trust in China.” *International Review of Sociology* 15, no. 1 (March 2005): 155–71. <https://doi.org/10.1080/03906700500038876>.
- Wang, Zhengxu, and Yu You. “The Arrival of Critical Citizens: Decline of Political Trust and Shifting Public Priorities in China.” *International Review of Sociology* 26, no. 1 (January 2, 2016): 105–24. <https://doi.org/10.1080/03906701.2015.1103054>.
- Wang, Zhong, and Qian Yu. “Privacy Trust Crisis of Personal Data in China in the Era of Big Data: The Survey and Countermeasures.” *Computer Law & Security Review* 31, no. 6 (December 2015): 782–92. <https://doi.org/10.1016/j.clsr.2015.08.006>.
- Ward, Paul R., Loreen Mamerow, and Samantha B. Meyer. “Interpersonal Trust across Six Asia-Pacific Countries: Testing and Extending the ‘High Trust Society’ and ‘Low Trust Society’ Theory.” Edited by K. Brad Wray. *PLoS ONE* 9, no. 4 (April 23, 2014): e95555. <https://doi.org/10.1371/journal.pone.0095555>.
- Webster, Graham, Rogier Creemers, Elsa Kania, and Paul Triolo. “Full Translation: China’s ‘New Generation Artificial Intelligence Development Plan’ (2017).” *DigiChina* (blog). Accessed March 10, 2024. <https://digichina.stanford.edu/work/full-translation-chinas-new-generation-artificial-intelligence-development-plan-2017/>.
- Wedeman, Andrew. “The Dynamics and Trajectory of Corruption in Contemporary China.” *China Review* 22, no. 2 (2022): 21–48. <https://www.jstor.org/stable/48671498>.
- Wei, Yujun, Zhonghua Ye, Meng Cui, and Xiaokun Wei. “COVID-19 Prevention and Control in China: Grid Governance.” *Journal of Public Health* 43, no. 1 (April 12, 2021): 76–81. <https://doi.org/10.1093/pubmed/fdaa175>.
- Weible, Christopher M., Daniel Nohrstedt, Paul Cairney, David P. Carter, Desera A. Crow, Anna P. Durnová, Tanya Heikkila, Karin Ingold, Allan McConnell, and Diane Stone. “COVID-19 and the Policy Sciences: Initial Reactions and Perspectives.” *Policy Sciences* 53, no. 2 (June 2020): 225–41. <https://doi.org/10.1007/s11077-020-09381-4>.

- Weixi, Hu. “On Confucian Communitarianism.” *Frontiers of Philosophy in China* 2, no. 4 (2007): 475–87. <https://doi.org/10.1007/s11466-007-0030-2>.
- Weng, S. H., C. H. Lin, and Z. Kudireti. “评估紧急情况下开放数据的质量： covid-19 流行病国家样本的实证分析 (Evaluation of the quality of open data in emergencies: An empirical analysis of national samples of covid-19 epidemic).” *E-Government* 5, no. 209 (2020): 2–13.
- Weng, Shi-Hong, Anna Ya Ni, Alfred Tat-Kei Ho, and Ruo-Xi Zhong. “Responding to the Coronavirus Pandemic: A Tale of Two Cities.” *The American Review of Public Administration* 50, no. 6–7 (August 2020): 497–504. <https://doi.org/10.1177/0275074020941687>.
- Wenyang, Fan, and Huishi Huang. “粤健康码下线部分服务，将删除所涉数据！健康码会彻底退出吗? (Guangdong Kangma has offline some services and the data involved will be deleted! Will the health code be completely withdrawn?).” *Southern Metropolis Daily*, n.d. <https://m.mp.oeeee.com/a/BAAFRD000020230214764597.html>.
- WHO. “China Country Overview | World Health Organization.” Accessed March 11, 2024. <https://www.who.int/countries/chn>.
- . “Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19).” Accessed March 11, 2024. [https://www.who.int/publications-detail-redirect/report-of-the-who-china-joint-mission-on-coronavirus-disease-2019-\(covid-19\)](https://www.who.int/publications-detail-redirect/report-of-the-who-china-joint-mission-on-coronavirus-disease-2019-(covid-19)).
