

Digital China: From Cultural Presence to Innovative Nation

Michael KEANE (Curtin University)

Ying CHEN (Zhejiang University of Economics and Finance)

Forthcoming in *Asiascape: Digital Asia*

ABSTRACT

The rapid development of digital technology infrastructure in the People's Republic of China together with the government's recent support of grassroots innovation has led to a growing mood of techno-nationalism, as well as a feeling that digital technology can play an important role in renovating China's international image. Powerful internet companies are challenging the dominance of traditional state-owned media. Cultural products are digitized, distributed and consumed on online platforms. Such platforms offer consumers a choice of content through subscription, either free or paid. With China's media and culture striving to 'go out' (*zou chuqu*), typified by CCTV and Confucius Institutes, we pose the question: can China use the 'digital power' of the Internet to achieve international recognition as an 'innovative nation' or will the internet perpetuate a stereotype of China as a copycat nation?

Keywords: Internet+, soft power, Chinese media, internet, mass innovation, online video.

I like to think
(it has to be!)
of a cybernetic ecology
where we are free of our labors
and joined back to nature,
returned to our mammal
brothers and sisters,
and all watched over
by machines of loving grace

All Watched Over by Machines of Loving Grace, Richard Brautigan 1967

Introduction: Ten Thousand Things

Strolling the streets of Shenzhen in Southern China, one might come across a government propaganda poster proclaiming ‘Chinese people love the ten thousand things’ (*Zhongguoren ai wanwu* 中国人爱万物). A philosophical idea informing Daoist and Confucian thought, *wanwu* (literally ‘the ten thousand things’) signifies endless variety and constant change. Placed alongside posters proselytizing the ‘Chinese Dream’, we see an image of a pitiable-looking person amid some small animals (not ‘things’). The interpretation is somewhat mystifying, both to Chinese and foreign passers-by.

From another perspective, *wanwu* extols the success of Shenzhen’s digital industries. The Internet of Things (IoT) is sometimes translated as *wanwu hulianwang* (万物互联网);¹ that is, a network of myriad connected ‘things’ – and potentially many thousands of people. The Internet of Things points to a cybernetic future in which big data, sensors, and smart devices will liberate people, making us more productive. The global production centre for ‘things’ associated with the IoT is Shenzhen. Shenzhen is home to the Chinese technology giant, Tencent Holdings Ltd. On 27 August 2015, a report in the *South China Morning Post* proclaimed that WeChat, Tencent’s popular mobile messaging app, was driving interest in the IoT through its open hardware platform (He 2015). Thanks to ubiquitous technology, low-cost sensors, and easy-to-deploy microelectronics, it is possible to connect ‘just about

¹ More often translated as *wulianwang* (物联网).

anything and everything to the internet’ (Greengard 2015: 57). While Shenzhen is the epicentre of the IoT, developments elsewhere in China are elevating China’s technological capabilities, engendering innovation, and attracting interest from global venture capital.

In this paper, we offer the following speculative question: Can China use the ‘digital power’ of the internet to achieve international recognition as an innovative nation, or will the internet perpetuate a stereotype of China as a copycat nation? Our purpose is not to provide a definitive answer; rather, it is to focus on strategies to enhance the nation’s ‘cultural power’ (*wenhua qiangguo* 文化强国) and, in doing so, its international reputation. China’s digital media industries are commercial, many are IPO (Initial Public Offering) listed entities. At the same time, they are bound to the government’s national development blueprints; in the field of media and technology these are ‘the innovative nation’ (*chuangxin xing guojia* 创新型国家) and, more specifically, Internet+ (discussed below). The ‘innovation nation’, and the techno-utopianism now associated with the Chinese Dream, are tied to China’s development agenda, laid out in the 13th Five Year Economic Plan (cf. Xinhua 2016).

The question of Chinese innovation conjures up various associations. The view in the international community wavers somewhere between suspicion of intellectual property violation and respect for local inventiveness. Following the work of the political scientist David Shambaugh (2013), we deconstruct the concept of global presence. We argue that while China has achieved a global presence – for instance, people everywhere are aware of the ubiquity of made-in-China goods – the idea of China as a centre of innovation has not garnered global recognition: this is despite hyperbolic reports that indicate a shift of global power (cf. Yip & McKern 2016; Erisman 2015). Chinese media, likewise, are viewed in the global mirror as derivative and propagandist, comparing unfavourably with the ‘cool’, often highly original pop culture of South Korea, Hong Kong, Japan, and Taiwan.

The advent of media platforms and services linking Chinese culture and Chinese worldviews with communities around the globe heralds a new dawn of enhanced connectivity, which we will call ‘digital China’. Such an upgrading of digital infrastructure is reflected in cyber-nationalism (Jiang 2012) and techno-utopianism (Lindtner 2015). In this paper, we examine the association between techno-utopianism and political statecraft, particularly the government’s prescription of a cybernetic future in which ordinary people will become ‘mass entrepreneurs’ (for a critique see Lindtner 2015; Wang 2016). In recalibrating the capacity of China’s media and communications industries to ‘go out’, we are looking beyond powerful state media groups (e.g. CCTV, Xinhua, and SMG). We argue that

commercial online platforms can provide a barometer to assess China's influence outside its national borders. Our attention is on internet industry 'giants' such as Baidu, Alibaba, and Tencent, known collectively as BAT.

In our discussion, we characterize the emerging digital ecology in China as a shift from 'state culture' (a closed system) to 'services' (an open system) to 'knowledge' (a complex ecosystem). We begin, however, with a brief overview of scholarship on the internet, identifying a 'perception' of bias, or at least differing approaches to evaluating knowledge in the Western academy and in the PRC. Scholarship conducted outside China is weighted towards online activism (see Yang 2009). There are good reasons for this, not least a strong tradition of critique in the Western academy. However, the internet has many manifestations that can be investigated, including its potential to impact on the workforce, to benefit elderly and marginalized communities, to engender grassroots innovation, and to provide a new distribution channel for traditional cultural products. Our intention in this article, therefore, is to signal a broader pathway for research, one that shows how the internet is transforming China, both within its borders, and in the world outside China's borders.

The next section examines how the internet is enabling the dissemination of culture and, by extension, soft power (Nye 1990). Soft power is arguably an overused concept: it refers to the attractiveness of a nation's culture and values – the ability to 'attract' followers rather than using force (hard power). We introduce the concept of 'presence' as a proxy for soft power, noting how China's 'cultural presence' is remediated in real time through online communication, rather than via conventional soft power strategies, for instance overseas delegations, performances, and festivals.

The next two sections of the paper address the evolving ecosystem of digital innovation in China. We begin with a discussion of three interdependent layers of activity, which are constantly in tension: 'official carriers' (government media institutions), 'digital platforms' (commercial media), and 'users' (consumers/ audiences). The following section introduces the above-mentioned digital ecology framework, which we characterize as 'culture-services-knowledge', a heuristic developed by Stuart Cunningham (2005) to describe the migration of content onto digital platforms, transfers of cross-platform expertise, and the implications for media regulation. We hope that by applying this model to China we will contribute to a more nuanced understanding of media industry convergence on the Mainland, which calls to mind Louis Mumford's 'will to utopia' (Mumford 2003/1922) as much as a will to 'cultural power'. The paper concludes with a provisional assessment of China's capability to become an innovative nation.

