

Independent Game Production in Southern China

Hugh Davies

RMIT

hugh.davies@rmit.edu.au¹

Abstract

This article examines the interplay between commerce and creativity within Southern China's game development by examining three sites of tension within that media production sector. These are the long hours demanded by the digital media industries in which many independent game makers are employed; the tight government controls dictating what game content can be published; and the commercially driven game types that many independent game makers rally against. Revealed here is that strict videogame regulation policies enacted by the Chinese government are experienced as a positive force by many independent game makers. These government policies prevent commercial games from dominating the market, thereby enabling a space for independent games and their makers to exist. These commerce/creativity dialectics in Southern China connect to media industries globally and highlight the resilience of Chinese indies in balancing commercial, creative, and governmental constraints. Drawing on recent scholarship combined with ethnographic fieldwork, this article expands awareness of game production beyond Anglo-centric and neoliberal understandings by illuminating understanding of Southern China's independent game community and the circumstances of their creative practice.

Keywords: China, Game Production, Indie Game Development, Cultural Production, Creativity

Introduction

Trajectories of game making and playing across the Asia Pacific are complex, unique, dynamic, and evolving.² China represents the largest gaming market in the world with an

estimated 2021 turnover of US\$49.3 billion, slightly larger than the US industry valued at US\$48 billion.³ Japan ranks third globally, turning over US\$24 billion, four times the revenue of fourth ranked South Korea.⁴ Within China, the game market is dominated by two companies, both based in the south of the country. These are Shenzhen-based Tencent with a 51 percent share and Hangzhou-based NetEase with 17 percent. The remaining 32 percent market share is made up by numerous small game companies from across the country.⁵ With larger commercial game producers drawing much of the focus, China's videogame industry and the issues experienced within it tend to be depicted as homogenous and uniform, despite the sector being intensely varied, rapidly changing, and radically different to elsewhere in the world.⁶

This article illuminates the conditions of independent game makers in Southern China, many of whom are employed by larger game companies and other tech corporations but who create their own games outside of work hours. Although Southern China is the most intensified location of game production and consumption in the world,⁷ game studies focusing on this region remain a remarkably underdeveloped subfield. In this way, Southern China's game industries are paradoxically central and peripheral in the global imagination. Positioned at the intersection of Regional Game Studies⁸ and Game Production Studies,⁹ this article focuses upon game creativity in Southern China to build a nuanced understanding of this global center of cultural production and media industries.

This research took place between March 2018 and September 2019, during which I traveled to Mainland China six times for up to two weeks each visit. Staying in Shenzhen, Guangzhou, Shanghai, and Hangzhou, I spoke with people and groups identifying as independent game makers and with several individuals on the periphery of game production, such as educators, students, institutional representatives, and game journalists. Most elected not to be mentioned by name, as speaking anonymously allowed them to be more candid, especially in their criticism of the tech industries in which many were employed. Conversations occurred across a range of formal and informal settings, including game studios, workshops, social gatherings, game jams, and co-working spaces. Discussions were wide-ranging, spanning histories, skills development, labor conditions, government restrictions, the dominance of commercial game products, and broader ambitions for the cultivation of an independent Chinese game sector. The findings that arise are scaffolded by relevant scholarship and journalistic accounts that, taken together, provide a snapshot of the ecology of Southern China's digital game makers. From this fieldwork and themes, an unexpected discovery surfaces. Specifically, that Chinese Communist Party (CCP) restrictions upon videogame publishing and play, while frustrating for many independents, are also understood by individuals in these communities as a necessary and well-intentioned barrier preventing highly commercial games from entirely dominating the market. In this way, government restrictions upon game production in the Mainland Chinese Context were not solely experienced as a creative barrier but enabled a space in which creative game making could arise.

A central contact in my discussions who was happy to be identified was Tony Xiong (hereafter Tony), a game developer, historian, and keen advocate of Chinese independent games. Clearly a trusted identity among Southern Chinese game developers with a long history of

practice, many of my interviewees directed me toward him to gain a broader overview of the Chinese game industry. At various junctures in our discussions, Tony took great lengths to define Chinese indie games and how they differ from Anglophone understandings. Tony offers an alternate definition of Chinese indies as being Original games. Original games sit at one end of a production spectrum, and Capital games sit at the other. For Tony, Original games are curious, innovative, and expressive forms of new media art communicated via the interactive medium of games. In stark contrast, Capital games and their makers care nothing about creativity or player experience—only about reproducing or reskinning market-proven profitable games. Capital games, according to Tony, use a Skinner box logic designed to manipulate inherent human vulnerabilities, existing to pursue profit and profit alone. As this article will explore, this notion of Capital games connects with global criticism of exploitation games and the broader neoliberal co-optation of the medium.¹⁰

Cultural industries policies in China have undergone significant transformations in recent decades. In their discussion of creativity and innovation in China, Keane and Zhao note that where once the CCP excerpted tight rule over cultural production, since the 1970s, the government has “voluntarily relinquished control over many aspects of cultural production in exchange for the potential benefits of cohesion and increased productivity.”¹¹ As a result, the market rather than government has become the defining mediator of cultural tastes.¹² Nonetheless, creativity is differently nurtured and understood in Mainland China. Keane highlights that catering to sociopolitical preferences remains an important dimension of creative production.¹³ Contrasting with expressive, subversive, and generally libertarian understandings of artistic practice celebrated elsewhere in the world, Chinese discourses on creativity are couched within a harmonious vision of collective progress. As remarked by Keane, “The European Enlightenment view that creativity is about asking difficult questions, challenging authority, and destabilizing norms does not sit well with the government.”¹⁴ As a result, awareness of the political climate is crucial to expressing creativity successfully within Mainland China. This is especially true in relation to digital games, artifacts that at once represent popular new mediums of expression, intoxicating activities requiring government control, and key products within China’s digital renewal.

This article is structured as follows. The first section briefly outlines a historical overview of China’s rising independent game sector from the year 2000 to the present. It then identifies three overlapping areas of tension that impact the region’s contemporary game development sector: the work culture in which many of the game makers are employed; the governmental restrictions that dictate what can be legally published in China; and the highly commercially driven game types (below conceptualized as Capital games) that many in the independent sector set themselves in opposition to. While game development in China is often understood as occurring beneath and despite government restrictions, it becomes apparent that many independent game makers defend the CCP’s socialist impulse to combat hyper-neoliberal practices of game production and monetization. These findings prompt a rethink of Chinese videogame regulation to consider how such legislature may even sustain some independent game makers within a highly competitive commercial setting.

An Overview of Recent Chinese Game History

Chinese governmental regulations are a central gravitational force grounding the nation's cultural production. The key event shaping Chinese videogame culture in the new millennium is undoubtedly the console ban initiated by the CCP in the year 2000 and ending in 2015. The ban prevented the sale and importation of all electronic game equipment and accessories in mainland China,¹⁵ thereby incubating a distinct ecosystem of videogaming different from anywhere else in the world. Through the early 2000s, Chinese game culture became globally renowned for online gaming in internet cafes and the notorious secondary game industries of gold farming, guild labor, loot boxes (战利品盒 *Zhànlìpǐn hé*) and gambling that proliferated within them.¹⁶ Government regulations intended to control China's videogame consumption arguably cultivated some of its worst traits, a prominent side-effect of which were negative depictions of videogames in the national media where they were cast as "electronic heroin," prompting perennial governmental restrictions.¹⁷ Nonetheless, videogame play in internet cafes developed into a major pastime across the country.¹⁸

For aspiring Chinese game makers in the first decade of the 2000s, game production costs and fierce competition from large commercial players all but prevented independent start-ups from forming. China operated as a global hub for international game corporations to outsource graphic assets, meaning that up-and-coming developers were often channeled into large companies where creativity was stifled.¹⁹ These global production hubs were localized so that by 2010, both Shenzhen-based Tencent and Hangzhou-based NetEase, each founded in the late 1990s, had become significant local and international videogame makers and distributors, elevated on a rising tide of national technology investment and expansion.