- . “United States of America.” datadot. Accessed March 11, 2024. <https://data.who.int/dashboards/covid19/cases>.
- Williamson, Ben. “Political Computational Thinking: Policy Networks, Digital Governance and ‘Learning to Code.’” *Critical Policy Studies* 10, no. 1 (January 2, 2016): 39–58. <https://doi.org/10.1080/19460171.2015.1052003>.
- Woesler, Martin, Martin Warnke, Matthias Kettner, and Jens Lanfer . “The Chinese Social Credit System. Origin, Political Design, Exoskeletal Morality and Comparisons to Western Systems.” *European Journal of Interdisciplinary Studies*, no. 2 (September 2021): 7–35.
- Wong, Maggie Hiufu. “3 Billion Journeys: World’s Biggest Human Migration Begins in China.” CNN, January 10, 2020. <https://www.cnn.com/travel/article/chunyun-2020-lunar-new-year-travel-rush-china/index.html>.

- Wong, Timothy Ka-ying, Po-san Wan, and Hsin-Huang Michael Hsiao. “The Bases of Political Trust in Six Asian Societies: Institutional and Cultural Explanations Compared.” *International Political Science Review* 32, no. 3 (June 2011): 263–81. <https://doi.org/10.1177/0192512110378657>.
- Wu. “荣成：用信用管理出租车 (Rongcheng: Use Credit to Manage Taxis).” *Credit Shandong*, n.d. https://credit.shandong.gov.cn/101.news.detail.dhtml?news_id=63797.
- Wu, Cary, and Zhilei Shi. “Education and Social Trust in Transitional China.” *Chinese Sociological Review* 52, no. 2 (March 14, 2020): 115–43. <https://doi.org/10.1080/21620555.2019.1665995>.
- Wu, Huizhong. “Beijing Human Rights Activist Immobilized by COVID-19 App.” AP News, December 20, 2022. <https://apnews.com/article/technology-health-beijing-covid-human-rights-adcefe4b4696aab684f0b69175999005>.
- Wu, Jun, Jian Wang, Stephen Nicholas, Elizabeth Maitland, and Qiuyan Fan. “Application of Big Data Technology for COVID-19 Prevention and Control in China: Lessons and Recommendations.” *Journal of Medical Internet Research* 22, no. 10 (October 9, 2020): e21980. <https://doi.org/10.2196/21980>.
- Wu, Shishi, Rachel Neill, Chuan De Foo, Alvin Qijia Chua, Anne-Sophie Jung, Victoria Haldane, Salma M Abdalla, et al. “Aggressive Containment, Suppression, and Mitigation of Covid-19: Lessons Learnt from Eight Countries.” *BMJ*, November 28, 2021, e067508. <https://doi.org/10.1136/bmj-2021-067508>.
- Wuhan Health Commission. “武汉卫健委：肺炎疫情不排除有限人传人可能 (Wuhan Health Commission: Limited Human-to-Human Transmission of Pneumonia Not Ruled out, but Sustained Risk Is Low),” January 15, 2020. <https://news.sina.cn/gn/2020-01-15/detail-iihnzakh4152793.d.html>.
- Xi, Jinping. “习近平：决胜全面建成小康社会 夺取新时代中国特色社会主义伟大胜利——在中国共产党第十九次全国代表大会上的报告 _ 最新报道 _ 中国政府网 (Xi Jinping: Win Decisively to Build a Moderately Prosperous Society in All Respects and Strive for the Great Victory of Socialism with Chinese Characteristics for a New Era - Report at the 19th National Congress of the Communist Party of China).” Report at the 19th National Congress of the Communist Party of China. 19th National Congress of the Communist Party of China: National Congress of the Communist Party of China, October 18, 2017. https://www.gov.cn/zhuanti/2017-10/27/content_5234876.htm.