Scholarship on the Internet: Balancing a Western Bias

Much territory is currently uncharted with respect to the Chinese government's deployment of internet technologies. To date, the bulk of academic research has focused on the internet *within China*. Research has investigated political control, online activism, and 'cultures of contention' (Yang 2009). In saying this, we need to ask: is there a bias in Western research – or does Chinese research navigate a narrow political road? Perhaps a more appropriate question is: what do we actually mean by the Chinese internet? For over two decades, researchers have focused on political, economic, and social impacts *in* and *on* China (Herold & De Seta 2015: 73–74). While we do not intend to provide a comprehensive listing of literature, it is clear where the English language balance lies. Studies have had two basic foci: the internet and the democratization of China; and the internet as a means of entry for Western corporations into the large Chinese market.

The former, representing the dominant approach, both in terms of numbers and citations, views the internet as a site of contestation. This is represented in critiques of socio-cultural space (Lei 2011; Lu & Qiu 2013; Yang 2009; 2014; Yu 2006; Stockmann 2015; Wang 2015); control and surveillance (Bamman, O'Connor, & Smith 2012; Taubman 1998; Chen 2015), e-governance (Schlæger 2015; Schlæger & Jiang 2015; Balla 2015) as well as the identification of digital, rural, local, and urban divides (Jung *et al.* 2001; Qiu 2009; Weber 2011; Szablewicz 2015). On the other hand, the business focus is on legal and regulatory issues such as intellectual property, consumer rights protection, and online user experience (examples include Cheung 2016, 2012; Montgomery & Priest 2016; Keane & Zhao 2012; Gao, Waechter, & Bai 2015; Liu, Y. 2015).

In order to draw a comparison of research themes, we conducted a search on the Chinese Social Sciences Citation Index (CSSCI) using the specific search criteria: title=Internet: time=2014 – 10 August 2016. The results showed 2225 records: 2014 (482), 2015 (1004) and 2016 (740).² Research within the PRC is broadly organized into four clusters. The first cluster concerns BAT, the collective term now used to describe the three largest internet technology players, Baidu, Alibaba, and Tencent. As we discuss below, these three companies with their combined assets and resources effectively run the commercial

² The search was conducted in early August 2016 and it is evident that citations in 2016 are likely to exceed previous years.

internet in China. Citations counts in this cluster list ‘Internet+’³ (342), the ‘mobile internet’ (116), ‘internet thinking’ (85), and ‘big data’ (68), and topics range from finance to film production, especially with BAT active in the film production sphere. The second cluster examines development trends and governance regulations pertaining to the internet finance ecosystem. According to Chen & Tan (2016), more than 270,000 papers had been authored on internet finance by the end of 2015. Prominent citations here are ‘internet finance’ (341) and ‘third party payments’ (47). The third cluster concerns Massive Open Online Courses (MOOC) operated by the top universities across a range of subject areas with citations in ‘social media’. The fourth category is a general discussion of the internet and citations mainly address ‘internet economy’ (46) and the Internet of Things (42).

From the abovementioned comparison of literature and citations, it is clear the research focus is overwhelmingly about the internet *in* China – and in the case of Chinese research, the architecture of the internet. In contrast to research conducted outside China, there is a deficit of research within China on social activism. This is hardly surprising. Research conducted on China in liberal democracies privileges resistance to power and draws heavily on theorists writing about pluralist societies. Transplanting across social and political contexts, for instance, Foucauldian notions of power (cf. Jiang 2012), often leads to predetermined analytical outcomes, for instance, that China is irrevocably drawn into a neoliberal world order. In fact, the obverse is the case, much of the world is influenced directly or indirectly⁴ by the ‘China model’ of state capitalism. In this paper, we draw ideas from a broad range of scholarship in order to contribute to a middle-range theoretical approach.⁵

The overriding image from the international research literature is that China is changing slowly, aside from its restless digital communities. Yet, anyone who has spent time in China knows that it is probably the most successful nation state in the world in terms of its ability to adapt. In their state-of-the-field stocktake, Herold & De Seta (2015: 79) note that very few studies have looked at ‘how China shapes the Internet.’ We believe there are two

³ The government’s internet blueprint; see discussion in the following section.

⁴ In the developed world, the Chinese approach to sovereignty, including internet sovereignty, is influential. Much of this ‘soft power’ is led by Chinese business going out; in particular, the One Belt One Road Policy is opening Eurasia to Chinese notions of economic and social progress.

⁵ Middle-range theory is distinctive from ‘grand theory’: like its name, it attempts to broker a middle way between totalizing explanatory schemes or grand narratives and traditional area studies approaches that require country-specific knowledge.

reasons for this gap: first, Western scholarly bias towards critique, and second, a lack of global presence by China's internet corporations. However, the second reason no longer holds true, as the Chinese research citations attest. Alibaba's success as the world's largest IPO ever represents the first wave in the globalization of China's internet corporations. When China overtook the US in 2014 as the world's largest economy in purchasing power parity terms, its success was partly due to an increasing commitment to the development of information communication technology (PwC 2015). Elsewhere, the MIT-based China expert Wang Jing (2016) notes a seismic shift from top-down government-managed clusters and innovation parks to bottom-up creative maker communities.

Presence Remediated: Digital Culture 'Going Out'

In the first decade of the new millennium, national soft power became a talking point in Chinese think tanks. A notable development in China in the early 2000s was the appropriation of Nye's (1990) concept within a policy framework called 'comprehensive national power' (Hu & Men 2002), which, at the time, aligned with the idea of a 'rising China'. In the years coinciding with the ascendancy of the Xi Jinping faction in 2013, a new slogan, 'strong cultural power' (*wenhua qiangguo* 文化强国), entered the political lexicon. Along with the pre-existing policy of 'going out', it identified the need for China to convert its economic presence into global cultural dominance, or perhaps to put it more contentiously, to assert China's 'cultural power'.

Without doubt, China has established an economic presence in the world in the past decades. Made-in-China goods proliferate. Chinese companies have established market presence, for instance: Huawei (Huawei Technologies: electronics), Hai'er (Hai'er Corporation: white goods), and Lenovo (Legend Holdings Ltd.: computers). Yet, despite these outbound achievements, China's international brand (its reputation) remains demonstrably weak. Economic presence does not equate to influence or 'soft power' status. Internationally, the UK, the US, Japan, and South Korea have garnered reputations as creative nations. The Chinese government is envious and has for some time endeavoured to make the nation's culture more globally appealing, its media output more imaginative, and its technology more cutting edge. Many strategies currently assist Chinese culture (and ideology) to 'go global'. Government-endorsed cultural representatives – Confucius Institutes, China Central Television (CCTV) channels, artists, and performance troupes – have 'gone out'. However, despite such initiatives, Chinese world views have shown few

signs of ascendancy on the global stage outside of overseas Chinese communities. China is a ‘partial power,’ according to David Shambaugh (2013). Western culture has consolidated its influence.