China's development from a globally marginal producer and consumer of games to become the world's largest games economy is a story often told in policy terms.²⁰ Through the 2010s, the Chinese government implemented sweeping industrial and governance policies to break free of technological and industrial dependence on wealthier countries while simultaneously restructuring itself from the world's factory²¹ to a digitally centered knowledge-based economy.²² Huang details the emergence of Chinese game ecologies from policies enacted to foster entrepreneurship in high-tech creative clusters such as Shenzhen and Shanghai,²³ while Yu highlights the role of videogames and esports in China's so-called Digital Great Leap Forward.²⁴ Jiang and Fung illuminate China's strategy of neo-techno-nationalism in order to minimize dependence on foreign technologies and game products.²⁵ In discussing these policies, these scholars each underscore the influential role of videogame industries in China's technological and economic ascent, and within it, a shift away from labor outsourcing to toward locally produced and consumed content.

The five years from 2009 to 2014 are a formative moment in the cultivation of a Chinese independent game scene. Many in industry and scholarship cite this moment as being the turning point in game production and consumption from low-risk copy-based, commercial products to creatively driven game experiences.²⁶ Tony describes how in around 2010, several prominent developers working in China's game community had become disenchanted by making hyper-commercial games (or what he terms Capital games) within large companies and had become increasingly attracted to the creative possibilities of independent game

design. They sought to explore and develop a local artisanal craft of game making to produce what Tony would often term Original games.

The formation of Shanghai independent game company Coconut Island Games (椰岛游戏, *Yē dǎo yóuxì*) presents a salient example of this shift. Working for Konami in the 2000s, its founders Weiwei Bao, Ye Feng, and Wen Chen, like many developers drudging away in international game companies based in China, had little creative influence over the commercially driven products they were paid to make. Ambitious to express their own game ideas and creativity,²⁷ the group established Coconut Island Games in 2009. Bao admits that only later did he become aware of indie games,²⁸ a concept with which his company would become closely associated. Coconut Island Games emerged as one of several formative independent companies embracing the creative possibilities of indie games during this era.

In their study of Chinese game history, Nakamura and Wirman reveal that indie momentum in Shanghai at this time was nurtured through the Independent Game Festival in 2009 and later Unity's establishment of a Shanghai office in April 2012, each providing support for independent aspirants.²⁹ Adding impetus to this shift, in 2014, the US film *Indie Game: The Movie* was released with Chinese subtitles, fueling fledgling ambitions for a homegrown indie game sector. According to several game makers I spoke with, almost overnight, countless independent developer teams arose. Also mentioned was the motivating success of *Monument Valley* (2014), a mobile game that stunningly capitalized on the affordances of the smartphone—China's favored gaming platform—inspiring many local indies to rethink the format.³⁰ As one veteran Chinese developer recalls, “This game totally blew a lot of people's minds . . . redefined what a videogame is. It was the first time a lot of iPhone users and gamers realized that videogames can be art.”³¹ More than rousing the creativity of local developers, *Monument Valley* stirred a new generation of game consumers to become more discerning in their tastes and to seek original, thoughtful, and creative experiences over the pervasive action-oriented games and pay-to-play mechanics.

In 2015, a major turning point occurred with the Chinese government lifting the videogame console ban. As scholars Liboriussen, White, and Wang detail, not only had the moral threat once posed by game consoles become entirely superseded by the internet, but perhaps more importantly, the ban had never really worked.³² Videogame culture pervaded through China's internet cafes, and consoles had remained widely available via the black and gray markets.³³ As a result, the CCP adopted a new approach shifting the responsibility of game regulation from console makers, internet cafes, and parents to game makers themselves. Believing that the companies profiting from videogames should be held responsible for their impact, the government imposed steep publication hurdles on foreign and Chinese videogame companies alike—be they enormous commercial entities or tiny two-person operations. The complexity and severity of these regulatory control mechanisms become a defining characteristic of the field of Chinese videogames.³⁴ Nonetheless, the change in policy signaled a shift in CCP's blanket ban of games to instead welcome them tenuously as part of China's new economy of digital innovation.

The response from China's education sector was immediate. Colleges across the country expanded programs on innovation and entrepreneurship that would help develop the business of game making.³⁵ Meanwhile, a growing number of universities launched game design courses teaching graphics and programming skills. Yet according to many participants with

whom I spoke, the craft and creativity of indie game making were largely developed outside of institutional contexts, specifically in game jams. In these socially driven contexts, creativity was nurtured, and networks formed, with more established independent companies doing much to cultivate a local indie scene. Among these organizers, a clear agenda formed to foster and grow a game community not occupied by economic gain alone but with innovative content and creative endeavor in mind.

For example, Coconut Island Games organized the 2014 Game Jam and went on to found IndieACE, a game developer community that would eventually host game jams across Shanghai, Shenzhen, and Guangzhou. Often in lieu of formal games education, these game jams became a crucial learning space while helping local developers build international networks and attain skills in fomenting their own creative ideas, experiences they were unlikely to acquire working within enormous studio systems. Similarly, IndieLight studio in Shanghai established a dedicated space for indie makers to connect, share experiences, test games, and discuss game ideas in a receptive and supportive forum. Like many Chinese independent companies, IndieLight's founders began at a larger game studio (in this case, Tencent) but left to form their own studio and now support fellow indie aspirants.

Another key figure in the Shanghai scene, Simon Zhu, is a former employee of ChinaJoy who left to establish the Chinese Independent Games Alliance (CiGA). Through an entrepreneurial approach, Zhu enlisted a broad range of supporters and partners to tour the game jam event across numerous Southern Chinese cities and sometimes as far north as Beijing. CiGA also organized IndiePlay, China's principal awards for independently made games by combining and formalizing communities of peer assessment and recognition. IndiePlay is likewise well supported by stakeholders, including the Independent Game Developers Association (IGDA), indie media outlet Indienova, and game company Indielight. Tellingly, the Indieplay awards also included a "Best Game Jam Game" category.³⁶

Since 2017, this group of organizers have been collaborating to deliver the WePlay Expo in Shanghai. The event has provided independent developers a platform to present games, share ideas, expertise, and resources. In contrast to the commercially focused ChinaJoy (also in Shanghai), where globe-bestridding companies showcase blockbuster game products, WePlay is a markedly community-oriented event that enables smaller indie teams to build connections with media, online influencers, and game players. While Southern China's game sector has benefited from government investment and support in technology and entrepreneurial ventures over the past two decades, a groundswell of independent game makers has been pivotal in nurturing the developmental trajectory of game creatives outside of purely commercial frameworks.

Circumstances of Contemporary Game Production in Southern China

In this brief outline of this recent history of Chinese game development and the rise of independent game production within it, what emerges as key are three overlapping areas

of tension and constraint that impact the region's game development sector. The first is the commercially driven tech employment culture in which many of the game makers are engaged; the second are the stringent and evolving governmental restrictions that dictate what game content can be legally published in China; and the third are the well-financed and hyper-commercial game types created by both large game companies and smaller start-ups (termed by Tony as Capital games) that many in the independent sector position themselves in antagonism to. A critical finding crystallizes at the juncture of these three areas of study. Many independent Chinese game makers are not directly opposed to severe governmental regulations but instead oppose game products that they identify as being artless manipulators of player attention and the driving cause of strict government legislation. It is not simply these Capital game products that independents are opposed to, but the hyper-monetization models they promote and the conditions in which they are produced.

Work Culture

In August of 2018, I travelled to Guangzhou for an art/game workshop event. Belying its status as the province's capital, Guangzhou is increasingly eclipsed by the exploding tech metropolis of Shenzhen 140 kilometers to the southeast. In Guangzhou, I met up with a group of art workers, game developers, and writers from across Southern China for a game production workshop and crash course in experimental game making. The gallery-staged workshop drew a diverse crowd, resembling a media arts event. Its organization by curatorial staff evidenced the diminishing uneasiness between videogame production and arts practice.³⁷ Ideas were generated, passions fomented, and network building ensued.