- Xia, Jiawen, Aihua Yang, and Xiubo Zhang. “科技引领发展 创新赢得未来 (Technology Leads Development, Innovation Wins the Future).” *People’s Liberation Army Daily*, July 8, 2022. <http://www.mod.gov.cn/gfbw/jmsd/4915068.html>.
- Xinhua Credit. “长三角探索打造‘数字示范区’ 信用‘红黑名单’互认可期 (The Yangtze River Delta Explores the Creation of a ‘Digital Model Zone’ and Mutual Recognition of Credit ‘Red and Black Lists’).” Accessed February 3, 2024. <https://www.credit100.com/xhxy/c/2020-05-12/592021.shtml>.
- Xinhua News Agency. “Chinese Treasure Spirit of Lei Feng.” Accessed March 11, 2024. <http://www.china.org.cn/english/DO-e/28188.htm>.
- . “中央国家安全委员会第一次会议召开 习近平发表重要讲话滚动_新闻_中国政府网 (The First Meeting of the Central National Security Commission Was Held and Xi Jinping Delivered an Important Speech).” Accessed March 10, 2024. https://www.gov.cn/xinwen/2014-04/15/content_2659641.htm.
- . “乌鲁木齐市一高层住宅楼发生火灾造成10人死亡-新华网 (Fire in a High-Rise Residential Building Kills 10 in Urumqi - Xinhua).” Accessed February 9, 2024. http://www.xinhuanet.com/local/2022-11/25/c_1129157881.htm.
- . “习近平：高举中国特色社会主义伟大旗帜 为全面建设社会主义现代化国家而团结奋斗——在中国共产党第二十次全国代表大会上的报告_滚动新闻_中国政府网 (Xi Jinping: Hold High the Great Banner of Socialism with Chinese Characteristics and Work Together to Build a Modern Socialist Country in an All-Round Way - Report at the 20th National Congress of the Communist Party of China).” Accessed February 9, 2024. https://www.gov.cn/xinwen/2022-10/25/content_5721685.htm.
- . “关键时刻，中央开了一次很不寻常的会议! (At a Critical Moment, the Central Government Held a Very Unusual Meeting!).” Accessed February 8, 2024. https://wappass.baidu.com/static/captcha/tuxing.html?ak=572be823e2f50ea759a616c060d6b9f1&backurl=https%3A%2F%2Fmbd.baidu.com%2Fnewspage%2Fdata%2Flandingsuper%3Fid%3D1731500559822995112%2526wfr%253Dspider%2526for%253Dpc%253E%26third%3Dbaijiahao%26baijiahao_id%3D1731500559822995112%26wfr%3D%26for%3Dpc%253E%26c_source%3Dduedge%26c_score%3D0.999100×tam p=1707420010&signature=47667253e8f23cc1413dcff98e0ad956.

- . “**李克强主持召开国务院常务会议-新华网** (Li Keqiang Presided over the Executive Meeting of the State Council).” Accessed February 5, 2024. http://www.news.cn/politics/2023-02/22/c_1129388429.htm.
- Xinhuanet. “Full Text of Constitution of Communist Party of China.” Accessed February 8, 2024. http://eng.chinamil.com.cn/CHINA_209163/TopStories_209189/10195159.html.
- . “**李克强主持召开国务院常务会议-新华网** (Li Keqiang Presided over the Executive Meeting of the State Council).” Accessed February 3, 2024. http://www.xinhuanet.com/politics/leaders/2019-06/12/c_1124614835.htm.
- Xu, Bin. “Consensus Crisis and Civil Society: The Sichuan Earthquake Response and State–Society Relations.” *The China Journal* 71 (January 2014): 91–108. <https://doi.org/10.1086/674555>.
- Xu, Ping, Brian Krueger, Fan Liang, Mingxin Zhang, Marc Hutchison, and Mingzhi Chang. “Media Framing and Public Support for China’s Social Credit System: An Experimental Study.” *New Media & Society*, July 28, 2023, 14614448231187823. <https://doi.org/10.1177/14614448231187823>.