While the ‘going global’ of China’s media and the quest for soft power may be ‘the hottest topic of the day’ (Zhao 2013: 18), research has yet to address the role of China’s new ‘digital champions’, best represented by Baidu, Alibaba, and Tencent (BAT), whose CEOs proudly self-identify as ‘digital disruptors’. Undoubtedly, ‘digital disruption’ is impacting on traditional modes of production and consumption. At the same time, it is challenging the Chinese Communist Party to reassess its command and control strategies in the cultural sphere. While disruption is a term that one needs to be cautious of when it is promoted by companies with strong links to an authoritarian government, already there are signs that a new digital Silk Road is allowing Chinese cultural goods and services to make virtual inroads into world markets, paralleling the material infrastructure of One Belt One Road. That said, we note that the internationalization of China’s digital media empire is just beginning. An analysis of China’s ‘overseas deals’ between 2006 and 2016 by Bloomberg (2016) reveals a prominent spike in internet and software in the past year.

The most obvious example is Alibaba’s Taobao (within China) and AliExpress (internationally). To this we can add Baidu’s streaming service IQiyi as well as LeTV and Youku Tudou, which allow Chinese content to be accessed anywhere in the world in real time, even while Google’s YouTube and Facebook are blocked in the Mainland. We might even say that digital channels and applications (apps) are changing the ways that Chinese culture ‘goes out’. How digital companies such as Baidu, Alibaba, and Tencent navigate the vagaries of policy while appropriating the creativity of user communities is of great interest to scholars as well as foreign governments and businesses looking to develop networks and to expand their operations in China.

As always in China, the context is economic and social development. In the framing of the 13th Five Year Plan for Economic and Social Development (2016–2020), the Chinese leadership has moved its development agenda towards the nation becoming a services-led economy. Informatization (*xinxi hua* 信息化), and the upgrading of digital infrastructure, are central to this agenda. As far back as the Tenth Five Year Plan (2001–2005) period, the Ministry of Science and Technology (MOST) articulated China’s National Innovation System (NIS) strategy; it greenlighted the construction of science and technology industrial parks, software parks, science and technology business incubators, and introduced schemes to entice

Chinese technology graduates working in Silicon Valley to return to China (Wang 2016). In 2006, China's State Council launched a mid- to long-term plan (2006–2020) to strengthen China's science and technology (S&T) development. China would become an innovation-oriented nation (*chuangxin xing guojia* 创新型国家) by 2020.

The 'Outline of the Program for Innovation in National Culture and Technology' in 2012 further established the blueprint. In March 2015, the President Xi Jinping-led government championed a policy agenda called Internet+, the next stage in a strategy to expand informatization and harness the benefits of the knowledge economy. The Internet+ strategy offers a big-picture reassessment of digital capabilities. Its objectives are: 'to integrate mobile Internet, cloud computing big data, and the Internet of Things with modern manufacturing, to encourage the healthy development of e-commerce, industrial networks, and Internet banking, and to get Internet-based companies to increase their presence in the international market' (Li 2015). The plan is even touted as the 'uberisation of the Chinese economy' (Pasquier 2015). The technological frontier of Internet+ includes next generation information networks, core electronics, high-end software and new information services. Particularly in coastal cities such as Beijing and Shanghai, the emerging technologies of mobile internet, cloud computing, and big data are driving the 'upgrade' of cultural and creative industries. By endorsing the Internet+ blueprint the government has championed 'collaborative innovation' (*xietong chuangxin* 协同创新), which entails liberating grassroots innovation (Wang 2016). In June 2015, the State Council issued instructions in a document entitled 'Opinions to Further Boost Mass Entrepreneurship and Innovation' (*dazhong chuangye wanzhong chuangxin* 大众创业万众创新). Among the eight recommendations/opinions were a range of policies and fiscal incentives to maximize the development of an 'entrepreneurial ecosystem.' This is discussed in the following sections.

Official Carriers, Digital Platforms, and Users

Many studies focus on part of the evolving digital landscape, for instance the involvement of 'netizens' and activists, business leaders, or political institutions. In order to understand how the internet functions in China, not just the internet *within* China, we need to be aware of the larger canvas. Of course, our point here is that Chinese servers and websites have an international reach; that is, they are not blocked by foreign governments. We identify three interrelated domains of content origination, dissemination, reception, and sharing: these are (i) official carriers, (ii) digital platforms, and (iii) users.

Official carriers include government departments and ministries – the primary legislators and providers of media infrastructure. While major state media organizations have established an online presence as part of government going online, the state’s continued and routine interference in content has rendered official channels largely ineffective (Sun 2015: 409). The term ‘official carriers’ thus reflects the ‘visible hand of government’ (Keane_2015) in the form of regulation, subvention, and censorship. The most heavy-handed regulatory institutions are the Ministry of Culture, the State Administration of Press, Publication, Radio, Film and Television (SAPPRFT), and the Central Propaganda Department, sometimes called the Publicity Department.

The state’s involvement in disseminating messages overseas; that is, making China’s voice heard in the world, has a long legacy dating back to the Maoist era: it is routinely described as external propaganda (*wai xuan* 外宣). Sending messages overseas is part of China’s foreign relations, which has evolved considerably since the 1950s. Florian Schneider (2016) writes that attention now is focused on not offending ‘foreign audiences’ with content that is too ‘propagandistic.’ The problem is that propaganda (ideology) is never far from the surface, even in formatted entertainment programmes like *The Brain* (*Zuiqiang Danao* 最强大脑). State-approved content is dispatched to overseas markets, sometimes facilitated by reciprocal business relationships; for example, China Central Television (CCTV) is broadcast in multiple languages and accessed on foreign TV networks in exchange for landing rights in the PRC. However, despite a massive upscaling in the number of channels, particularly in overseas tourist hotels, there is no actual audience research that validates CCTV’s reception overseas (see Zhu 2013). What we do know is that overseas Chinese audiences, apart from viewing the 7.00 pm national news service, which is distributed by CCTV, are predominantly attracted to commercial satellite channels (Sun & Sinclair 2016). At the same time, incoming cultural content is strictly regulated by SAPPRFT, forcing foreign players to partner with Chinese companies or invest in non-content areas.

Digital platforms have benefited from the rollout of public communications infrastructure. They are represented primarily by Baidu, Alibaba and Tencent (BAT), aka the ‘Three Kingdoms’, a reference to the intense competition in the digital landscape. These ‘kingdoms’ are acquiring social networking firms, game developers, online video portals, logistics, and apps to strengthen their market position and compete with each other for the spoils of war (Mian 2015). Comparatively speaking, they exert control over different domains, while gradually encroaching on interests in the cultural and creative industries.

