



Book Review

Networking China

The Digital Transformation of the Chinese Economy

Michael Keane

Curtin University, Australia

Research on the Chinese Internet has led to a plethora of scholarly publications over the past two decades. Academic researchers outside of the Chinese mainland have mostly investigated political control and online activism whereas those within the mainland tend to enthuse about the benefits of technology for development. However, China's rapidly growing communications landscape has received little attention internationally

Networking China: The digital transformation of the Chinese Economy is a timely and ground breaking account of major transformations in China's communications over the past two decades, with global warnings attached. The focus of the book is communications, comprising information and communication technologies (ICTs), telecommunications, and media.

Echoing the title 'networking', the emphasis is on the adoption of computing and digital infrastructure, what is

* Hong, Y. (2017). *Networking China: The digital transformation of the Chinese economy*. University of Illinois Press

sometimes called informatization. Hong adopts a political economy of the media approach; in many respects the account is an adaptation of Dan Schiller's 'digital capitalism' polemic. Schiller's premise is that the global financial crisis, was precipitated to a great extent by ICTs, which emerged from within the belly of the beast of transnational capitalism.

Hong's extension of Schiller's position contextualizes China's deepening engagement in the global economy, precipitated by what she calls the expansion and concentration of global business power under neoliberal policy. In the 1980s and 1990s powerful transnational companies, typified by communications industries, looked for new markets as well as locations for low-cost production, the so-called international division of labour. Many regions in China welcomed transnational capital. The concept of a networked China, according to Yu Hong is therefore contingent on a state-led model of digital capitalism. The state model 'contends, collaborates, and overlaps with the US-dominated system of global digital capitalism.' For instance, the Chinese state encourages foreign direct investment by lowering the entry barriers, although in many cases market entry is part of the General Agreement of Trade and Services (GATS), together with China's entry to the World Trade Organisation in December 2001.

The book addresses a number of questions, including whether or not China will continue down the road of state-capitalism, specifically 'digital capitalism', or readjust its course to a socialist market economy. Another question is: will China's embrace of ICTs provide relief or drag the world further into crisis?

Rather than movements and communities that might offer liberating potential, as is sometimes the case in accounts of borderless disruptive communications, powerful forces

dominate. The author challenges what many construe as the dominant paradigm of communications research: namely the state's capacity to deal with the forces unleashed by new technologies in an inevitable shift to a free market internet. In most of these accounts Hong says complex, evolving, and contingent interactions among state, the market and society are overlooked, and the role of the state is simplified.

The function of this provocation serves to open up a different area of focus. The critical approach taken by Hong draws attention to China's position firstly, as an export focused nation and secondly, as a site for offshore processing of electronics and communications equipment. Indeed what is not pointed out is that mainland China offers a site for cheap offshore production of many kinds of commodity, hence the negative connotation attached to the brand label Made in China.

Chapter one sets out the discussion of ICTs, namely the export dominant model of offshore production including electrical and telecommunications components. Hong details how foreign direct investment in ICT manufacturing in China increased exponentially from the 1990s coinciding with neoliberal policy. Reliance on this economic model along with cheap exports became apparent in the wake of the financial crisis, which saw a lessening of overseas demand for China's manufactured products as well as a shift to production in western regions of China and lower cost developing countries.

Chapter two addresses China's telecom infrastructure, showing how state-controlled telecommunications institutions responded to the demands of export-processing and how this model has had profound implications for domestic social relations. The chapter provides a historical sketch of telecoms development in China from 1978 to 2005. The argument is that state-led development has made telecommunications 'a

platform for corporate communications', hence the genesis of the networked economy.

Chapter three looks at the role of broadband in the networked economy. Hong again returns to the main argument, whereby the global financial crisis placed information and communications at the core of economic restructuring. The claim is that policy makers around the world turned to broadband internet and its purported innovative potential for a growth comeback. The boom that eventuated, however, can be dated to the late 1990s when the seeds of China's internet revolution were being fed by venture capital.