- Xu, Ping, Yinjiao Ye, and Mingxin Zhang. “Exploring the Effects of Traditional Media, Social Media, and Foreign Media on Hierarchical Levels of Political Trust in China.” *Global Media and China* 7, no. 3 (September 2022): 357–77. <https://doi.org/10.1177/20594364221115270>.
- Xu, Xu. “To Repress or to Co-Opt? Authoritarian Control in the Age of Digital Surveillance.” *American Journal of Political Science* 65, no. 2 (2021): 309–25. <https://www.jstor.org/stable/45380806>.
- . “To Repress or to Co-opt? Authoritarian Control in the Age of Digital Surveillance.” *American Journal of Political Science* 65, no. 2 (April 2021): 309–25. <https://doi.org/10.1111/ajps.12514>.
- Xu, Xu, Genia Kostka, and Xun Cao. “Information Control and Public Support for Social Credit Systems in China.” *The Journal of Politics* 84, no. 4 (October 1, 2022): 2230–45. <https://doi.org/10.1086/718358>.
- Yan, Yunxiang. “The Good Samaritan’s New Trouble: A Study of the Changing Moral Landscape in Contemporary China1: THE GOOD SAMARITAN’S NEW TROUBLE.” *Social Anthropology* 17, no. 1 (February 18, 2009): 9–24. <https://doi.org/10.1111/j.1469-8676.2008.00055.x>.

- Yang, William. “How Much Do Chinese People Care about Privacy? – DW – 04/12/2018.” dw.com. Accessed February 20, 2024. <https://www.dw.com/en/how-much-do-chinese-people-care-about-privacy/a-43358120>.
- Yang, Guodong, and Jiang Wu. “电子治理的概念特征价值定位与发展趋向 (Conceptual Characteristics, Value Positioning and Development Trends of e-Governance).” *Journal of Shanghai Administration Institute*, September 12, 2017. https://www.sohu.com/a/www.sohu.com/a/191415405_781358.
- Yang, Kaifeng. “Unprecedented Challenges, Familiar Paradoxes: COVID -19 and Governance in a New Normal State of Risks.” *Public Administration Review* 80, no. 4 (July 2020): 657–64. <https://doi.org/10.1111/puar.13248>.
- Yang, Qing, and Wenfang Tang. “Exploring the Sources of Institutional Trust in China: Culture, Mobilization, or Performance?” *Asian Politics & Policy* 2, no. 3 (July 2010): 415–36. <https://doi.org/10.1111/j.1943-0787.2010.01201.x>.
- Yang, Yuan. “China’s Collective Memories of the Pandemic Deserve to Be Preserved.” Accessed February 25, 2024. <https://www.ft.com/content/cf2d122e-0678-4bb2-a2be-1b10959266e9>.
- Yang, Zeyi. “China Just Announced a New Social Credit Law. Here’s What It Means.” MIT Technology Review. Accessed March 11, 2024. <https://www.technologyreview.com/2022/11/22/1063605/china-announced-a-new-social-credit-law-what-does-it-mean/>.
- Yang, Zifeng, Zhiqi Zeng, Ke Wang, Sook-San Wong, Wenhua Liang, Mark Zanin, Peng Liu, et al. “Modified SEIR and AI Prediction of the Epidemics Trend of COVID-19 in China under Public Health Interventions.” *Journal of Thoracic Disease* 12, no. 3 (March 2020): 165–74. <https://doi.org/10.21037/jtd.2020.02.64>.
- Yao, Liping. “同心抗疫独家述评 | 疫情改变的，还有‘信用习惯’ (Exclusive Commentary on Fighting the Epidemic Together | The Epidemic Has Also Changed “credit Habits).” Accessed February 6, 2024. https://wappass.baidu.com/static/captcha/tuxing.html?ak=572be823e2f50ea759a616c060d6b9f1&backurl=https%3A%2F%2Fmbd.baidu.com%2Fnewspage%2Fdata%2Flanding%3Fid%3D1660391942140707129%26third%3Dbaijiahao%26baijiahao_id%3D1660391942140707129%26wfr%3D%26c_source%3Dduedge%26c_score%3D0.999100×tamp=1707187702&signature=09fb2a9079a43dad8bc702e890a2bc1f.