Baidu remains the dominant search engine in China, Alibaba is synonymous with e-commerce, while Tencent lords over social media. While BAT is an easy acronym to remember, there are many other players contending for the spoils of the digital age, some of which have been absorbed into BAT war chests; for instance, the online video site Youku Tudou is now one-third owned by Alibaba. Tencent Holdings and Sohu meanwhile have engaged in protracted merger deliberations since early 2015.

Chinese communications, technology, and media companies have already ‘gone out’ in a number of ways and directions. As early as 2005, Lenovo had bought IBM’s PC division, later acquiring Motorola’s smartphone business. By the first half of 2014, the high technology sector accounted for 87.5 per cent of Chinese FDI in the US, with several companies targeting assets in Silicon Valley. Baidu set up R&D centres in Silicon Valley in 2014, to add to those in Japan, Brazil, and Thailand (Wang & Miao 2016). Undoubtedly, Dalian Wanda’s acquisition of AMC (2014) and Hoyts (2015) cinema chains as well as its purchase of Hollywood’s Legendary Pictures in 2016, will provide global outlets for Chinese content. Similarly, LeTV’s 2015 partnership with Netflix to reformat the TV drama *Empresses in the Palace* entails a strengthening of commercial strategies abroad. Alibaba’s 2015 acquisition of the *South China Morning Post* affords it an influential role in shaping international perceptions of China (Barboza 2015), pointing to what many consider the real intent of the ‘going out’ campaign, namely, reversing negative reporting of China (Sun 2015; Zhao 2013). In 2016, CCTV resold digital streaming rights to the Rio Olympics to Tencent and AliSports, the online sports arm of Alibaba, for a fee reported to be RMB 100 million (US\$15 million) for each (Lee 2016). Chinese audiences globally were able to access the Games through these apps.

The influence of these platforms is disrupting the traditional media, which are having to change their strategies. In looking to internationalize, these platforms have government support. There is, however, a quid pro quo. The 13th Five Year Plan has made it clear that China’s leading internet companies are set to play a key role in providing their ‘open innovation resources’ to small- and medium enterprises and entrepreneurial start-ups (cf. Xinhua 2016: ch. 26), and to facilitate innovation in ‘culture’ through the convergence of technological innovation and cultural creativity (Ibid.: ch. 68). In this way, the Chinese government looks to secure the services and loyalty of its digital champions.

Users in China numbered 710 million by June 2016 (CNNIC 2016), in addition to many hundreds of millions overseas. As international critique has shown, the Chinese internet represents a sphere of unprecedented informal creativity. Much of the creativity (and culture)

that manifests among users is based on media events; for instance, parodies, spoofs, and critiques of power and corruption. Users are largely ambivalent; they engage with symbolic forms and practices; they are often amateur, and they thrive on a culture of contention (Yang 2009: 7). While some are extremely patriotic, many others are hostile; indeed, many rely on their messages ‘going out’ to the world in order to underpin civil society activism (Yang 2009). Such counter-publics find ways of avoiding censorship, circulating memes, and tales of official corruption, often encoded in a distinctive ‘internet language’ that is frequently two steps ahead of the regulators. All the same, time patriots patrol the internet, taking down offending posts and reposting patriotic messages (Keane, J. 2013).

The relationship between official carriers and digital platforms, and between government and communities, is underpinned by the spectre of ‘internet sovereignty,’ adding a layer of ‘structured uncertainty’ (Bresnitz & Murphree 2013) to the activities that are allowable and encouraged. If digital platforms act overtly as carriers of propaganda or emissaries of the state, they will jeopardize profitability; and if they follow a purely commercial route (by encouraging contention) they will attract conflict from regulators. While they may be lauded as digital champions, the reputation of these companies in China is far from assured. Baidu in particular has been a willing accomplice of Chinese censors (Yang 2009).

Culture-Services-Knowledge

Online media, big data, a plethora of apps, devices, and affordances, are changing the way people everywhere connect with and consume culture. In addition, the ‘cloud’, a distributed system of computer resources, millions of servers, hard drives, routers, fibre-optic cables, and networks that connect masses of people (Hu 2015), has resulted in an unprecedented repository of personal data. On a positive note, digital technology is providing new opportunities for ‘vernacular’ (Burgess 2006), amateur (Leadbeater & Miller 2004), and grassroots creativity (Voci 2010). The digital environment impacts on how artists and ‘culture-makers’ express themselves. Burri-Nenova (2008: 17) writes, ‘everything is online and some things are only online.’ Consider, for instance, the process of cultural production: a film producer secures a script, finds a director, actors, film crew, technical support, and financiers; the output is then digitalized; the rights are sold to online platforms whereby the film is streamed or downloaded on-demand. At the same time, the consumption of the product online leaves a digital fingerprint that is of value to advertisers and associated third parties, perhaps including government.

How, then, can we make sense of China’s convergent media space? In 2005, Stuart Cunningham described ‘three grids of understanding -- “culture”, “services”, and “knowledge”’ (Cunningham 2005, 200) to explain changes wrought by convergence on ‘cultural policy fundamentals’. The context was an increasing trend towards transmedia and the monetizing of digitally-enabled user-generated content. As mentioned above, material culture (the book, the movie, the TV serial) is digitized, downloaded, and streamed on demand (services), and this affects a digital trace (knowledge, big data). This trajectory has accelerated. The convergent media environment is nowhere more evident than in China, as shown in the following table.

Table 1: The CSK ecology of cultural production and digital consumption in China

	Culture (closed system)	Services (open system)	Knowledge (complex ecosystem)
Official carriers	Cultural security, propaganda function e.g. CCTV ‘going out’.	Regulatory policies and institutions to support both official and commercial enterprises ‘going out’; state-owned digital enterprises, e.g. China Network Television (CNTV)	‘mass entrepreneurship, mass innovation’, Internet+.
Digital platforms	Content production, distribution (digital and material culture) to overseas consumers	e-commerce / social networks / search engines / multimedia streaming; acquisition of grassroots content and conversion to professional generated content (PGC)	Cloud computing / big data analytics / algorithms and artificial intelligence; market intelligence; applications in non-cultural domains (e.g. health, education, finance, population management)
Users	Amateur, artistic, and smaller scale production / cultures of ‘contention’ / unofficial China	Nomadic consumers, the amateur-professional interface, fan communities, user generated content	Online sharing Communities / hacker and maker communities, crowdfunding, crowdsourcing, co-working spaces

Culture is clearly politicized in the PRC, and has been for over two thousand years since the Confucian rectification of names. While popular culture globally is dynamic (see Groys 2014), in modern China official culture has effectively functioned as a ‘closed system’: essentially, an archive of doctrinal proscriptions that evoke inflexible political ideas about

statecraft. In the Maoist era, all cultural workers were designated as government employees; culture was the superstructure, and the economy the material base. The reforms initiated by Deng Xiaoping moved culture towards the economy / base. Culture was something to be ‘developed’, but according to certain guiding principles. Foreign investment was off limits. From the late 1990s, cultural development (*wenhua jianshe* 文化建设) exercised the minds of policymakers at all levels of government in China. During the next decade, coinciding with the 10th and 11th Five Year Plans, systemic reforms facilitated the industrialization of Chinese culture, and managed the inflow of ‘foreign culture’ and investment in non-sensitive areas such as media infrastructure in the wake of WTO accession.