In a restaurant afterward, several attendees traded stories about similar events in different cities. Participants enthusiastically shared their various art and game projects, discussed their local communities and personal ambitions asked me about similar scenes in my own country. For all the exuberance of these makers at the intersection of art and game production, their practice was for the most part a personal and not a paid activity. Moreover, refrains of overwork were expressed in relation to the broader labor conditions in the games industry. Many were gainfully employed in various positions in the Chinese tech sector; some even worked for Tencent or NetEase, China's two largest game makers, yet not as game developers. Their game making only occurred outside of office hours. These non-work hours were rare and precious, as the demands of paid jobs were excessive.

Several confessed to reluctantly participating in the so-called 996 work system (996工作制, 996 *gōngzuò zhì*), whereby employees are expected to work from 9am to 9pm, six days a week.³⁸ Although China's labor laws explicitly prohibit employees from working over eight hours a day, or more than forty hours a week, the 996 culture pervades across China's media industries and has been endorsed by both Jack Ma, then head of tech titan Alibaba, and Richard Liu, the head of rival company JD.com.³⁹ Many workers in China have taken to the internet to protest these labor expectations, and movements have emerged to oppose the employment culture in which they proliferate.⁴⁰ Several game makers framed their own production activities in terms of "revenge gaming" (报复性娱乐, *gàofùxìng yúlè*), a phenomenon

whereby workers attempt to ameliorate the sense of lost time given over to exploitative employment practices by staying up late socializing, playing games, and/or making games as a kind of vengeful resistance.⁴¹ Of course, these efforts to recoup their personal lives by staying awake ultimately bring a health cost. The resentment toward the industrial culture motivating these practices represents a critical connection between laborers in the Chinese game sector and their overworked counterparts elsewhere in the world.

Investigating similar tendencies in the US, Chia critiques how the desire to “do what you love” accelerates engagement in digital production but also drains game workers and aspirants by “normalizing expectations to sacrifice job security for passionate work.”⁴² Kuehn and Corrigan have termed a similar phenomenon as “hope labor” to denote “un or under-compensated work carried out in the present, often for experience or exposure, in the hope that future employment opportunities may follow.”⁴³ As explored in the opening section, many independent Chinese game makers have self-organized collaborative peer communities, constituting what Deuze has termed semi-permanent work groups (SPWG) to lessen the contingencies of precarity and to create games in supportive as opposed to competitive environments.⁴⁴ Nonetheless, as mapped by Dyer-Witheford and de Peuter, varying degrees of precarious employment combined with expectations to work overtime permeate game industries globally.⁴⁵ Despite its communist governance, China’s tech sector presents little exception to this trend.

Some of the Chinese game makers I spoke to distanced themselves from both the game sector and the tech sector altogether, refusing to identify their creations as an income stream but rather as a passion or an arts practice. One participant remarked, “I don’t like much of what passes for videogames—especially in the commercial sector—I prefer to think of what I make as artwork.” Yet others who were employed in software development discussed their game making not within a financial framework but as a creative outlet, hoping to eventually bridge the two. This strain between desires for creative game making and commercial pressure to produce so-called Capital games will be taken up in the final section. But preceding that, we turn attention to the critical role of governmental restrictions on game production.

Governmental Restrictions

The colossal impact of publishing restrictions and game regulation is rarely experienced outside of the Asian continent and as a result is largely overlooked in Anglophone game production scholarship. Notable exceptions include work by Choi and colleagues⁴⁶ as well as Sang, Park, and Seo⁴⁷ in relation to Korea; Xiao⁴⁸ and Liboriussen, White, and Wang⁴⁹ in regard to China; and Daiiani and Keogh⁵⁰ in their discussion of Iranian games. Given the scope of official Chinese game restrictions, the scale of the country’s game production and consumption, and the increasing footprint of Chinese game investment abroad, it appears necessary for this field of scholarship to be expanded.

Within Mainland China, all digital media is filtered through strict governmental moderation and censorship. These restrictions are especially vigorous in relation to videogames, which are regularly depicted in media discourse as corrupting foreign influences, gambling-like

experiences, and addictive electronic heroin. To restrain the negative aspects of games, the Chinese public supports and even demands stringent government regulations while the country has pioneered the formation of digital addiction recovery centers.⁵¹ As argued by Chew, the development of China's online game industry ultimately depends more on social and political than economic factors.⁵² This hard-line approach of the CCP to videogame players has led to protest acts both in and out of games.⁵³ All told, game production in China occurs within a highly politicized and regulated environment.

In the lead up to this research, these game restrictions were most evident in game licensing requirements, a protracted, costly, and complex process intended to weed out all but the most determined and compliant game makers. As summarized by Ong, to pass the scrutiny of the State Administration of Press and Publication, "all game developers must obtain numerous licenses, pay substantial—and non-refundable—application fees, and jump through legal and bureaucratic hoops that are constantly at risk of being changed."⁵⁴ Messner details that each game must have "no blood and gore, sexual content, or themes that run counter to China's state-sanctioned values."⁵⁵ More recently, game developers have also been required to reduce loot boxes (ideally to none) and to implement anti-addiction measures such as curfews and limits on daily play time.⁵⁶ For the Chinese government, at stake in the regulation of games are not just moral and ethical concerns but national values and cultural sovereignty against encroaching Western influence.⁵⁷

The game developers I spoke with believed the government restrictions had the worthy intent of tackling the most predatory game types. Nonetheless, the restrictions were hugely disruptive. Game companies face a daunting task of obtaining compliance with Chinese regulatory regimes, which are made up of multiple levels of governing bodies exercising overlapping networks of power, often with competing agendas.⁵⁸ Beset with constantly shifting rules and lacking firm guidelines of how to proceed, many would simply give in. Even if a game complies with the complex governmental restrictions, the onerous application process prevents many games from making it to market. Further complications arise with sudden, unannounced measures that catch the industry and consumers by surprise.

In 2018, a sudden and dramatic overhaul to the regulation and licensing of digital games occurred. A restructure of government bureaucracies led to a nine-month game publishing freeze from March 2018 to December 2018, delivering a devastating impact to China's game industry.⁵⁹ Tencent and NetEase suffered multibillion-dollar losses, as many games and game updates went unpublished or unreleased. Many smaller and independent studios were wiped out altogether.⁶⁰ The impact of the publishing freeze was so profound that China fell from its place as the world's largest game economy.⁶¹ With the game freeze occurring at the time of my ethnography in China, I had the opportunity to discuss its implications with developers, journalists, and players during a series of game events in Shenzhen. Shenzhen is the largest city in Guangdong province, accommodating 13 million workers employed at the frontier of China's digital innovation revolution. As articulated by Lindtner in her book *Prototype Nation*, Shenzhen offers an exemplary model of China's lightning shift from hardware factory to software innovation hub. Games form a critical part of this story.⁶²

With five divisions across Shenzhen and Shanghai and over 50 percent of China's videogame market share, Tencent Games is the world's largest videogame company.⁶³ In addition

to owning and operating a large stable of popular games such as *League of Legends*, *PUBG*, and *Fortnite*, Tencent Games boasts an impressive investment portfolio with stakes in Epic Games, Activision Blizzard, and Ubisoft, among others. Given this impressive status, I and several academic colleagues were pleased to accept an invite to the Tencent Research Institute as part of the Chinese Digital Games Research Association conference in Shenzhen in 2018. Following a series of short presentations by our Tencent hosts, questions were invited from our scholarly group. Some polite conversation proceeded before we broached more direct queries about the games freeze. Our hosts spoke plainly, confessing having little inkling of how to proceed. A huge and growing backlog of games was costing millions of RMB 元 Yuán every week in lost earnings—managers held ongoing discussions with government officials yet no prospect of an easing of restrictions was in sight. This conundrum of balancing commercial interests while accommodating governmental control is familiar to most media companies in China, organizations that are often caught between “the party line and the bottom line,” as eloquently encapsulated by Zhao.⁶⁴ Indeed, our Tencent hosts were remarkably composed, pragmatic, and generous in welcoming our thoughts as international game researchers.