- Ye, Meng. “How the CCP Is Stalling China’s Legal System,” June 24, 2022. <https://eastasiaforum.org/2022/06/24/how-the-ccp-is-stalling-chinas-legal-system/>.
- Yi-Huah, Jang. “Asian Values and Communitarian Democracy.” *PROSEA, Academia Sinica*, no. 32 (2000): 1–16.
- You, Sophie, and Emilia Jin. “The Personal Information Protection Law in China: A Legal Analysis.” *China Briefing News*, September 15, 2021. <https://www.china-briefing.com/news/the-personal-information-protection-law-in-china-a-legal-analysis/>.
- Yu, Jia, and Jun Xia. “E-Justice Evaluation Factors: The Case of Smart Court of China.” *Information Development* 37, no. 4 (November 2021): 658–70. <https://doi.org/10.1177/0266666920967387>.
- Yu, Keping. “国家治理的中国特色和普遍趋势 (Chinese Characteristics and General Trends in National Governance).” *China Public Administration Review*, no. 1 (2019): 1–19.
- . “治理和善治引論 (Introduction to Governance and Good Governance).” *Tianfu Review - Administrative Law Forum*, 2000. https://sex.ncu.edu.tw/course/Michel%20Foucault/link/fou_link02.htm.
- Yu Zeyuan. “健康码又要回来了？ | 联合早报 (Is the health code coming back again? | United Daily News).” Accessed February 25, 2024. <https://www.zaobao.com.sg/news/china/story20231204-1453916>.
- Yuan, Shawn. “Zero COVID in China: What Next?” *The Lancet* 399, no. 10338 (May 2022): 1856–57. [https://doi.org/10.1016/S0140-6736\(22\)00873-X](https://doi.org/10.1016/S0140-6736(22)00873-X).
- Yuan, Suwen. “中国防疫神器‘健康码’是怎么运转的？ -中新网 (How Does China’s Anti-Epidemic Tool ‘Health Code’ Work?).” Accessed March 11, 2024. <https://www.chinanews.com.cn/sh/2022/01-26/9662114.shtml>.
- Yunnan COVID-19 Prevention and Control Work Leading Group Office. “转发关于进一步做好两码合一工作的通知-楚雄彝族自治州人民政府 (Forward the Notice on Further Improving the Work of Integrating Two Codes into One).” Accessed February 11, 2024. <http://www.chuxiong.gov.cn/info/2862/34193.htm>.
- Yunnan Daily. “云南省启动疫情防控信用监测 (Yunnan Province Launches Epidemic Prevention and Control Credit Monitoring),” n.d. <https://credit.bjdx.gov.cn/xydt/detail/dd2d32b17d564c0ea46a645eecf8de29>.

- Zemin, Jiang. “中国共产党历次全国代表大会数据库 (Jiang Zemin’s Report at the 15th National Congress of the Communist Party of China).” 15th National Congress of the Communist Party of China: National Congress of the Communist Party of China, September 12, 1997. <http://cpc.people.com.cn/GB/64162/64168/64568/65445/4526285.html>.
- Zeng, Jinghan. “Artificial Intelligence and China’s Authoritarian Governance.” *International Affairs* 96, no. 6 (November 9, 2020): 1441–59. <https://doi.org/10.1093/ia/iaa172>.
- . “China’s Date with Big Data: Will It Strengthen or Threaten Authoritarian Rule?” *International Affairs (Royal Institute of International Affairs 1944-)* 92, no. 6 (2016): 1443–62. <https://www.jstor.org/stable/45238141>.
- Zeyuan, Yu. “China Reinstating the Health Code to Combat Respiratory Disease? Society News - ThinkChina,” December 7, 2023. <https://www.thinkchina.sg>.
- Zhai, Yida. “Traditional Values and Political Trust in China.” *Journal of Asian and African Studies* 53, no. 3 (May 2018): 350–65. <https://doi.org/10.1177/0021909616684860>.