In 2001, the State Council ratified the term cultural industries following protracted debates about ‘cultural security’ (*wenhua anquan* 文化安全), namely the weakness of Chinese culture vis-à-vis foreign competitors (Keane 2013). The primary plan was to generate more quantifiable cultural outputs; this resulted in a rapid expansion of physical infrastructure – cultural parks, creative precincts, cultural quarters and streets, theme parks, and film bases. At the same time, there was some liberalization of expression, especially for visual artists. Yet, the cultural industries were fundamentally about material culture, not creativity. Culture was reduced to industrial outputs, accounted for in Blue Book (*lanpi shu* 蓝皮书) reports, which show increasing productivity; for instance, the number of books published, the value of paintings sold, the quantity of handicrafts made, the number of films, theatre performances, television serials produced and so on.

Intangibles such as box office takings were harder to measure than the shiploads of artefacts and paintings heading towards Hong Kong, the main exit gateway for China’s outbound cultural trade. When the government operationalized plans to extend China’s ‘cultural power’ globally in the mid-2000s, it did this largely through conventional government supported channels such as television and radio programmes (CCTV, China Radio International), overseas missions (Confucius Institutes), and performing arts troupes, as well as by encouraging film makers to make movies that were representative of China. ‘Going out’ took a number of forms; by the second decade, commercial filmmakers had begun to shoot overseas; many looked to coproduce with overseas players, or more significantly foreign producers looked for opportunities in China. TV reality shows such as *Where Are We Going Dad?* (Hunan Satellite TV) and *Running Man* (Zhejiang Satellite TV) were made offshore. Incidentally, both of these were formats imported from South Korea. Overseas TV specials were shot in China featuring international contestants often from the

Chinese Diaspora, once again showing a ‘reconnection’ with Chinese culture (Keane 2016).

Services came of age in the first decade of the new millennium. A key moment was the launch of the bit torrent site BTChina in 2003 (Zhao & Keane 2013), which suddenly allowed internet users a degree of agency. *Services*, at least the idea that one was able to choose from an expanded buffet of content, thus symbolized an ‘open system’, one that interacted dynamically with a wider net environment. The rapid development of user-generated content (UGC) challenged the hegemony of professional culture makers employed in state institutions. Much user-generated content was commercially unusable, once described by Tudou’s founder Wang Wei as industrial waste water, a reference to its low quality and high consumption of bandwidth (Zhao 2016). Some grassroots content producers made the jump into professional content and in doing so contributed to the professionalizing ethos of user communities. Original content became king (once again) and amateur content creators were given a new lifeline in the form of individual channels (*zipindao* 自频道 dedicated to made-for-web content (Zhao 2016). By the second half of the first decade, leading digital platforms in China such as IQiyi, Youku, and LeTV were searching out new content for their own platforms; in addition to acquiring overseas rights to popular movies and TV shows they sought to invest in home grown movies, television series, and sponsor the production of webisodes.

Initially, many hesitated to pay for subscription services such as IPTV, video-on-demand, and streaming. Regulations enacted in 2008 made free downloading illegal, or at least more difficult, and forced the digital platforms to compete in an arms race for rights to content that could be used on their sites and on-sold to other online sites, including those that serviced user communities overseas (Zhao & Keane 2013). Online sites became the prime vendors of culture, offering branded products. Even CNTV, the national digital platform operated in conjunction with CCTV, began to offer e-commerce and product tie-ins. Culture began to move through digital pipelines precipitating the involvement of the household economy, namely home-based workers and designers that are sub-contractors for e-commerce companies like Taobao. The distribution of online cultural products (fashion, handicrafts, and designer goods), together with online sales of movie tickets, featured as part of Alibaba’s development strategy as it moved into the cultural and content business. Tencent’s Wechat platform went global, with users in China sharing links to online videos with their family and friends overseas, much in the same way as Facebook and Youtube did, although Wechat’s digital functionality outpaced its Western competitors. Consumers (and

users) were faced with more options, more digital choices, and more chances to ‘pull’ the content of their choosing. At the same time, commercial interests were engaging in ‘pushing’ products. Even if the users were not subscribing they were visiting sites and sharing their interests through social media. Data analytics companies moved centre stage. This is a far cry from the situation in the late 1980s, when the state media would transmit messages to a mass audience on a limited number of media channels, most of which were similar. This is the age of abundance.

Knowledge suddenly transforms the ecosystem: it becomes a commodity as well as a means to engender creativity and monitor intellectual property compliance. Big data analytics and the cloud mean that content is stored while user activity is scrutinized and viewing habits delivered to advertisers. Second screen viewing apps associated with Alibaba, Tencent, and Baidu (IQiyi) offer prizes to viewers who provide more details about themselves and their ‘friends’. Of course, this is a global phenomenon and many people willingly give over details to internet companies without knowing where this information might go (Lee & Andrejevic 2014). The Chinese cousins of international apps such as Zeebox, Viggle, Miso, and GetGlue include Panda TV, Acfun, Bilibili, and CBox, which also function to allow people outside China to access and share selected Chinese content.

However, this is a complex ecosystem in other respects. Not all data is accessible and usable. Lugmayr *et al.* (2016) propose different categories of big data: light, grey, and dark, referring to the degree of transparency. Dark data, for instance, includes the dark web, a domain of connectivity that evades government control, often harbouring hackers, porn sites, and fraudsters. ‘Grey’ data refers to activity that is partly traceable – it is known to exist but is relatively ‘unknowable’ (i.e. accessible), whereas ‘light’ data is searchable – and knowable – data. The down side is that the Chinese state can also trace the digital activity of almost all its citizens, including people living overseas. The well-known Chinese maxim *shang you zhengce, xia you duice* (上有政策，下有对策; ‘on the top there are policies, below there are tactics’), which refers to the possibility of evading rules, becomes less operational. In October 2016, *The Washington Post* reported on how the Chinese government would soon operate a rating system on everyone by using big data, ‘vacuuming’ records from courts, policy, banking, tax, and employment, essentially creating digital profiles (Denyer 2016). It goes without saying that big internet companies are expected to comply with such surveillance. A well-known case, outside of China, is of the US internet company Yahoo supplying information about pro-democracy activist Wang Xiaoning in 2002, resulting in Wang, a

resident of Beijing, being convicted and jailed for ten years. Returning once more to the new oligopoly of BAT – the Three Kingdoms – Baidu maintains close links with the government and, consequently, has a poor reputation among many net users in China. Alibaba meanwhile has a reputation for fake products, a weakness that conspires to thwart its global ambitions. Of the three kingdoms, only Tencent seems to have the confidence of users.