The following week, I met up with Tony, who was also in Shenzhen, to run a couple of game events. Together, we attended the *Game On* exhibition opening at the OCT Creative Exhibition, where Tony delivered an impromptu tour of past and present Chinese game culture within the exhibition setting, information that informs the history articulated earlier in this article. Dispelling popular misconceptions of a total ban on game consoles across Mainland China from 2000 to 2015, Tony explained how imitation, pirated, and contraband versions of US and Japanese consoles and games had been readily available via street vendors, black, and gray markets. Moreover, via the Nintendo 1Que console, a device specifically designed for the Chinese market, several Japanese games appeared on the mainland during the decade and a half of game platform restrictions. As I would come to learn, China’s strict governmental restrictions were often quite porous.

While discussing the subject of game restrictions, I queried Tony about the current game ban. Like others I had interviewed, Tony was reluctant to criticize it. “It’s difficult,” he winced, “because I feel like a lot of the games the government are trying to tackle should be banned—they are designed for addiction—purely to make money—they should never be built to begin with.” But as he went on to explain, the government processes and legislation for countering these game types lacked precision and nuance. “It’s like at school. Someone does something wrong and everyone gets punished . . . a lot of good games and game makers suffer in the process.” In Tony’s view, fault lay squarely with the revenue-driven game types, which he felt warranted severe government regulation despite the fallout on more creative game-making practice.

Yet the 2018 game freeze did not end all development or publishing activity. Like the console ban of the early 2000s and the workarounds that it gave rise to, in 2018, tactics to evade governmental regulation quickly surfaced. Tencent had begun working with the government to advocate *Functional Games*, a genre of game developed to promote approved causes such as health, education, and cultural heritage, a concept that closely mirrors so-called Serious Games in the Anglosphere. Alternately, some developers had elected to release their games

for free. Crucially, licenses are not required for free-to-play games so long as there are no microtransactions, accounting for the proliferation of these game types within China. For non-commercial developers, hobbyists, and artists making playable experiences outside of economic imperatives, the ban had no significant impact outside of their own playing habits. One game maker I spoke to said that the game freeze had increased interest in his work, which was otherwise overshadowed by a stream of commercial releases.

But the most prominent workaround by game developers was publishing to the US-based platform: Steam.⁶⁵ Prior to the publication freeze, Steam had already enabled many Chinese indies and even some major companies to circumnavigate the formalities of government approval and launch their creations with relative ease.⁶⁶ For indie developers during the games freeze, Steam emerged as a popular loophole through which to keep their studios afloat. In the words of Zifei Wu, president of Pathea Games, “100 percent of China’s indie scene is alive because of Steam.”⁶⁷ Crucially, while Steam provides an alternate avenue for games to reach market, it remains a compromise for Chinese developers. Although Steam’s 30 million Chinese subscribers represent the largest of any national Steam community globally, it remains a small fraction of China’s enormous domestic games market, estimated at around 620 million players and US\$38 billion in total revenue in 2019.⁶⁸ This vast player base is what keeps many game developers traversing the rigmarole of official publishing channels.

The evolving challenges of China’s official regulatory constraints have curtailed the most aggressive traits of Chinese revenue-driven games but not dissuaded the country’s independent game developers. Rather, they have been conditioned to be resilient and adaptive. The ad-hoc and tactical workarounds of these game makers recall Lobato and Thomas’s work on informal media economies and distribution networks that operate outside of regulated and policy-governed media industries.⁶⁹ Instead of despairing over circumstances, Chinese game makers appeared pragmatic about the shifting rules of government regulations, perceiving them simply as a set of obstacles to overcome. In the words of Ian Garner, CEO of China-based indie game publisher: *Another Indie* “[w]here we foreigners’ kind of look in and see this great tragedy or this great injustice, the Chinese developers just see business as usual.”⁷⁰ For game journalist Khee Hoon Chan, the agility in navigating the complex regulatory environment reveals the “immense fortitude of the Chinese indie game industry.”⁷¹ For Tony, the dexterity of Chinese indies in adjusting to changing conditions places them in a globally competitive position. While Tony credits US and European influences in inspiring the development of China’s indie game sector, he also believes that Chinese indies can be globally instructive examples of resilience and durability under adverse conditions.

Original and Capital Games

A couple of days later, I attend a game presentation in Shenzhen hosted by a videogame hardware company that designs and manufactures classic-look retro controllers with contemporary Bluetooth connectivity. Running on the hardware are a number of locally made indie games. Here, passion projects and unpublished creations are disseminated among players and peers, presented in exhibition, salon, game jam, and similar local and social contexts.

At the end of the event, I stuck around with a handful of hangers on and was shown other unfinished ideas, works-in-progress, and experiences that defy explanation, existing only as artworks playable on individual devices. Common to each is an aesthetic privileging of the handmade over the mass-produced, a level of play in the very construction, falling into what Keogh has theorized as the “videogame maker’s agency through craft,” whereby a “level of care, intimacy, and skill” is contrasted with the alienated assembly line and crunch production of AAA games.⁷² Following Keogh, if the indie craft of game making in the West is conceptualized as occurring in response and opposition to the hegemony of AAA studios, I argue that these creatively original works emanating from individual makers and indie studios in China function in opposition to so-called Capital games and their makers. At the center of tensions between government restrictions, indie ambitions, and commercial imperatives were the types of games being made and the conditions in which they were produced. These game types focus on maximizing revenue streams through freemium models, loot boxes, coercive systems, and hypermonetization. This sees game play locked behind paywalls, players’ experiences compromised unless additional content is purchased, and virtual currencies leveraged to encourage players into spending more than they realize.⁷³

Notwithstanding these global parallels, Chinese game makers and researchers have identified its local revenue-driven game types as characteristically Chinese. Hong Kong game scholar Chew has labeled “Chinese style online games” (国产游戏, *guóchǎn yóuxì*) as “inferior yet lucrative games that dominate the Chinese market.”⁷⁴ Chew describes these game types as “ethically dubious and uniquely Chinese business model that became domestically dominant”⁷⁵ but that have grown to profoundly impact global online game design. Echoing Chew’s observations, Tony believes that Capital games are unique to China’s game industry, and their presence highlights the abusive relationship between game companies and their consumers. Moreover, Tony reports the companies producing Capital games manipulate company data and monthly reports to attract new investors. He tells me, “They only treat a game as a tool to play a rigged capital game, so I call them Capital game companies.”⁷⁶ Ultimately, Tony believes it is not up to the government to end the reign of Capital games, but to consumers. In his assessment, Chinese game consumers are already becoming more literate and discerning but must continue to be more judicious about the game experiences they choose to support.