- Zhang, H., and H. Zheng. “‘社区守护者’, 他们是上海抗疫的平凡之光_浦江头条_澎湃新闻 (‘Community Guardians’, They Are Ordinary People’s Lights in Shanghai’s Fight against the Epidemic).” Accessed February 1, 2024. https://m.thepaper.cn/kuaibao_detail.jsp?contid=5776027&from=kuaibao.
- Zhang, Phoebe, Kate Zhang, and Nick Yang. “Fear of Data Misuse as Health Code Turns Red for Chinese Bank Protesters.” *South China Morning Post*, June 14, 2022. <https://www.scmp.com/news/china/science/article/3181635/chinese-health-code-turns-red-financial-victims-about-protest>.
- Zhang, Baobao, Sara Kreps, and Nina McCurry. “Contact-Tracing Apps Face Serious Adoption Obstacles.” *Brookings*. Accessed February 25, 2024. <https://www.brookings.edu/articles/contact-tracing-apps-face-serious-adoption-obstacles/>.
- Zhang, Chang, Dechun Zhang, and Hsuan Lei Shao. “The Softening of Chinese Digital Propaganda: Evidence from the People’s Daily Weibo Account during the Pandemic.” *Frontiers in Psychology* 14 (February 28, 2023): 1049671. <https://doi.org/10.3389/fpsyg.2023.1049671>.

- Zhang, Chenchen. "Governing (through) Trustworthiness: Technologies of Power and Subjectification in China's Social Credit System." *Critical Asian Studies* 52, no. 4 (October 1, 2020): 565–88. <https://doi.org/10.1080/14672715.2020.1822194>.
- Zhang, Chun. "'绿马'火了 '抗疫周边'成新商机-新华网 (Green Horse" Has Become Popular in 'Anti-Epidemic Peripherals' and Has Become a New Business Opportunity)." Accessed March 11, 2024. <http://www.xinhuanet.com/fashion/20220518/14003f51075a4a7ab75f3171ab2165e7/c.html>.
- Zhang, Everett, Arthur Kleinman, and Tu Weiming, eds. *Governance of Life in Chinese Moral Experience: The Quest for an Adequate Life*. New York: Routledge, 2011.
- Zhang, Kangzhi, and Yuqiong Xiang. "网络空间中的政策问题建构 (The Construction of Policy Issues in Cyberspace Construction)." *China Social Science*, 2015.
- Zhang, Liutao. "杭州市卫健委回应 '渐变色健康码': 仅为设想, 暂无上线计划_长三角政商_澎湃新闻 (Hangzhou Municipal Health Commission Responded to the 'Gradient Color Health Code': It Is Just an Idea and There Is No Plan to Launch It)." Accessed March 11, 2024. https://www.thepaper.cn/newsDetail_forward_7579606.
- Zhang, Yunshan. "7天, '健康码'从杭州跑遍全国 一人一码, 大数据助力精准防疫--社会·法治--人民网 (In 7 Days, the 'Health Code' Traveled across the Country from Hangzhou. One Code per Person, Big Data Helps Precise Epidemic Prevention)." Accessed March 11, 2024. <http://society.people.com.cn/n1/2020/0224/c1008-31600444.html>.
- Zhao, Lei. "Command of Armed Police Force to Be Unified." Accessed March 10, 2024. <https://www.chinadaily.com.cn/a/201712/28/WS5a441fa5a31008cf16da3d96.html>.
- Zheng, Bao, and Xinning Zhao. "郑保卫 赵新宁: 论新闻媒体在新冠肺炎疫情传播中的职责与使命 - 中国记协网 (Zheng Bao and Zhao Xinning: On the Responsibilities and Missions of News Media in the Spread of the New Coronavirus Epidemic)." Accessed March 11, 2024. http://www.zgjx.cn/2020-05/09/c_139042077.htm.
- Zheng, George G. "China's Grand Design of People's Smart Courts." *Asian Journal of Law and Society* 7, no. 3 (October 2020): 561–82. <https://doi.org/10.1017/als.2020.20>.