Concluding Remarks: Utopia in the Cloud

In this final section, we turn to the question posed at the beginning: Can China use the digital power of the internet to achieve international recognition as an ‘innovative nation’ or will the internet perpetuate a stereotype of China as an authoritarian state and a copycat nation? The short answer is that both scenarios are likely to play out.

To address the innovative nation conundrum first, the nation is undoubtedly riding on a wave of digital utopianism. Utopia is a familiar concept in literature and politics: in the language of the Great Proletarian Revolution, communism would release people from their hard labour. The current political version called the Chinese Dream promises not a land of plenty, but national revitalization; it projects forward to 2049, when China will be a superpower and a technological powerhouse. Yang Guobin (2009: 156) writes about the utopian impulse among online communities, ‘a critique of the present and a yearning for a better world.’

Currently, the Chinese government identifies three kinds of innovation: original innovation, innovation in logistics and supply chains, and secondary innovation (*zai chuangxin* 再创新). The last of these categories is where China plays the hardest, taking ideas from the rest of the world and ‘fine-tuning’ them. To achieve ‘original innovation’ requires a fundamental change in the way that information is managed and this needs to extend across society, not only in free trade zones and selected maker spaces. Meanwhile, China is building its own unique capabilities; for instance, Shenzhen’s maker movement has opened up linkages to global technology communities, which have the potential to change China’s image as a copycat nation (see Lindtner 2015). Massive amounts of money have flooded into digital projects since the government’s announcement of Internet+ in March 2015. The upside to this is that more researchers and entrepreneurs from places like Silicon Valley are returning to China to grab a piece of the action. Many employees at China’s large internet companies such as Alibaba speak with American accents. They have returned from Silicon Valley for a piece of the dream.

The idea that everyone can be an entrepreneur and an innovator, and in doing so contribute to building the Chinese Dream, is alluring. Part of the statecraft behind this policy is alleviating social tensions among the large demographic sardonically referred to as *diaosi* (屌丝; ‘losers’); for instance, people with computing and IT skills who lack career prospects. The utopianism of digital innovation and the dream fantasy that ‘anyone can be an entrepreneur’ functions as a pressure release valve. The rapid development of digital hubs, and the hype associated with projects, such as the aptly named Dream Town (梦想城镇) in Hangzhou (, a place where aspiring start-ups compete to gain admission, is evidence of the new national mindset articulated by Internet+. The iconography of Dream Town is a composite of the ‘mass entrepreneur’ and the young tech-savvy neophyte, reminiscent of the sent-down youth of the Cultural Revolution. Indeed, a publicity image promoted by Hangzhou’s Dream Town shows a golden field, a field of dreams. Jack Ma’s presence is felt in Dream Town: on the wall we find his handprints, first and foremost among a cohort of entrepreneurs, many of whom are de facto state officials. This is a dream of a cybernetic future in which China will rebalance its economy, become an innovative nation, and achieve a measure of global soft power.

In the next five years, we will surely know more about the potential of the innovative nation. The down side is that the Xi Jinping regime is sending out mixed messages. Be innovative and make money. Be disruptive but confine this to the marketplace, as demonstrated by the competitive activities of BAT. Underpinning this digital development blueprint is the fact that a great deal of innovation currently comes from below. Premier Li Keqiang is the cheerleader, visiting makerspaces and encouraging young Chinese to retool. From the government’s perspective, the primary reason for the interest in the Internet of Things, makerspaces, mass entrepreneurship, and innovation hubs is nation building. China needs the Internet of Things because connectivity will alleviate many problems, at least that is the plan. The IoT can fine tune air conditioners to improve energy consumption. Combined with big data it can improve crop yields. The use of sensor networks can help monitor traffic congestion. And, of course, it can effectively monitor subversive activities.

However, the success of Silicon Valley, which the government seeks to emulate, was fostered in an environment that celebrates individualism and neoliberal values. How this will play out in China in the future remains unclear. The rapid breakout of incubators, innovation hubs, and Silicon Valley style projects raises questions about the government’s ability to micro-manage creativity, similar to the creative clusters of the past decade. In the end, most

became real estate projects (see Keane 2011). Moreover, the massive investment in cloud computing is a mixed blessing. Big data in the hands of the right people, for instance scientists, medical practitioners, is valuable. In the hands of government authorities it increases the risk of surveillance.

The implications for Chinese culture going global via its digital champions is less clear. Will China's digital missionaries succeed beyond the Mainland? Currently, the success of Chinese online platforms provides overseas Chinese with a connection to their home culture. But this is an ethnocentric model of 'going out': that is, consumers are already culturally familiar with the content, with the product, and with the messages. The positive side for the government is that these online platforms are connecting many 2nd generation Chinese, for instance the sons and daughters of migrants. Overseas Chinese are consuming content and sharing this on Wechat. However, in order for China to achieve real cultural power, Chinese media needs to engage with poly-ethnic communities and audiences; that is, the unconverted 'non-Chinese'. Taking Chinese culture to the foreigner (*waiguo ren* 外国人) is more difficult. In this regard, China's digital champions are probably better placed than China Central Television or its cousin China Network Television; they are currently buying up knowledge assets, brands, and customer data bases gaining know-how that will assist in cracking the world market. Companies like Alibaba, Wanda, Tencent, and LeEco are seeking to learn from international competitors by forming business alliances.

At the same time, even these frontrunners have to overcome global perceptions of China as an imitative nation (Yang 2016), of an authoritarian regime that has, and continues to suppress expression. As Shambaugh argues, this illustrates a weakened version of soft power, reflective of a 'partial power,' not yet a great power (*da guo* 大国).

References

- Balla, Steven J. (2015), 'Government Consultation and Political Participation on the Chinese Internet'. In: Guobin Yang (ed.), *China's Contested Internet*. Copenhagen: NIAS Press, 75–107.
- Bamman, David, O'Connor, Brendan, & Noah A. Smith (2012), 'Censorship and Deletion Practices in Chinese Social Media', *First Monday*, 17(3), retrieved 18 November from <http://firstmonday.org/article/view/3943/3169>.
- Barboza, David (2015, December 11), 'Alibaba Buying South China Morning Post, Aiming to Influence Media'. *New York Times*, retrieved 18 November 2016 from