Few of the younger developers I spoke with were as strident as Tony in his denunciation of so-called Capital games and his elevation of so-called Original games to counter them. However, similar antagonisms against hyper-commercial games and ambitions for improved cultures of Chinese game production and consumption have been openly expressed by more seasoned game makers. Yang Geyilang of Beijing-based indie studio Moyuwan derides the commercially driven companies in which so many developers began their careers, remarking: “We used to work for the big factories where people only cared about statistics. . . . They produce products, not games.”⁷⁷ Geyilang admits to not caring much about the business side of things but instead focuses on passion projects that reflect ideas close to him. Likewise, Bao WeiWei of Shanghai-based Coconut Island Games is on record as stating: “Our vision is to make games that have cultural influence. We believe games can be a form of expression, not only entertainment.”⁷⁸ Amplifying these assessments, in 2018, Gao Ming, head of Beijing-based indie company Spotlighter Interactive, published what amounts to an indie

manifesto that scorned manipulative game products while intensifying growing expectations for quality and originality from Chinese gamers. For Ming, these consumer choices are impacting the market. He writes that “even developers who have historically produced rip-offs are now seeking ways to transform themselves to profit in a market more focused on quality. The future doesn’t lay in the wholesale elimination of pirates; rather, it rests in transforming which games we choose to give our attention to.”⁷⁹ These independent game makers were not simply commenting from the sidelines but took active leadership roles to bring about a complete transformation in game production and consumption—away from addictive and lucrative games and toward games as cultural and creative practice.

Discussion

Underpinning these comments and activities by leaders in the Chinese independent game community are broader political concerns—of desires for artistic expression, creative autonomy, and labor satisfaction in conflict with games as products of profit-generation along capitalist lines. Although I heard no discourses of heroic creativity, the quiet courage and spirit of Chinese indies’ are inseparable from long-standing commerce/creativity debates and critiques of free labor that permeate the cultural industries globally. Many of these precarities are all evidenced in the documentary film *Indie Games in China* (独行, *Dúxíng*) which follows the varied experiences of four dedicated indie developers. Some experienced great success; others suffered bankruptcy and burnout. The film presents in stark terms the challenges and risks of indie game development, but perhaps also normalizes for indie game makers what Hesmondhalgh and Baker have critiqued as self-exploitation, “whereby workers become so enamored with their job that they push themselves to the limits of their physical and emotional endurance.”⁸⁰ Common to game development sites globally, the resilience of Chinese indies also was marked by high levels of insecurity, casualization, and overwork.

The central finding that emerged as unique to the Southern Chinese game development context was this distinct tri-part structure of antagonisms and alignments. Chinese independent game makers struggled to publish their own games within the narrow parameters of government control but were often themselves employed within excessively commercial structures that they actively opposed. As such, Chinese indie game makers face the dual challenges of neoliberal capitalism on one side and party-state disciplinary power on the other. The resilience of this community becomes clear in their steadfast game production within the context of these large oppressive structures. Compressed between these forces, an ethical imperative surfaces among several senior game developers—a struggle against bare capital gains and toward more social, creative, and aesthetically concerned games that reflect the communities of practice out of which they are born.⁸¹ Within these social contexts in Southern China, government regulations were seen as frustrating challenges but ultimately not misdirected efforts. State restrictions were broadly understood as a blunt instrument but also a benevolent socialist impulse with ambitions common to independent game makers. Each shared the desire to curtail neoliberal game experiences that are designed to generate profit by whatever means necessary.

Conclusion

Through situated ethnography, this research article enriches current understanding of creative game culture in Southern China. The aim has been to comprehend game production in this region by both complementing and complicating existing quantitative data and policy frameworks research. Exploring the ecology of communities, companies, events, organizations, and the efforts of many individuals that lend support to the independent game development sector, revealed here are the shared efforts of this community to nurture collective creativity and to transform game production from a commercial to a cultural and creative project. Identifying three interrelated sites of tension that impact independent game developers in Southern China: (1) the 996 culture of overwork, (2) the shifting obstacles and vagaries of governmental restrictions, and (3) competition from commercial companies producing profit-driven games, this article articulates the predicament of independent game makers attempting to carve out a space for creative practice while caught between state control and regulations and excessively commercial game production processes and products.

Exploring how these factors are experienced and countered by independent creators both individually and collectively, what emerges is a sub-sector attempting to transition away from game production as a commercial imperative and instead toward cultural and creative ends. In these ambitions, government restrictions are experienced as irritating and inexact but also well intentioned in tackling the stronghold of hyper-commercial game enterprises.

¹ Hugh Davies is a researcher of digital culture and creativity. Working across academic scholarship and creative practice, he explores the social, cultural, and political dimensions of art and technology. In addition to lecturing internationally, he has co-authored two books: *Understanding Games and Game Cultures* (2021) and *Exploring Minecraft, Ethnographies of Play* (2020). He is currently a research fellow at RMIT in Melbourne focusing on Chinese Platform Studies and is president of the Chinese Digital Games Research Association (CDiGRA).

² Cheryll Ruth Soriano, Hugh Davies, and Larissa Hjorth, "Social Surveillance and Let's Play: A Regional Case Study of Gaming in Manila Slum Communities," *New Media & Society*, 21, no. 10 (2019): 2119–39.

³ Katherina Buchholz, "Asian Countries Make Up 40% of the World's Top 10 Video Gaming Markets," *We Forum*, August 24, 2021, <https://www.weforum.org/agenda/2021/08/which-countries-have-the-largest-video-gaming-markets>

⁴ Buchholz, "Asian Countries Make Up 40% of the World's Top 10 Video Gaming Markets."

⁵ Statista, "Market Share of the Leading Online Gaming Companies in China in 1st Quarter 2019," *Statista*, August 11, 2022, <https://www.statista.com/statistics/868870/market-share-of-leading-online-gaming-operators-china/>

⁶ Matthew M. Chew, "A Critical Cultural History of Online Games in China, 1995–2015," *Games and Culture* 14, no. 3 (2019): 195–215.

⁷ Yin Yijun, "Is Winter Finally Over for China's Indie Game Creators?" *Sixthtone*, January 30, 2019, <https://www.sixthtone.com/news/1003524/is-winter-finally-over-for-chinas-indie-game-creator>

- ⁸ Bjarke Liboriussen and Paul Martin, “Regional Game Studies.” *Game Studies* 16, no. 1 (2016).
- ⁹ Olli Sotamaa, “Studying Game Development Cultures,” *Games and Culture* 16, no. 7 (2021): 835–54.
- ¹⁰ Brendan Keogh, *The Videogame Industry Does Not Exist: Why We Should Think Beyond Commercial Game Production* (MIT Press, 2023).
- ¹¹ Michael Keane and Elaine Jing Zhao, “The Reform of the Cultural System: Culture, Creativity and Innovation in China,” in *Cultural Policies in East Asia: Dynamics Between the State, Arts and Creative Industries* (Palgrave Macmillan UK, 2014), 155.
- ¹² Karl Gerth, *As China Goes, So Goes the World: How Chinese Consumers are Transforming Everything* (Hill and Wang, 2010).
- ¹³ Michael Keane, “Unbundling Precarious Creativity in China,” *Precarious Creativity: Global Media, Local Labor* (2016): 215–30.
- ¹⁴ Keane, “Unbundling Precarious Creativity in China,” 227.
- ¹⁵ State Council Office, “State Council’s Circulation of the Ministry of Culture and Other Department’s Special Regulating Advice on Electronic Game Arcades,” no. 44 June 12, (2000), http://www.gov.cn/gongbao/content/2000/content_60240.htm.
- ¹⁶ Li Zhang and Anthony Fung, “Working as Playing? Consumer Labor, Guild and the Secondary Industry of Online Gaming in China,” *New Media & Society* 16, no. 1 (2014): 38–54; Zixue Tai and Fengbin Hu, “Play Between Love and Labor: The Practice of Gold Farming in China,” *New Media & Society* 20, no. 7 (2018): 2370–90.
- ¹⁷ Marcella Szablewicz, *Mapping Digital Game Culture in China* (Springer International Publishing, 2020).
- ¹⁸ Qiaolei Jiang and Anthony Fung, “Games With a Continuum: Globalization, Regionalization, and the Nation–State in the Development of China’s Online Game Industry,” *Games and Culture* 14, nos. 7–8 (2019): 801–24.
- ¹⁹ Aleena Chia, “The Artist and the Automaton in Digital Game Production,” *Convergence* 28, no. 2 (2022): 389–412; Wang, “The Makers Are Coming! China’s Long Tail Revolution,” Michael Keane, *Handbook of Cultural and Creative Industries in China* (Edward Elgar Publishing, 2016), 43–63.
- ²⁰ Zixue Tai and Jue Lu. “Playing with Chinese Characteristics: The Landscape of Video Games in China,” in *The Routledge Handbook of Digital Media and Globalization* (Routledge, 2021), 206–14.
- ²¹ Kevin H Zhang, ed., *China as the World Factory* (Routledge, 2006).
- ²² Yu Hong, *Networking China: The Digital Transformation of the Chinese Economy* (University of Illinois Press, 2017).
- ²³ Gejun Huang, “The Impacts of Cultural Policy on Gaming Entrepreneurs in Shanghai: An Entrepreneurial Ecosystem Approach,” *Cultural Trends* 31, no. 4 (2022): 311–31.
- ²⁴ Hong, *Networking China*.
- ²⁵ Jiang and Fung, “Games With a Continuum.”
- ²⁶ Sara XT Liao, “Japanese Console Games Popularization in China: Governance, Copycats, and Gamers,” *Games and Culture* 11, no. 3 (2016): 275–97; Akinori Nakamura and Hanna Wirman, “14. The Development of Greater China’s Games Industry: From