Chapter four turns to mobile communications in the context of an industrial strategy. Hong provides a rich and well documented history of telecom development through successive network generations, starting from fixed-line networks to second-generation and then third-generation mobile networks. The chapter shows how the development of 3G networks provided an opportunity for domestic players in both physical devices and value added network services. The role played by state policy included developing the China-only TD SCDMA standard. To establish this standard, the state created an industrial alliance, set up a TD-SCDMA R& D and industrialization fund, assigned favourable frequencies, and forced the dominant telecom player China Mobile to adopt it. The handset companies discussed in detail in the chapter include ZTE and Huawei. The chapter also provides a fascinating account of competition between domestic telecoms China Mobile, China Unicom and China Netcom, backgrounded by the alliances with global players, namely Apple, Nokia and Android.

Chapter five argues that within the rapidly changing digital

landscape, state-owned digital media companies are increasingly at the forefront of the economic development of China's media and culture industry. The chapter looks at major policy changes impacting on cultural production, expressed here as 'cultural-system reform'. The account of cultural industries in this chapter is a summary rather than a close examination or a contextualised analysis across sectors and institutions. The chapter and the next addresses the rise of privately owned digital television and online companies, noting the role played by Robin Li of the Chinese search engine Baidu in promoting China's digital advantages. Similar arguments would be put to the government by China's new breed of digital entrepreneurs.

The book closes by critically conceptualizing the Chinese state as a 'developmental' state in the global system of digital capitalism. The final chapter takes up some of the questions about China's future, assessing whether or not China's embrace of the communications revolution is sustainable. The verdict seems to be that China is unlikely to overcome significant structural problems and that overcapacity is more likely to continue with little advantage flowing to the western regions where component production is now located.

The book is well written overall and the research is exemplary, although there are a few areas where one would have liked to see more evidence. Hong says that communications has become a 'pillar industry' in China. However, there is no mention of this policy framework either in the book or in existing Chinese policy documents, where the newly initiated 'pillar' sector is IT: without the C for communications. Another point of contention is the book's premise that the communications revolution, or upgrading, is a state-led response to the global financial crisis. While this ties in neatly with Schiller, there is not enough policy evidence

provided to demonstrate this take-off point. In fact, China had adopted a technology driven agenda in 2006 at the beginning of the 11th Five Year Plan. One could also argue with some justification that China's emergence in the communications arena is a result of the rapid rise of the internet giants Baidu, Alibaba and Tencent, known collectively as BAT, and digital competitors including Xiaomi and LeEco. With assets of big data and interests in fin-tech, these companies, many of which are IPO listed, challenge the assertion made in chapter five that state-owned media companies are at the forefront of developments. In fact the power of the new players, the equivalents of global companies such as Google, EBay and Amazon, are disrupting the inefficiencies of State Owned Enterprises (SOEs).

An alternative appraisal might be that the global financial crisis alerted the Chinese government of the nation's overreliance on low-cost manufacturing, characterised by original equipment manufacturing (OEM), and forced policy makers to ramp up existing programs directed at fostering technological innovation, as well as providing more latitude for commercial players, in order that China could move up the global value chain. Together with this, a positive scenario is that China is leading the world in applications of digital technology and their embeddedness in society, leading to greater efficiencies and social dividends. However, such an optimist view runs up against the core premise of the book that digital capitalism will inevitably lead to collapse. While there is no question that China boasts hugely financialized communications companies with strong links to government, the idea of 'digital capitalism' Chinese style seems to me to be an oversimplification.

Networking China: The Digital Transformation of the Chinese Economy provides a much needed critical assessment of China's

engagement with ICTs, telecommunications and media. It is enriched by Chinese sources, including data and policies. Following the release over the past two years of key development blueprints, namely Internet Plus and Made in China 2025, China is attempting to change its image by rebooting its economy. The book represents the most well-articulated discussion of the imminent rise of techno-nationalism and economic development in China. It is an important resource for teachers, lecturers and researchers in the fields of media communications, technology studies, comparative policy studies, political science, and area studies.