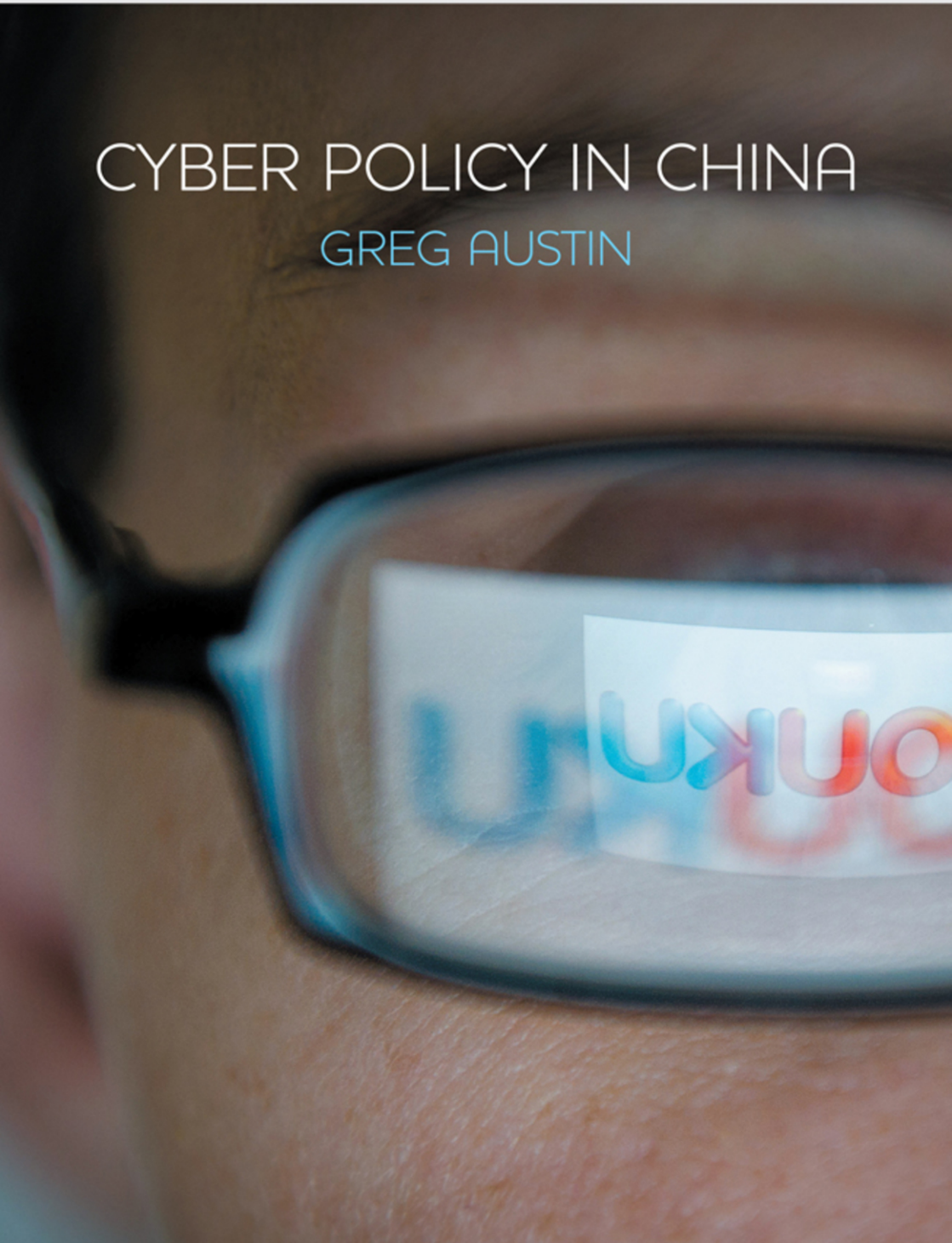
CHINA 中国 TODAY

CYBER POLICY IN CHINA

GREG AUSTIN



CYBER POLICY IN CHINA

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This book is dedicated to Angelica and Elvira.