- Copying to Imitation to Innovation,” in *Game Production Studies* (Amsterdam University Press, 2021), 275–92.
- ²⁷ Pocketgamer, “Coconut Island’s Wen Chen on the Difficulties of Being an Indie Developer in China,” *PocketGamer* April 5, 2011, <https://www.pocketgamer.biz/feature/28861/coconut-islands-wen-chen-on-the-difficulties-of-being-an-indie-developer-in-china/>
- ²⁸ Steven Messner, “Between Censorship and Steam, Chinese Indie Developers are Hanging by a Thread,” *PCGamer*, February 08, 2020, <https://www.pcgamer.com/between-censorship-and-steam-chinese-indie-developers-are-hanging-by-a-thread/>
- ²⁹ Nakamura and Wirman, “14. The Development of Greater China’s Games Industry.”
- ³⁰ Larissa Hjorth and Dean Chan, eds. *Gaming Cultures and Place in Asia-Pacific* (Routledge, 2009).
- ³¹ Khee Hoon Chan, “The Closing Walls Around China’s Independent Game Developers,” *EGM*. January 17, 2020. <https://egmnow.com/the-closing-walls-around-chinas-independent-game-development-scene/>
- ³² Chan, “The Closing Walls Around China’s Independent Game Developers.”
- ³³ Sara XT Liao, “Japanese Console Games Popularization in China: Governance, Copycats, and Gamers,” *Games and Culture* 11, no. 3 (2016): 275–97.
- ³⁴ Matthew M. Chew, “A Critical Cultural History of Online Games in China, 1995–2015,” *Games and Culture* 14, no. 3 (2019): 195–215.
- ³⁵ Wang, “The Makers are Coming! China’s Long Tail Revolution.”
- ³⁶ Ken Wong, “A Glimpse into the Rising Indie Game Scene in China,” *Medium*, December 22, 2018, <https://medium.com/@fuzzyrhombus/a-glimpse-into-the-rising-indie-game-scene-in-china-9251c13ca5ea>
- ³⁷ Hugh Davies, Kyle Chung, and Yang Jing, “Curating Games in the Asia Pacific Region,” *Proceedings of the 25th International Symposium of Electronic Art* (2019): 722–24.
- ³⁸ Zheping Huang, “China Spells Out How Excessive ‘996’ Work Culture is Illegal,” *Bloomberg*, 27 August, 2021, <https://www.bloomberg.com/news/articles/2021-08-27/china-s-top-court-says-excessive-996-work-culture-is-illegal#xj4y7vzkg>
- ³⁹ Lin Qiqing and Raymond Zhong, “‘996’ Is China’s Version of Hustle Culture. Tech Workers Are Sick of It,” *New York Times*, April 29, 2019. <https://www.nytimes.com/2019/04/29/technology/china-996-jack-ma.html>
- ⁴⁰ Xiaotian Li (2019) documents the emergence of the 996.ICU movement growing out of resentment among tech workers in China regarding the sector’s excessive work culture. The name derives from idea that working 9am to 9pm, six days a week risks employee admittance into hospital intensive care unit (ICU).
- ⁴¹ Tingting Liu, “The Freedom of Binge Gaming or Technologies of the Self? Chinese Enjoying the Game Werewolf in an Era of Hard Work,” *Chinese Journal of Communication* 14, no. 2 (2021): 177.
- ⁴² Aleena Chia, “The Moral Calculus of Vocational Passion in Digital Gaming,” *Television & New Media* 20, no. 8 (2019): 767.
- ⁴³ Kathleen Kuehn and Thomas F. Corrigan. “Hope Labor: The Role of Employment Prospects in Online Social Production,” *The Political Economy of Communication* 1, no. 1 (2013): 9.

- ⁴⁴ Mark Deuze, "Work in the Media," *Media Industries Journal* 1, no. 2 (2014).
- ⁴⁵ Nick Dyer-Witheford and Greig de Peuter, *Games of Empire: Global Capitalism and Video Games* (Minneapolis: University of Minnesota Press, 2009).
- ⁴⁶ Jiyun Choi, Hyunseok Cho, Seungmin Lee, Juyeong Kim, and Eun-Cheol Park. "Effect of the Online Game Shutdown Policy on Internet Use, Internet Addiction, and Sleeping Hours in Korean Adolescents," *Journal of Adolescent Health* 62, no. 5 (2018): 548–55.
- ⁴⁷ Yoonmo Sang, Sora Park, and Hogeun Seo. "Mobile Game Regulation in South Korea: A Case Study of the Shutdown Law," *Mobile Gaming in Asia* (Springer, 2017), 55–72.
- ⁴⁸ Leon Y Xiao, "Drafting Video Game Loot Box Regulation for Dummies: A Chinese Lesson," *Information & Communications Technology Law* 31, no. 3 (2022): 343–81.
- ⁴⁹ Bjarke Liboriussen, Andrew White, and Dan Wang, "The Ban on Gaming Consoles in China: Protecting National Culture, Morals, and Industry Within an International Regulatory Framework," In *Video Game Policy* (Routledge, 2015), 230–43.
- ⁵⁰ Daiiani, Mahsum, and Brendan Keogh. "An Iranian Videogame Industry? Localizing Videogame Production Beyond The 'Global' Videogame Industry," *Media Industries* 9, no. 1 (2022): 37–66.
- ⁵¹ Szablewicz, "Mapping Digital Game Culture in China."
- ⁵² Chew, "A Critical Cultural History of Online Games in China, 1995–2015."
- ⁵³ Hugh Davies, "The Revolution Will Not Be Gamified," *British Journal of Chinese Studies* 12, no. 2 (2022): 76–100.
- ⁵⁴ Alexis Ong, "How an Unlikely Tencent Project is Helping China's Indie Scene," *Games Industry*, March 10, 2020. <https://www.gamesindustry.biz/how-an-unlikely-tencent-project-is-helping-chinas-indie-scene-to-grow>
- ⁵⁵ Messner, "Between censorship and Steam, Chinese indie developers are hanging by a thread."
- ⁵⁶ Brenda Goh, "Three Hours a Week: Play Time's Over for China's Young Video Gamers." *Reuters*, August 30, 2021, <https://www.reuters.com/world/china/china-rolls-out-new-rules-minors-online-gaming-xinhua-2021-08-30/>
- ⁵⁷ Liboriussen, et al., "The Ban on Gaming Consoles in China."
- ⁵⁸ Jiang and Fung, "Games with a Continuum."
- ⁵⁹ Yijun, "Is Winter Finally Over for China's Indie Game Creators?."
- ⁶⁰ Ong, "How an Unlikely Tencent Project is Helping China's Indie Scene."
- ⁶¹ Iris Deng, "China to Lose Its Crown as the World's Biggest Gaming Market to the US Due to Impact of Approvals Freeze," *South China Morning Post*, June 19, 2019. <https://www.scmp.com/tech/big-tech/article/3015130/china-lose-its-crown-worlds-biggest-gaming-market-us-due-impact>
- ⁶² Silvia M. Lindtner, *Prototype Nation: China and the Contested Promise of Innovation*. Vol. 30. Princeton University Press, 2020.
- ⁶³ Statista. Market share of the leading online gaming companies in China in 1st quarter 2019.
- ⁶⁴ Yuezhi Zhao, *Media, Market, and Democracy in China: Between the Party Line and the Bottom Line* (Vol. 164. University of Illinois Press, 1998): x.
- ⁶⁵ Messner, "Between Censorship and Steam, Chinese Indie Developers are Hanging by a Thread."