- http://www.nytimes.com/2015/12/12/business/dealbook/alibaba-scmp-south-china-morning-post.html?ref=topics&_r=0.
- Bloomberg (2016), *China Deal Watch*. Retrieved 18 November 2016 from <http://www.bloomberg.com/graphics/2016-china-deals/>.
- Brautigan, Richard (1967), *All Watched Over by Machines of Loving Grace*. San Francisco: The Communication Company.
- Bresnitz, Dan & Michael Murphree (2011), *Run of the Red Queen: Government, Innovation, Globalization and Economic Growth in China*. New Haven: Yale University Press.
- Burgess, Jean E. (2006), 'Hearing Ordinary Voices: Cultural Studies, Vernacular Creativity and Digital Storytelling'. *Continuum*, 20(2), 201–214.
- Burri-Nenova, Mira (2008), 'Trade Versus Culture in the Digital Environment: An Old Conflict in Need of a New Definition'. NCCR Trade Delegation, *Working Paper* no 2008/17, retrieved 18 November from http://www.phase1.nccr-trade.org/images/stories/publications/trade_culture_burri.pdf.
- Chen, Thomas (2015), 'The Workshop of the World: Censorship and the Internet Novel "Such is the World"'. In: Guobin Yang, (ed.) *China's Contested Internet*. Copenhagen: NIAS Press, 19–44.
- Chen, Lin & Yangjing Tan (2016), 'Hulian wang jinrong shengtai xitong fazhan qushi ji jianguan duice' (Internet Finance is a Drastic Reform of Internet Thought Pattern and Technology). *Caijing kexue (Finance Economics)*, 3, 49–57.
- Cheung, Ming (2012), 'Shanzhai Phenomenon in China: The Disparity between IPR Legislation and Enforcement'. *International Review of Intellectual Property and Competition Law*, 43(1), 3–20.
- Cheung, Ming (2016), 'The E-commerce Revolution: Engendering Trust and Consumer Rights in China'. In: M. Keane (ed.) *Handbook of Cultural and Creative Industries in China*. Cheltenham: Edward Elgar, 412–430.
- CNNIC (2016), Statistical Report on Internet Development in China (July 2016) 38th Survey Report. China Internet Network Information Centre. Retrieved 18 November 2016 from <https://cnnic.com.cn/IDR/ReportDownloads/>
- Cunningham, Stuart D. (2005), 'Culture, Services, Knowledge: Television between Policy Regimes'. In: Janet Wasko (ed.), *A Companion to Television*. Malden, MA: Blackwell Publishing, 199–213.
- Denyer, Simon (2016, October 22), 'China Plans to Organize its Society Relies on "Big Data" to Rate Everyone'. *The Washington Post Online*, retrieved 18 November 2016

- from https://www.washingtonpost.com/world/asia_pacific/chinas-plan-to-organize-its-whole-society-around-big-data-a-rating-for-everyone/2016/10/20/1cd0dd9c-9516-11e6-ae9d-0030ac1899cd_story.html.
- Erisman, Porter (2015), *Alibaba's World: How a Remarkable Chinese Company is Changing the Face of Global Business*. New York: Palgrave Macmillan.
- Gao, Lingling, Waechter, Kerem A. & Xuesong Bai (2015), 'Understanding Consumers' Continuance Intention towards Mobile Purchase: A Theoretical Framework and Empirical Study – A Case of China'. *Computers in Human Behavior*, 53, 249–262.
- Groys, Boris (2014), *On the New*, translated by G.M. Goshgarian. London: Verso.
- Gu, Shulin & Bengt-Åke Lundvall (2006), 'China's Innovation System and the Move towards Harmonious Growth and Endogenous Innovation'. *Innovation, Management, Policy and Practice*, 8, 1–26.
- He, Huifeng (2015, August 27), 'WeChat Eyes Lead Role in "Internet of Things" as Tencent's Mobile Messaging Tool Lures Developers to its Open Hardware Platform'. *South China Morning Post*, retrieved 18 November 2016 from <http://www.scmp.com/tech/innovation/article/1852787/wechat-eyes-lead-role-internet-things-tencents-mobile-messaging-tool>.
- Herold, David K. & Gabriele De Seta (2015), 'Through the Looking Glass: Twenty Years of Chinese Internet Research'. *The Information Society: An International Journal*, 31(1), 68–82.
- Hu, Angang & Honghua Men (2002), 'The Rising of Modern China: Comprehensive National Power and Grand Strategy'. Presentation to "Rising China and the East Asian Economy", International Conference by KIEP held 19–20 March 2004 in Seoul, previously published in Chinese in *Strategy & Management*, 3, 2002. Retrieved 18 November 2016 from <https://myweb.rollins.edu/tlairson/china/chigrandstrategy.pdf>.
- Hu, Tung-Hui (2015), *A Prehistory of the Cloud*. Cambridge, MA: MIT Press.
- International Telecommunications Union (ITU) (2015), 'Measuring the Information Society 2015'. Geneva: ITU.
- Jiang, Ying (2012), *Cyber-Nationalism in China: Challenging Western Media Portrayals of Censorship in China*. Adelaide: University of Adelaide Press.
- Jung, Joo-Young, Qiu, Jack L. & Yong-Chan Kim (2001), 'Internet Connectedness and Inequality: Beyond the "Divide"'. *Communication Research*, August, 507–535.
- Keane, John (2013), *Democracy and Media Decadence*. Cambridge: Cambridge University Press.

- Keane, Michael (2011), *China's New Creative Clusters: Governance, Human Capital and Investment*. London: Routledge.
- Keane, Michael (2013), *Creative Industries in China: Art, Design, Media*. London: Polity.
- Keane, Michael (2015), *The Chinese Television Industry*. London: BFI Palgrave.
- Keane, Michael (2016), 'Disconnecting, Connecting and Reconnecting: How Chinese Television Found Its Way Out of the Box'. *International Journal of Communication* 10, 5426--5443.
- Keane, Michael and Elaine J. Zhao (2012), 'Renegades on the Frontier of Innovation: The Shanzhai Grassroots Communities of Shenzhen'. *Eurasian Geography and Economics* Special issue on Creative Economy, 53(2), 316–330.
- Leadbeater, Charles & Paul Miller (2004), *The Pro-Am Revolution: How Enthusiasts are Changing our Economy and Society*. London: Demos.
- Lee, Hye Jin & Mark Andrejevic (2014), 'Second Screen Theory: From the Democratic Surround to the Digital Enclosure'. In: Jennifer Holt & Kevin Sanson (eds), *Connected Viewing: Selling, Streaming and Sharing Media in the Digital Age*. New York & London: Routledge, 40–61.
- Lee, Emma (2016, August 9), 'China is Watching the Olympics with Internet Companies Instead of State TV'. *Technode*, retrieved 18 November 2016 from <http://technode.com/2016/08/09/tencent-alibaba-rio-olympics/>.
- Lei, Ya-Wen (2011), 'The Political Consequences of the Rise of the Internet: Political Beliefs and Practices of Chinese Netizens'. *Political Communication*, 28(3), 291–322.
- Li, Keqiang (2015, May 3), 'Report on the Work of the Government'. *China Daily*, retrieved 18 November 2016 from http://www.chinadaily.com.cn/china/2015twosession/2015-03/05/content_19729663.htm.
- Lindtner, Silvia (2015), 'Hackerspaces and the Internet of Things: How Makers Reinvent Industrial Production, Innovation and the Self'. In: Guobin Yang (ed.) *China's Contested Internet*. Copenhagen: NIAS Press, 44–74.
- Liu, Xuan, Wang, Xiaoguang, Matwin, Stan, & Nathalie Japkowicz (2015), 'Meta-MapReduce for Scalable Data Mining'. *Journal of Big Data*, 2(1), 14.
- Liu, Yue (2015) 'Consumer Protection in Mobile Payments in China: A Critical Analysis of Alipay's Service Agreement'. *Computer Law & Security Review*, 31(5), 679–688.
- Lu, Jia & Yunxi Qiu (2013), 'Microblogging and Social Change in China'. *Asian Perspectives*, 37, 305–331.
- Lugmayr, Artur, Stockleben, Bjoern, & Christoph Scheib (2016), 'A Comprehensive Survey