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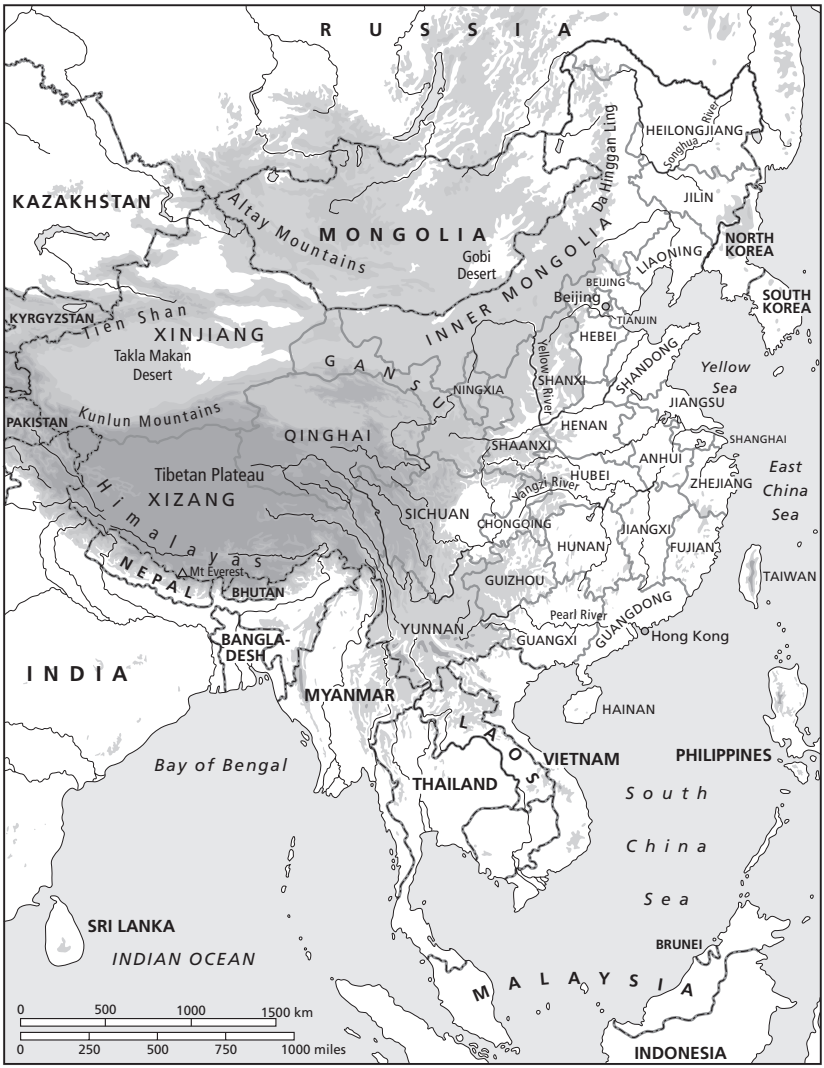
R U S S I A
KAZAKHSTAN
Altay Mountains
MONGOLIA
Gobi Desert
INNER MONGOLIA
Da Hinggan Ling
HEILONGJIANG
Songhua River
JILIN
LIAONING
NORTH KOREA
SOUTH KOREA
BEIJING
Beijing
TIANJIN
HEBEI
KYRGYZSTAN
Tien Shan
XINJIANG
Takla Makan Desert
GANSU
NINGXIA
SHANXI
Yellow River
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JIANGSU
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SHANGHAI
ANHUI
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Tibetan Plateau
XIZANG
HUBEI
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Yangzi River
SICHUAN
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JIANGXI
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FUJIAN
Himalayas
Mt Everest
NEPAL
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GUIZHOU
TAIWAN
Pearl River
GUANGDONG
Hong Kong
YUNNAN
GUANGXI
BANGLA-DESH
INDIA
MYANMAR
HAINAN
LAOS
VIETNAM
PHILIPPINES
Bay of Bengal
THAILAND
South China Sea
SRI LANKA
INDIAN OCEAN
BRUNEI
MALAYSIA
INDONESIA
0 500 1000 1500 km
0 250 500 750 1000 miles