- ⁶⁶ Messner, “Between Censorship and Steam, Chinese Indie Developers are Hanging by a Thread.”
- ⁶⁷ Messner, “Between Censorship and Steam, Chinese Indie Developers are Hanging by a Thread.”
- ⁶⁸ Yijun, “Is Winter Finally Over for China’s Indie Game Creators?”
- ⁶⁹ Ramon Lobato and Julian Thomas, “An Introduction to Informal Media Economics,” *Television & New Media* 13, no. 5 (2012): 379–82.
- ⁷⁰ Chan, “The Closing Walls Around China’s Independent Game Developers.”
- ⁷¹ Chan, “The Closing Walls Around China’s Independent Game Developers.”
- ⁷² Brendan Keogh, “Between Triple-A, Indie, Casual, and DIY: Sites of Tension in the Videogames Cultural Industries,” in *The Routledge Companion to the Cultural Industries* (Routledge, 2015), 377.
- ⁷³ Bedingfield, It’s Not Just Loot Boxes: Predatory Monetization Is Everywhere.
- ⁷⁴ Chew, “A Critical Cultural History of Online Games in China,” 211.
- ⁷⁵ Chew, “A Critical Cultural History of Online Games in China.”
- ⁷⁶ *Indienova*. “A Talk on Chinese Indie Game,” February 24, 2017. <https://indienova.com/en/indie-game-development/a-talk-on-chinese-indie-game/>
- ⁷⁷ Yijun, “Is Winter Finally Over for China’s Indie Game Creators?”
- ⁷⁸ Wong, “A Glimpse Into the Rising Indie Game Scene in China.”
- ⁷⁹ Gao Ming, “The Quiet Need for Chinese Indie Games,” *Game Industry*, March 6, 2018. <https://www.gamesindustry.biz/articles/2018-03-06-the-quiet-need-for-chinese-indie-games>
- ⁸⁰ David Hesmondhalgh, and Sarah Baker. *Creative Labour: Media Work in Three Cultural Industries* (Routledge, 2013), 6.
- ⁸¹ Ingrid Richardson, Larissa Hjorth and Hugh Davies, *Understanding Games and Game Cultures* (Sage Publications, 2021).

Bibliography

- Bedingfield, Will. “It’s Not Just Loot Boxes: Predatory Monetization Is Everywhere.” *Wired*, July 28, 2022. <https://www.wired.com/story/loot-boxes-predatory-monetization-games/>
- Buchholz, Katherina. “Asian Countries Make Up 40% of the World’s Top 10 Video Gaming Markets.” *We Forum*, August 24, 2021. <https://www.weforum.org/agenda/2021/08/which-countries-have-the-largest-video-gaming-markets>
- Chan, Khee Hoon. “The Closing Walls Around China’s Independent Game Developers.” *EGM*. January 17, 2020. <https://egmnow.com/the-closing-walls-around-chinas-independent-game-development-scene/>
- Cheung, Carlos KF, and Anthony Fung. “Globalizing the Chinese Online Game Industry: From Incubation and Hybridization to Structural Expansion in the Past Two Decades.” *Global Game Industries and Cultural Policy*. Cham: Palgrave Macmillan, 2016, 71–90.
- Chew, Matthew M. “A Critical Cultural History of Online Games in China, 1995–2015.” *Games and Culture* 14, no. 3 (2019): 195–215.

- Chew, Matthew M. "The Significance and Complexities of Anti-Corporate Gamer Activism: Struggles Against the Exploitation and Control of Game-Worlds in 2000s China." *Games and Culture* 17, no. 4 (2022): 487–508.
- Chia, Aleena. "The Artist and the Automaton in Digital Game Production." *Convergence* 28, no. 2 (2022): 389–412.
- Chia, Aleena. "The Moral Calculus of Vocational Passion in Digital Gaming." *Television & New Media* 20, no. 8 (2019): 767–77.
- Choi, Jiyun, Hyunseok Cho, Seungmin Lee, Juyeong Kim, and Eun-Cheol Park. "Effect of the Online Game Shutdown Policy on Internet Use, Internet Addiction, and Sleeping Hours in Korean Adolescents." *Journal of Adolescent Health* 62, no. 5 (2018): 548–55.
- Davies, Hugh. "The Revolution Will Not Be Gamified." *British Journal of Chinese Studies* 12, no. 2 (2022): 76–100.
- Davies, Hugh, Kyle Chung, and Yang Jing. "Curating Games in the Asia Pacific Region." *Proceedings of the 25th International Symposium of Electronic Art* (2019): 722–24.
- Daiiani, Mahsum, and Brendan Keogh. "An Iranian Videogame Industry? Localizing Videogame Production Beyond The 'Global' Videogame Industry." *Media Industries* 9, no. 1 (2022): 37–66.
- Deng, Iris. "China to Lose Its Crown as the World's Biggest Gaming Market to the US Due to Impact of Approvals Freeze." *South China Morning Post*, June 19, 2019. <https://www.scmp.com/tech/big-tech/article/3015130/china-lose-its-crown-worlds-biggest-gaming-market-us-due-impact>
- Deuze, Mark. "Work in the Media." *Media Industries Journal* 1, no. 2 (2014): 1–4.
- Dyer-Witheford, Nick, and Greig de Peuter. *Games of Empire: Global Capitalism and Video Games*. University of Minnesota Press, 2009.
- Gerth, Karl. *As China Goes, So Goes the World: How Chinese Consumers are Transforming Everything*. Hill and Wang, 2010.
- Goh, Brenda. "Three Hours a Week: Play Time's Over for China's Young Video Gamers." *Reuters*, August 30, 2021. <https://www.reuters.com/world/china/china-rolls-out-new-rules-minors-online-gaming-xinhua-2021-08-30/>
- Hesmondhalgh, David, and Sarah Baker. *Creative Labour: Media Work in Three Cultural Industries*. Routledge, 2013.
- Hjorth, Larissa, and Dean Chan, eds. *Gaming Cultures and Place in Asia-Pacific*. Routledge, 2009.
- Richardson, Ingrid, Larissa Hjorth and Hugh Davies. *Understanding Games and Game Cultures*. Sage Publications. 2021.
- Hong, Yu. *Networking China: The Digital Transformation of the Chinese Economy*. University of Illinois Press. 2017.