- on Big-Data Research and its Implications – What is Really New in Big Data? It's Cognitive Big Data!' *PACIS 2016 Proceedings*, paper 248.
- Melissen, Jan (2011), 'Concluding Reflections on Soft Power and Public diplomacy in East Asia'. In: Sook Jong Lee & Jan Melissen (eds), *Public Diplomacy and Soft Power in East Asia*. Basingstoke: Palgrave Macmillan.
- Mian, Jawad (2015) 'Investing in New China'. In: John F. Mauldin & Worth Wray (eds), *A Great Leap Forward? Making Sense of China's Cooling Credit Boom, Technological Transformation, High Stakes Rebalancing, Geopolitical Rise, & Reserve Currency Dream* (Kindle ed.). Phoenix, AZ: Mauldin Economics.
- Montgomery, Lucy & Eric Priest (2016), 'Copyright and the Creative Industries in China'. In: Michael Keane (ed.), *The Handbook of the Cultural and Creative Industries in China*, Cheltenham: Edward Elgar, 339–359.
- Mumford, Lewis (2003/1922), *The Story of Utopias*. Whitefish, MT: Kessinger Publishing.
- Nye, Joseph S. (1990), *Bound to Lead: The Changing Nature of American Power*. New York, NY: Basic Books.
- Pasquier, Martin (2015), 'Internet Plus: China's Official Strategy for the Uberisation of the Economy'. *Innovation Is Everywhere*, retrieved 18 November 2016 from <http://www.innovationiseverywhere.com/internet-plus-chinas-official-strategy-for-the-uberisation-of-the-economy/>.
- Qiu, Jack L. (2009), *Working-Class Network Society: Communication technology and the Information Have-Less in Urban China*. Cambridge, MA: MIT Press.
- Schneider, Florian (2016), 'The Cultural Governance of Mass Media in Contemporary China'. In: M. Keane (ed.), *The Handbook of China's Cultural and Creative Industries*. Cheltenham: Edward Elgar Press, 189–206.
- Schlæger, Jesper (2015), 'Collaboration in China's E-government'. In: Yijia Jing (ed.), *The Road to Collaborative Governance in China*. New York: Palgrave Macmillan, 123–146.
- Schlæger, Jesper & Min Jiang (2015), 'Official Microblogging and Social Management by Local Government in China'. In: Guobin Yang (ed.), *China's Contested Internet*. Copenhagen: NIAS Press, 192–226.
- Shambaugh, David (2013), *China Goes Global: The Partial Power*. New York: Oxford University Press.
- Stockmann, Daniela (2015), 'The Chinese Internet Audience: Who seeks Political Information Online?' In: Lisheng Dong, Hanspeter Kriesi, & Daniel Kübler (eds), *Urban Mobilization and New Media in Contemporary China*. London: Ashgate.

- Szablewicz, Marcella (2015), 'The "Losers" of China's Internet: Memes as "Structures of Feeling" for Disillusioned Young Netizens'. In: Guobin Yang (ed.), *China's Contested Internet*. Copenhagen: NIAS Press, 168–191.
- Sun, Wanning (2010), 'Mission Impossible? Soft Power, Communication Capacity, and the Globalization of Chinese Media'. *International Journal of Communication*, 4, 54–72.
- Sun, Wanning (2015), 'Slow Boat from China: Public Discourses about the "Going Out" Policy'. *International journal of Cultural Policy*, 21(4), 400–418.
- Sun, Wanning & John Sinclair (2016), *Media and Communication in the Chinese Diaspora*. London: Routledge.
- Tse, Edward (2014), *China's Disruptors: How Alibaba, Tencent and Other Companies Are Changing the Rules of Business*. New York: Penguin.
- Taubman, Geoffry (1998), 'A Not-so World Wide Web: The Internet, China, and the Challenges to Nondemocratic Rule'. *Political Communication*, 15(2), 255–272.
- Voci, Paola (2010), *China on Video: Smaller-Screen Realities*. London: Routledge.
- Wang, Huiyao & Miao Lu (2016), *China Goes Global: How China's Overseas Investment is Transforming its Business Enterprises*. London: Palgrave Macmillan.
- Wang, Jing (2016), 'The Makers are Coming! China's Long Tail Revolution.' In: Michael Keane (ed.), *The Handbook the Cultural and Creative Industries in China*. Cheltenham: Edward Elgar Press, 43–63.
- Wang, Wilfred Y. (2015), 'Remaking Guangzhou: Geo-Identity and Place-Making on Sina Weibo'. *Media International Australia*, 156, 29–38.
- Weber, Ian (2011), 'Mobile, Online and Angry: The Rise of China's Middle-class Civil Society'. *Critical Arts: South-North Cultural and Media Studies*, 25(1), 25–45.
- Xinhua (2016), 'Zhonghua renmin gongheguo guomin jingji he shehui fazhan di shisan ge wu nian guihua gangyao' (Outline of the Thirteenth Five-Year Plan for the People's Republic of China's National Economic and Social Development). *Xinhua Net*, retrieved 18 November 2016 from http://sh.xinhuanet.com/2016-03/18/c_135200400.htm.
- Yang, Fan (2016) *Faked in China: Nation Branding, Counterfeit Culture, and Globalization*. Bloomington, IN: Indiana University Press.
- Yang, Guobin (2009), *The Power of the Internet in China*. New York: Columbia University Press.
- Yang, Guobin (2014), 'Political Contestation in Chinese Digital Spaces: Deepening the Critical Inquiry'. *China Information*, 28(2), 135–144.
- Yip, George S. & Bruce McKern (2016), *China's Next Strategic Advantage: From Imitation*

- to Innovation*. Cambridge, MA: MIT Press.
- Yu, Haiqing (2006), 'From Active Audience to Media Citizenship: The Case of Post-Mao China'. *Social Semiotics*, 16(2), 302–326.
- Zang, Wenyu, Zhang, Peng, Zhou, Chuan, & Li Guo (2014), 'Comparative Study between Incremental and Ensemble Learning on Data Streams: Case Study'. *Journal of Big Data*, 1, 1–5.
- Zhao, Elaine J. & Michael Keane (2013), 'Between Formal and Informal: The Shakeout in China's Online Video Industry'. *Media Culture and Society*, 35(6), 724–741.
- Zhao, Yuezhi (2013), 'China's Quest for "Soft Power": Imperatives, Impediments and Irreconcilable Tensions?' *Javnost-The Public*, 20(4), 17–29.
- Zhu, Ying (2012), *Two Billion Eyes: The Story of China Central Television*. New York: The New Press.