Chronology

1911	Chinese Republican Revolution and fall of the Qing dynasty
1949	Founding of the People's Republic of China (PRC)
1950–3	Korean War
1953–7	First Five-Year Plan; PRC adopts Soviet-style economic planning
1954	First constitution of the PRC and first meeting of the National People's Congress
1957	Anti-rightist campaign suppresses political criticism of Mao Zedong
1958	First Chinese computer built, based on designs from the USSR
1966–76	Great Proletarian Cultural Revolution; Mao reasserts power
1976	Mao dies; most universities reopen after ten years' closure
1978	Deng Xiaoping rises to power and launches the opening up, reform and four modernizations
1983	China accelerates investment in electronics industry
1985	Software Institute set up in the Chinese Academy of Sciences
1986	First email sent from China
1987	China commits to the goal of becoming an information economy
1989	Tiananmen Square protests culminate in 4 June military crackdown and suppression of the movement for science and democracy

1990	First Chinese-made PC launched in the domestic market
1992	US National Science Foundation rebuffs China's first request for public access to the internet; Deng Xiaoping's Southern Inspection Tour re-energizes economic reforms
1993–2005	Jiang Zemin takes Deng's place as paramount leader and continues economic growth agenda
1994	Competition in mobile phones introduced with establishment of Unicom
1995	Internet and world wide web come to the Chinese public
1996	State-owned Great Wall Technology Group set up
1997	Chinese telecoms companies part privatize on the New York Stock Exchange
1998	Ministry of Information Industry set up; Chinese web portals Sina and Sohu open
1999	China suppresses Falun Gong; China agrees tough terms that will enable it to join the World Trade Organization; Yahoo! in China; eBay clone EachNet set up
2000	Chinese Communist Party (CCP) general secretary Jiang Zemin commits China publicly to the goal of becoming an information society
2002	Microsoft is first foreign company admitted to China Software Association
2002–12	Hu Jintao is general secretary of the CCP and president of China from 2003
2003	China changes military doctrine to emphasize informatization

2005	Sina launches a blog capability; first internet TV licence issued
2006	Long-term plan for national informatization to 2020 launched
2008	New super-ministry of industry and information technology is set up
2009	China bans Twitter and Skype
2010	China's armed forces set up a leading group on informatization
2011	Obama says United States is facing another 'Sputnik moment', referencing cyber espionage by China
2012	Reports of cyber surveillance of China's leaders by its own police; Xi Jinping is general secretary of the CCP, and president of China from 2013
2013	New crackdown on anti-CCP information, the constitution movement and journalists
2014	Xi Jinping is first general secretary of CCP to take direct control of the leadership group on informatization, led since 2001 by the premier

Preface

The internet came to the public in China in 1995. Twenty years later, China has the biggest population of netizens in the world; it has become the world's biggest producer of desktop computers; and two of its telecommunications equipment providers are among the world's largest. Is China on a pathway to dominance in cyberspace? It could be. Yet, as impressive as those few manifestations of China's digital prowess are, they can be viewed as part of a much bigger canvas – the idea of an information society. This concept predates the creation of the internet by several decades and is defined by many features much more wide-ranging in scope than the sorts of measures just mentioned.

The idea of an information society evolved from an earlier concept of 'information economy' or 'knowledge economy'. In 1962, economist Fritz Machlup estimated for the first time the monetary value of knowledge production in the United States and how this form of production had transformed the economy (Machlup 1962). By the early 1970s, various commentaries on his work had elaborated on the concept of the 'knowledge economy' and 'information economy', portending an information revolution every bit as transformative in social and political terms as the industrial revolution.

The world was now in an information age. The transformative effect of the new age was seen early on as extending beyond the industrial and the economic domains to reach the very moral fabric of society. Norbert Wiener (1964) penned a short work appropriately titled *God & Golem, Inc.*, with the subtitle 'A Comment on Certain Points where Cybernetics Impinges on Religion'. Bell (1976) predicted that the information revolution would be the catalyst for a post-industrial society and that information exchange would become the basis of all

economic and social exchange. One of the most insightful antecedents, however, was probably Masuda (1981 [1980]), who coined the word 'computopia', thereby anticipating the comprehensive and profound effects of information technologies and their use. Masuda foreshadowed 'the realisation of a society that brings about a general flourishing state of human intellectual creativity, instead of affluent material consumption'. He also anticipated e-democracy, the globalization of a new renaissance, a shattering of previous conceptions of privacy, the emergence of a new concept of time-value, and a new intensity in system innovation – all premised on the complete objectification and commodification of information.

