Innovating China: governance and mobility in China's new economy

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Chapter Two The Global City and Its Contents

In the course of China's economic reform, Shenzhen is seen as a laboratory of market economy to exhibit the socialistic market success without quantitative political change. This chapter starts by exploring how mobility, consumption driven modernity and the development of the relationship between state authorities and a migrant-driven informal economy has shaped the transformation trajectory of Shenzhen, from an export-oriented industrial special economic zone to a model post-industrial "global city".

This chapter begins by introducing the formation of the Shenzhen Special Economic Zone (SEZ), specifically how this borderland in the market reforms of the socialist agenda is transformed into a frontier of Chinese tech-innovation and creativity. The second part of this chapter explains how the state-led (de-)industrial upgrading and the global innovation cultural flows have co-produced innovation fever in contemporary China. The third part explores how this transformation has created a new form of economic organization, namely the tiny scale startups working for "creative capitalism" (Kinsley and Clarke 2009). It seems that the new form of working pattern and urban (de-)industrial transition liberates the entrepreneurial spirit of young Chinese professionals and non-Chinese professionals. I argue that the state-led liberalization that welcomes an open and individualistic innovation-economy foreshadows a new (social-)mobility pattern in Shenzhen.

2.1 Borderland Formation: Space and Power Intertwined

2.1.1 Making Shenzhen: The Rise of the Socialist Frontier and Its Population

Three major forces have shaped the Shenzhen SEZ: first, is the SEZ-policy under the socialist agenda; the second is the borderland-type political geography; and third is global capitalism. In the national narration about the SEZ, Shenzhen is a border city created from a small Pearl River Delta fishing town that faces the South China Sea. For most young Chinese people, Shenzhen's history begins in 1979 when Deng Xiaoping, the leader of Chinese Communist Party, identified the SEZ and initiated a developmental agenda of market economy in South China by introducing the Reform and Opening-up Policy. This political innovation and contemporary legend about Shenzhen SEZ trimmed the history of Chinese nationalism, high-socialism in mainland China and segregated capitalism in British Hong Kong (1841-1997).

Before the Opium War (1839-1942), contemporary Shenzhen SEZ belonged to the Xin'an County, one of the biggest market towns in South China. From 1842 to 1898, part of Xin'an County was ceded to the United Kingdom and became Hong Kong.

During the period of the Republic of China (1912-1949), Xin'an County was renamed Bao'an County. This became the collectivized area People's Communes (人民公社 *renmin gongshe*) under high-socialism (1949-1978), and what had been a prosperous market town during the late empire became a frontier of socialism in the Cold War (O'Donnell 2001, 2013; O'Donnell, Wong, and Bach 2017). Traditional peasant markets were discontinued, and local people were categorized into "social classes." The state imposed hierarchical social order and gradually transformed what had been a primarily lineage-based socioeconomic order. In addition, in the collectivization of land, peasants were divided into "teams" and "brigades" to maximize their production power (Potter and Potter 1990; Chan, Madsen and Unger 1992). In 1958, *Hukou* (户口 household registration policy) was launched to monitor and limit the movement of people. These structural changes put new pressures on the population that together with the economic disparity between China and British Hong Kong, and the failure of the Great Leap Forward in inland China, contributed to what is often termed "the Big Escape" (Chen 2016). Driven by the comparative prosperity of British Hong Kong, many people living in rural communes broke the *Hukou* regulation, swimming or running across the border from China to British Hong Kong.

In 1979, some territories in Bao'an County were segregated into Shenzhen SEZ to experiment with a market economy in the socialism frontier. In 1984, the central government created an order to draw a second borderline (二线关 *erxianguan*) around Shenzhen SEZ and institutionally segregate it from both British Hong Kong and socialist mainland China. Although part of China's market liberalization, the state's segregation of Shenzhen SEZ in 1984 indicates that the harsh controls over the mobility of the population and capital remained a part of this agenda. Furthermore, local control of mobility echoed nationally in the 1980s. In 1980, Regulation on Custody and Repatriation of Wanderers and Beggars in Cities (城市闲散人员收容遣送制度 *chengshi xiansan renyuan shourong qiansong zhidu*) was executed by the central state to punish people who mobilized without official permit from their *danwei* (单位 work units) or village committees (村委会 *cunweihui*).