- Zheng, Qian, ed. *An Ideological History of the Communist Party of China*. Translated by Li Sun and Shelly Bryant. First English edition. Montreal, Quebec: Royal Collins Publishing Group, 2020.
- Zheng, Sarah. “The Messy Afterlife of China’s Covid Health Codes.” *Bloomberg.Com*, August 16, 2023. <https://www.bloomberg.com/news/articles/2023-08-16/china-begins-to-grapple-with-its-covid-data-collection-machine>.
- Zheng, Yongnian, and Guoguang Wu. “Information Technology, Public Space, and Collective Action in China.” *Comparative Political Studies* 38, no. 5 (June 2005): 507–36. <https://doi.org/10.1177/0010414004273505>.
- Zhong. “泉州一私立学校：父母任何一方是失信被执行人的，拒接纳新生_中国政库_澎湃新闻 (A Private School in Quanzhou: If Either Parent Is a Person Subject to Breach of Trust, It Will Refuse to Admit New Students).” Accessed March 11, 2024. https://m.thepaper.cn/kuaibao_detail.jsp?contid=2246485&from=kuaibao.
- Zhou, Lihua, Kun Liu, Yining Peng, and Yimeng Zhao. “Workers Race against Time to Build ‘high-Speed’ Hospitals.” *chinadailyhk*. Accessed March 11, 2024. <https://www.chinadailyhk.com/article/119829#Workers-race-against-time-to-build-'high-speed'-hospitals>.
- Zhou, Wang. “Is China’s Grassroots Social Order Project Running Out of Money?” *#SixthTone*, May 31, 2018. <https://www.sixthtone.com/news/1002393>.
- Zhou, Xin. “China Approves Personal Credit Platform for Online Lending - Xinhua | English.News.Cn.” Accessed March 11, 2024. http://www.xinhuanet.com/english/2018-02/22/c_136991905.htm.
- Zhou, Xueguang. *The Logic of Governance in China: An Organizational Approach*. 1st ed. Cambridge University Press, 2022. <https://doi.org/10.1017/9781009159418>.
- Zhu, Julie, Yew Lun Tian, Engen Tham, and Yew Lun Tian. “How China’s New No.2 Hastened the End of Xi’s Zero-COVID Policy.” *Reuters*, March 3, 2023, sec. China. <https://www.reuters.com/world/china/how-chinas-new-no2-hastened-end-xis-zero-covid-policy-2023-03-03/>.
- Zhuoran , Li. “How Beijing Accidentally Ended the Zero COVID Policy.” Accessed February 9, 2024. <https://thediplomat.com/2023/01/how-beijing-accidentally-ended-the-zero-covid-policy/>.

- Ziller, Conrad, and Marc Helbling. "Public Support for State Surveillance." *European Journal of Political Research* 60, no. 4 (November 2021): 994–1006. <https://doi.org/10.1111/1475-6765.12424>.
- Zoglmann, MaKenna. "Xi Jinping and Confucianism: Legitimacy and a National Moral Identity." Honors Thesis, University of Colorado Denver, 2019. [file:///C:/Users/nicof/Downloads/xiJinpingAndConfucianismLegitimacyAndANationalMoralIden%20\(2\).pdf](file:///C:/Users/nicof/Downloads/xiJinpingAndConfucianismLegitimacyAndANationalMoralIden%20(2).pdf).
- Zou, Sheng. "Disenchanted Trust: Instrumental Reason, Algorithmic Governance, and China's Emerging Social Credit System." *Media and Communication* 9, no. 2 (April 6, 2021): 140–49. <https://doi.org/10.17645/mac.v9i2.3806>.
- Zuboff, Shoshana. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. First Trade Paperback Edition. New York: PublicAffairs, 2020.
- Zuo, Cai (Vera). "Promoting City Leaders: The Structure of Political Incentives in China." *The China Quarterly* 224 (December 2015): 955–84. <https://doi.org/10.1017/S0305741015001289>.