By the early 1990s, the concept of the information society had become globally prominent as an important goal of national and international policy. In 2000, China's leaders embraced the goal of an information society in a series of policy statements and administrative acts that are documented later. By 2002 and 2003, the United Nations (UN) system got behind the goal and convened the World Summit on the Information Society (WSIS). There was one basic reason. The advent of the information society was seen as global in scope and revolutionary in its impact on state power. The vision accepted by most countries participating in the WSIS, including China, was a grand vision of society transformed by the material, intellectual and social attributes of information technologies and the knowledge economy. The ideal has been described by the UN as a society 'where everyone can create, access, utilise and share information and knowledge' to 'achieve their full potential' in 'improving their quality of life' (UN Docs WSIS-03/GENEVA/DOC/4-E 12 December 2003). The idea in this formulation is 'people-centred'.

In Chinese, information society is most often rendered as *xìnxī shèhuì* (信息社会). A common substitute for the term 'information society' is the term *xìnxīhuà* (信息化), which can be translated as 'informatization'. It is often used in Chinese sources (as in English

ones) to contrast with industrialization (*chǎnyèhuà* or *gōngyèhuà*) as a period in social and economic history. In China, informatization has been defined as 'the historical process, during which information technology is fully used, information resources are developed and utilized, the exchange of information and knowledge sharing are promoted, the quality of economic growth is improved, and the transformation of economic and social development is promoted' (Central Committee and State Council 2006). It is broadly cognate with the Chinese government's concept of an information society, though it could be interpreted as less people-centred than the UN vision and more in the mould of the materialist and technocratic traditions that Chinese Communists have preferred. The idea of an information society cuts across a wide sweep of policy (politics, culture, art, economy, industry, education, science, technology, diplomacy and security).

The analysis here started as an effort to evaluate China's progress towards its goal of becoming an advanced information society. Within a short time, given China's political system, I came to see the preferences of the country's leaders as a key determinant and a worthy subject of study. What do Chinese leaders actually want from the information society and what dilemmas have they confronted in framing their policies? This then led me to look more closely at their political values – their ethics – not least because Chinese figures prominent in informatization policy made this connection themselves, as had statements from many delegations to the WSIS.

On the assumption that outcomes in the information society are ethically determined, the analytical framework used in the book revolves around ideal policy values for achieving an advanced information society. This framework is derived from a study of ethics. Thus, the analysis is not presented as a work in social science (be that political science, political economy, industry policy or strategic studies). It is a more simple effort to situate the values of China's leaders within an

ethical framework implied by their acceptance of the ambition to become an advanced information society. Since the analysis is intended to give a sense of the trajectory of China's ambition (where has it come from and the likely timeline for achieving the goal), it relies on a chronological treatment in each section.

Chapter 1 sets the scene for later chapters. It offers an introduction of China's ambition to become an advanced information society, identifying the year 2000 as the time when the leaders first adopted the information society ambition in policy. The chapter then sets out the framework of nine ideal policy values needed for an information society. Chapter 2 provides a short interpretative overview of China's information society prehistory in the period from 1949 to 1999. It shows how the leaders worked hard for almost three decades to suppress the emergence of an information society. Then, after 1978, they had to struggle to reverse the worst effects of that repression, opening up gradually to the idea of an information economy and later the idea of an information society. The following chapters look more closely at the leaders' policy values in the fifteen years since the start of this century, comparing them with the ideal values. Each of chapters 3, 4 and 5 takes three of the nine ideal values in turn, looking at them from the Chinese leaders' perspective. Thus, these chapters are titled 'e-Democracy i-Dictatorship', 'Innovative Information Economy', and 'Security in the Global Infosphere'. As already suggested, chapters 2–5 blend thematic issues with a chronological presentation. The presentation of developments sequentially by year is intentional and essential. Without it, the reader would not get a sense of the trajectory of China's information society policy. How quickly and how nimbly have its leaders moved? How well and how enthusiastically have they adjusted to opportunity or to failure? Are they on schedule to meet their targets? A short conclusion (chapter 6) looks at the feedback effect between these three domains of policy and the associated ideal policy values, and how that positions China going forward.