- Huang, Gejun. "The Impacts of Cultural Policy on Gaming Entrepreneurs in Shanghai: An Entrepreneurial Ecosystem Approach." *Cultural Trends* 31, no. 4 (2022): 311–31.
- Huang, Zheping. "China Spells Out How Excessive '996' Work Culture is Illegal." *Bloomberg*, August 27, 2021. <https://www.bloomberg.com/news/articles/2021-08-27/china-s-top-court-says-excessive-996-work-culture-is-illegal#xj4y7vzkg>
- Indienova. "A Talk on Chinese Indie Game." February 24, 2017. <https://indienova.com/en/indie-game-development/a-talk-on-chinese-indie-game/>
- Jiang, Qiaolei, and Anthony YH Fung. "Games With a Continuum: Globalization, Regionalization, and the Nation-State in the Development of China's Online Game Industry." *Games and Culture* 14, no. 7–8 (2019): 801–24.
- Keane, Michael. "Unbundling Precarious Creativity in China." *Precarious Creativity: Global Media, Local Labor* (2016): 215–30.
- Keane, Michael, and Elaine Jing Zhao. "The Reform of the Cultural System: Culture, Creativity and Innovation in China." In *Cultural Policies in East Asia: Dynamics Between the State, Arts and Creative Industries*. Palgrave Macmillan UK, 2014, 155–73.
- Keogh, Brendan. "Between Triple-A, Indie, Casual, and DIY: Sites of Tension in the Videogames Cultural Industries." In *The Routledge Companion to the Cultural Industries*. Routledge, 2015, 152–62.
- Keogh, Brendan. "Situating the Videogame Maker's Agency Through Craft." *Convergence* 28, no. 2 (2022): 374–88.
- Keogh, Brendan. *The Videogame Industry Does Not Exist: Why We Should Think Beyond Commercial Game Production*. MIT Press, 2023.
- Kuehn, Kathleen, and Thomas F. Corrigan. "Hope Labor: The Role of Employment Prospects in Online Social Production." *The Political Economy of Communication* 1, no. 1 (2013): 9–25
- Li, Xiaotian. "The 996. icu Movement in China: Changing Employment Relations and Labour Agency in the Tech Industry." *Made in China Journal* 4, no. 2 (2019): 54–59.
- Liao, Sara XT. "Japanese Console Games Popularization in China: Governance, Copycats, and Gamers." *Games and Culture* 11.3 (2016): 275–97.
- Liboriussen, Bjarke, and Paul Martin. "Regional Game Studies." *Game Studies* 16, no. 1 (2016): 1–13
- Liboriussen, Bjarke, Andrew White, and Dan Wang. "The Ban on Gaming Consoles in China: Protecting National Culture, Morals, and Industry Within an International Regulatory Framework." In *Video Game Policy*, 230–43. Routledge, 2015.
- Lindtner, Silvia M. *Prototype Nation: China and the Contested Promise of Innovation*. Vol. 30. Princeton University Press, 2020.
- Liu, Tingting. "The Freedom of Binge Gaming or Technologies of the Self? Chinese Enjoying the Game Werewolf in an Era of Hard Work." *Chinese Journal of Communication* 14, no. 2 (2021): 176–92.

- Lobato, Ramon, and Julian Thomas. "An Introduction to Informal Media Economies." *Television & New Media* 13, no. 5 (2012): 379–82.
- Messner, Steven. "Between Censorship and Steam, Chinese Indie Developers are Hanging By a Thread." *PCGamer*, February 08, 2020. <https://www.pcgamer.com/between-censorship-and-steam-chinese-indie-developers-are-hanging-by-a-thread/>
- Ming, Gao. "The Quiet Need for Chinese Indie Games." *Game Industry*, March 6, 2018. <https://www.gamesindustry.biz/articles/2018-03-06-the-quiet-need-for-chinese-indie-games>
- Nakamura, Akinori, and Hanna Wirman. "14. The Development of Greater China's Games Industry: From Copying to Imitation to Innovation." In *Game Production Studies*, 275–92. Amsterdam University Press, 2021.
- Ong, Alexis. "How an Unlikely Tencent Project is Helping China's Indie Scene." *Games Industry*, March 10, 2020. <https://www.gamesindustry.biz/how-an-unlikely-tencent-project-is-helping-chinas-indie-scene-to-grow>
- Pocketgamer. "Coconut Island's Wen Chen on the Difficulties of Being an Indie Developer in China." *PocketGamer*, April 5, 2011. <https://www.pocketgamer.biz/feature/28861/coconut-islands-wen-chen-on-the-difficulties-of-being-an-indie-developer-in-china/>
- Qiqing, Lin and Raymond Zhong, "996' Is China's Version of Hustle Culture. Tech Workers Are Sick of It." *New York Times*, April 29, 2019. <https://www.nytimes.com/2019/04/29/technology/china-996-jack-ma.html>
- Sang, Yoonmo, Sora Park, and Hogeun Seo. "Mobile Game Regulation in South Korea: A Case Study of the Shutdown Law." In *Mobile Gaming in Asia*, 55–75. Springer, 2017.
- Soriano, Cheryll Ruth R., Hugh Davies, and Larissa Hjorth. "Social Surveillance and Let's Play: A Regional Case Study of Gaming in Manila Slum Communities." *New Media & Society* 21, no. 10 (2019): 2119–39.
- Sotamaa, Olli. "Studying Game Development Cultures." *Games and Culture* 16, no. 7 (2021): 835–54.
- State Council Office. "State Council's Circulation of the Ministry of Culture and Other Department's Special Regulating Advice on Electronic Game Arcades." no. 44 June 12, (2000). http://www.gov.cn/gongbao/content/2000/content_60240.htm.
- Statista. "Market Share of the Leading Online Gaming Companies in China in 1st Quarter 2019." *Statistica*, August 11, 2022. <https://www.statista.com/statistics/868870/market-share-of-leading-online-gaming-operators-china/>
- Szablewicz, Marcella. "Mapping Digital Game Culture in China. Springer International Publishing, 2020.
- Tai, Zixue, and Jue Lu. "Playing with Chinese Characteristics: The Landscape of Video Games in China." In *The Routledge Handbook of Digital Media and Globalization*, 206–14. Routledge, 2021.

- Tai, Zixue, and Fengbin Hu. "Play Between Love and Labor: The Practice of Gold Farming in China." *New Media & Society* 20, no. 7 (2018): 2370–90.
- Yu, Haiqing. "Game On: The Rise of the Esports Middle Kingdom." *Media Industries Journal* 5, no. 1 (2018): 88–105.
- Wang, Jufang. "Regulation of Digital Media Platforms." *The Foundation for Law, Justice and Society* (2020). <https://www.fljs.org/sites/default/files/migrated/publications/Regulation%20of%20Digital%20Media%20Platforms%20-%20The%20case%20of%20China.pdf>
- Wang, Jing "The Makers are Coming! China's Long Tail Revolution." In *Handbook of Cultural and Creative Industries in China*, edited by Michael Keane, 43–63. Edward Elgar Publishing, 2016.
- Wong, Ken, "A Glimpse Into the Rising Indie Game Scene in China." *Medium*, December 22, 2018. <https://medium.com/@fuzzyrhombus/a-glimpse-into-the-rising-indie-game-scene-in-china-9251c13ca5ea>
- Xiao, Leon Y. "Drafting Video Game Loot Box Regulation for Dummies: A Chinese Lesson." *Information & Communications Technology Law* 31, no. 3 (2022): 343–81.
- Xiao, Leon Y. "People's Republic of China Legal Update: The Notice on Further Strictly Regulating and Effectively Preventing Online Video Gaming Addiction in Minors." *Gaming Law Review* 25, no. 9 (2021): 379–82.
- Yang, Guobin. "The Return of Ideology and the Future of Chinese Internet Policy." *Critical Studies in Media Communication* 31, no. 2 (2014): 109–13.
- Yijun, Yin. "Is Winter Finally Over for China's Indie Game Creators?" *Sixthtone*, January 30, 2019. <https://www.sixthtone.com/news/1003524/is-winter-finally-over-for-chinas-indie-game-creator>
- Zhang, Kevin H., ed. *China as the World Factory*. Routledge, 2006.
- Zhang, Li. and Fung, Anthony. "Working as Playing? Consumer Labor, Guild and the Secondary Industry of Online Gaming in China." *New Media & Society* 16, no. 1 (2014): 38–54.
- Zhao, Yuezhi. *Media, Market, and Democracy in China: Between the Party Line and the Bottom Line*. Vol. 164. University of Illinois Press, 1998.