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I begin with this official history of Shenzhen, not in order to reproduce the public memory of past days, but rather to trace the rapid transformation which occurred here, a transformation that has shaped modernity and the mobility of people-capital in this borderland between two worlds: the less developed mainland China on one side, and the more developed "Western world" on the other. This imagined, and now outdated, binary of two worlds was cultivated not only by the oligarchy-driven Cold War, but also by unbalanced regional economic development: compared to the capitalist world, the socialist world is poor.

This two-world binary was strengthened by the policy-driven economic reforms that followed. If Shenzhan's status as a borderland emerged out of Cold War geopolitics during the period of high socialism then, in a sense, the state's creation of SEZ continues those Cold War geopolitics while also cultivating a sense of development in the market-socialist agenda. In 1979, the Chinese central state imitated the "Four Asian Tigers", a

term used in the 1970s referring to Hong Kong, Singapore, South Korea and Taiwan, to revive China's stagnant domestic economy and reinstated its developmental agenda in the global economy. The state selected four coastal cities (Shenzhen, Zhuhai, Shantou, Xiamen), promoted them to prefecture-level and authorized them, as special economic zones, to take foreign export-oriented labor-intensive manufacturers and foreign direct investment from British Hong Kong, America, Taiwan, Japan, South Korea, etc. With the state-sponsored construction of export-oriented manufacturers, capital and labor flowed into Shenzhen. The first Chinese stock exchange center was built in Shenzhen in 1990. After using liberal financial regulation in Hong Kong and Shenzhen, Chinese state led foreign capital moved to mainland China (Smart and Smart 1991).

Key to Shenzhen modelling itself as a global edge was the "self-conscious making of spectacle" (Tsing 2004: 57). For a long time, "Shenzhen Speed" was widely reported as a miracle of economic reform that the Chinese state could display to the outside world. The official narrative of Shenzhen SEZ always begins by defining it as "the test field of reform and opening up" (Deng 1994) in the period of economic liberalization. The narration of economic success in Shenzhen echoes the state's goal: through marketization, socialist economic reform can produce huge economic success and a harmonious society. It is thus a starting point to understand Shenzhen not only as a SEZ, but also an idealized stage for the Chinese state to exhibit economic success both internally and externally to the world.

The (re-)creation of Shenzhen SEZ continues to be a process of space-making, migrant community formation and nation-building, all intertwined together. Life in Shenzhen became geopolitical because what happened in Shenzhen was thought to be geopolitically significant, which consequently had an influence on local life. The geopolitical transformation in Shenzhen SEZ was connected to the changing concepts of "the local" and "the newcomer." Identity politics were driven by the Reform and Opening-up Policy after Shenzhen opened its door to domestic immigrants (外地人 *waidiren*) and eventually to visiting foreigners.

Before the Reform, the people of Shenzhen were identified as three groups living in villages: the Weitou People (围头人 indigenous villagers), the Hakka people (客家人 guest families), and the Teochew people (潮汕人 people living in the border area between Guangdong and Fujian Province). Those who traced their ancestry and kinship to the Song dynasty (960-1279) from North China were identified as the Weitou People who now live in the border area of Shenzhen and the New Territory of Hong Kong. Hakka people were previously identified by Weitou people as vulgar ethnic groups living in the mountainous part of North Guangdong in the period of late empire. This naming of the Hakka people depicts them as once being an early group of "newcomers" in the Cantonese area. Teochew people came from the eastern coastal area of Canton. Their local lineage and kinship systems were diminished under socialist rule, yet as the forerunner developers of this area, they leveraged their renowned kinship networks in

the Southeast Asian-Pacific region into economic success in mainland China at the beginning of the Reform and the Opening-up period (Nonini and Ong 1997; Landa 1999).

Above I have traced the social construction of Shenzhen SEZ as a product of long-established ethnicity, kinship, and state authorities. It is also a history of how waves of domestic immigrants became "the local residents" in this core area of the South China. In the middle period of reform, the borderland witnessed the gradual decline of Cold War politics and the rise of legalized and normalized trans-border economic activities. Large amounts of state-owned and foreign capital was pulled into Shenzhen SEZ, manufacturing industries were moved up from Hong Kong, and the domestic immigrants (外地人 *waidiren*) being newcomers working for the world factories, entered this new city.