Acknowledgements

I would like to thank Professor Li Maosen and the Ethics Centre of the Department of Philosophy at Renmin University for helping me understand during my stay there the Chinese view of the contours of information ethics and moral education. This book debates that Chinese view and I alone am responsible for that. It is to the credit of the university and China that I was received so warmly while conducting this research. I would also like to thank Professor Luciano Floridi of Oxford University for orienting my understanding of the information age as a set of ethical problems. I owe a debt to Professor Mervyn Frost of King's College London for showing me the centrality of ethical contest in international affairs and how it can be (and has to be) distinguished from social science. I am indebted to the Department of War Studies at King's College for my time there as a Visiting Senior Fellow while I researched and wrote this book. Dr Thomas Rid provided important support. The EastWest Institute, particularly John Mroz, provided a unique environment for policy debates on the issues.

The manuscript has been improved as the result of critical review by two anonymous colleagues who identified important gaps or inconsistencies in the draft. I am grateful to Eric Cappon, who acted as the surrogate 'general reader' at the final stage to test the readability of the manuscript for its target audience. The quality of the manuscript has been dramatically enhanced through advice from Louise Knight at Polity and at an earlier stage from Kay Templeton in Sydney. Pascal Porcheron at Polity made the finishing touches. Fiona Sewell undertook a most thorough and thoughtful final edit. Special thanks to my wife Kay for continued support.

Abbreviations

At the request of the publisher, this list omits commonly understood abbreviations from international relations (such as UN for the United Nations), common abbreviations from the field of information society policy (such as ICT for information and communications technology) and abbreviations that only occur within a couple of pages of first mention.

ACSI	Advisory Committee for State Informatization
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
CAS	Chinese Academy of Sciences
CASS	Chinese Academy of Social Sciences
CCP	Chinese Communist Party
CERNET	China Education and Research Network
CMC	Central Military Commission
CNCERT	National Computer Network Emergency Response Technical Team Coordination Center
CNNIC	China Internet Network Information Center
CPLC	Central Political and Legal Commission
CPPCC	Chinese People's Political Consultative Conference
CUST	China University of Science and Technology
FOI	freedom of information
ICANN	Internet Corporation for Assigned Names and Numbers
IPR	intellectual property rights
IPv6	Internet Protocol version 6
ISP	internet service provider
ITU	International Telecommunication Union
IW	information warfare

KIP	Knowledge Innovation Programme
MEI	Ministry of Electronics Industry
MII	Ministry of Information Industry
MIIT	Ministry of Industry and Information Technology
MLP	Medium and Long-Term Development Plan for Science and Technology 2006–20
MPS	Ministry of Public Security
MSS	Ministry of State Security
NIP	National Informatization Plan
NPC	National People's Congress
NRI	Network Readiness Index
OGI	Open Government Initiative
PBoC	People's Bank of China
PLA	People's Liberation Army
PRC	People's Republic of China
PSC	Politburo Standing Committee
ROC	Republic of China
SCITO	State Council Informatization Office
SILG	State Informatization Leading Group
SIPO	State Intellectual Property Office
SOE	state-owned enterprise
WEF	World Economic Forum
WSIS	World Summit on the Information Society

1 China's Cyber Ambition

China's political leaders have expressed a vision of making the country into a world-class information society. This involves the widespread application in the economy and the society of advanced technologies in information processing and its exploitation, based on a pervasive communications infrastructure. Jiang Zemin, former general secretary of the Communist Party, laid out this general vision in at least three major speeches in Beijing in 2000: in addressing Communist Party members attending the National People's Congress (NPC) and the Chinese People's Political Consultative Conference (CPPCC) on 3 March; in welcoming remarks at the opening of the 16th World Computer Congress on 21 August; and in a speech to a meeting of the Central Military Commission (CMC) on 11 December (see Jiang 2010). Wen Jiabao, former premier, saw the ambition as a 'mega-trend for development in the contemporary world, a major force in promoting economic and social development and reform' (www.gov.cn 04/11/2005). According to a former senior adviser, the country's leaders were seeing informatization as the 'main power driving the country's overall economic and social development' (Qu 2010).

The Chinese delegate to one of the preparatory meetings of the World Summit on the Information Society (WSIS) signalled China's position as follows (Sha 2002). Countries with different social systems and cultural traditions will handle the transition to an information society differently. Information infrastructure will be the foundation of future economic progress but it is weak in developing countries