2.1.2 Shenzhen SEZ, Market Reform, and Industrialization: The *Waidiren* and the Rise of the "World Factory" in China

Based on ethnographical research conducted in South China, especially during the 1980s in the Pearl River Delta, sociologists and anthropologists trained in the West often treat the economic reform of market towns and villages as a window through which to understand local complexities in the transition of China's political economy (Potter and Potter 1990; Siu 1989). The vivid ethnography of Shenzhen, famously embodied as "Chen Village", investigated how collective socialist communes became market towns in the 1980s (Chan, Madsen and Unger 1992).

Comparing my own experience in Shenzhen to these accounts from the 1980s, I was amazed by how much and how quickly the contemporary urban landscape seemed to have changed. The first time I came to Shenzhen was in the summer of 2000. I remember needing a small, special license to pass through the second borderline to enter the inner city of Shenzhen. The metropolitan area was segregated by a wall, much like Berlin during the Cold War. The inner city shared a border with Hong Kong, but the peripheral city was clustered with factory zones for foreign invested manufacturing enterprises. Foxconn, the largest contract electronic manufacturer in the world, had built its manufacturing chain in Longhua town in Shenzhen in 1988. Longhua town was urbanized in 2004.

These factory zones were built on the collective land of villagers. Prior to the enactment of the Reform and Opening-up policies in Shenzhen, these areas were rural land owned by socialist communes with their administrative forms, the town (镇 *zhen*) in the urban peripherals. After Shenzhen began to welcome foreign-invested manufacturers, family-bound enterprises in these villages were institutionalized into township and village enterprises (TVEs) managed by officials from the local government (Unger and Chan 1999; Zhe and Chen 2000).

Shenzhen was promoted to the status of administrative city in 1992.[29] The market towns were urbanized into district (区 *qu*). The villagers gradually gained urban citizenship after this transition. However, most villages did not follow the *tudi guoyouhua* (土地国有化 nationalization of rural land). Villagers tried to negotiate for land rights with the local state. After several strands of negotiations, the Shenzhen government agreed to give each village 50 years of land-use rights. This local negotiation of collective village land contributed to the rise of local entrepreneurialism. Villagers established their shareholding companies (股份公司 *gufen gongsi*) to manage their collective land. This change in land management accelerated export-oriented industrialization: villagers rented out their land to newcomers, such as Hong Kong and Taiwanese manufacturing chain owners and immigrant workers. The villagers became shareholders and earned their incomes from rental properties. By giving management rights to former local leaders (normally from local lineages dominant before the socialist transformation), the local state gained ownership, outsourced authority over land-use to the residents who were allowed to marketize and monetize the use of the land. In this way, both former collective communes and newly settled, state-sponsored urban village enterprises played the role of landlord, renting out their collective land or the state's land to the foreign invested private manufacturers in 1980s and 1990s (Zhe and Chen 2000; Bach 2010; Chung and Unger 2013).

In the summer of 2000, I was living in an urban village located outside of the second borderline of Shenzhen. The multi-narrative histories of "the second borderline" made it difficult to figure out the exact reason for setting this "second borderline" within the city. Official history defined it as a way of forbidding illegal immigration from mainland China to Hong Kong. Yet, regardless of whether this is true or not, the setting of "the second borderline" physically segregated the inner city from the peripheral city and, from the start the 1980s, thus shaped the binary identities of "modern *shenzhener*" and "migrant outsiders". Towards the end of the 1990s, Shenzhen witnessed the decline of the second borderline. In 2003, after the national Regulation on Custody and Repatriation of Wanderers and Beggars in Cities (城市闲散人员收容遣送制度 *chengshi xiansan renyuan shourong qiansong zhidu*), local government regulations limiting domestic migration without official permits were diminished.

As a ten-year-old child I had limited knowledge about the institutionalized urban segregation in Shenzhen. Hence, my impression of the peripheral city of Shenzhen was that of a lot of workers in gray and blue suits, factory blocks, dormitory communities, cheap restaurants, and hostels clustered around the countryside. I remember hearing an older cousin telling my grandfather that we were living in the country, not an urban area. We were living in the rented apartment of a relative who came to Shenzhen in the early 1990s. My grandpa, a retired official who had worked in a local state-owned iron

[29] For further information on the early urbanization of Shenzhen SEZ, see: *Guanyu Shenzhen jingji tequ nongcun chengshihua de zanxing guiding* (Interim Regulation of Urbanization of Villages in Shenzhen Special Economic Zone), available at: http://szzx.sznews.com/content/2013-04/23/content_7974229.htm

and steel company in Hunan Province, told me that most of our rural relatives in Jiangxi and Hunan Provinces preferred to *dagong* (打工 work in private sectors) in Pearl River Delta, which they travelled to via the National Road 107, a road completed in 1988 to connect Beijing and the Shenzhen SEZ. In the eyes of my Hunan and Jiangxi relatives, Shenzhen was seen as the end-of-the-road icon and their best choice to *dagong*.

We lived with my grandpa's nephew, Uncle Huang. At that time, he was working for a Japanese invested electronic manufacturer who had production contracts with Sony, the consumer electronics tycoon in Japan. After the township village enterprise he worked went bankrupt, he lost his iron-rice-bowl job in Ji'an county, Jiangxi Province. When a friend from the same county described the Hong Kong style modern life in Shenzhen and invited him to go, Uncle Huang walked all the way to *dagong* in Shenzhen. Most of our neighbors were also migrant workers from other provinces. During a fieldwork trip in 2015, I visited Uncle Huang in Dongguan, a nearby manufacturing city where thousands of Three Import and Compensation Trade Enterprises[30] had clustered in the 1990s. By working as an industrious *dagongzai* (打工仔 migrant workers in Cantonese), Uncle Huang was promoted to a mid-level manager position in this Japanese-invested, Taiwanese owned enterprise.

In a sense, uncle Huang's story demonstrates how the imagination of Shenzhen as an economic miracle is strengthened by mass expectation of consumption driven modernity. Situated next to Hong Kong, a paragon of affluent society in Asia, Shenzhen was expected to become the next Hong Kong from the 1980s onwards. The high-speed-modern-city milieu attracted those with ambitions of self-realization within the developing market economy to live a modern life. The migrants with entrepreneurial spirits raised three waves of "entrepreneurial fever" in Shenzhen which were widely reported on in the 1980s, at the beginning of the 1990s, and at the turn of the 21st century. It was in the late 1990s that, combined with the first wave of overseas returnees after marketization, Chinese internet tycoons appeared. As explained by an informant who *xiahai-ed* in 1994: "At that time, working and living in Shenzhen helped me to gain access to Western goods, commercial news and knowledge. People in my hometown were envious that I became knowledgeable and always came back with fancy goods such as portable cellphone (大哥大 *dageda*) that I bought from Hong Kong."[31]

The contemporary imagination of Shenzhen as an economic miracle—which circulates in mass media, official brochures, and mass development plans— actually arose from mobility under state-sponsored economic liberalization, the impact of

[30] As it is officially defined by China Daily Dictionary, this commercial type is "A shorthand for enterprises that process imported raw materials, manufacture products according to imported samples, assemble imported parts and those that repay loans for imported equipment and product technologies. Emerging in the coastal area in the late 1980s, all these enterprises exported their products abroad. By taking the processing fee, they became the major force in the processing trade, which formed a big proportion in the country's total trade volume. They played a key role in fostering the development of China's trade." Please see: http://language.chinadaily.com.cn/60th/2009-08/25/content_8615027.htm (Accessed August 8, 2016).

[31] Interview, 2015, with Uncle Huang's relative.

modernity on the nature of consumption, and the sustainable urban informal economy. As the central state retreated[32] in the process of economic liberalization after the 1980s, Shenzhen became an enclave to test and implement national economic policies which imitated those from developed countries. At the same time, even as the Tax-sharing Reform consolidated the central state's economic authority in 1994, Shenzhen retained agency in dealing with liberal economic reforms.[33] Furthermore, it was these institutional reasons that drove mobility in the area: the state-sponsored economic liberalization attracted human and global capital to Shenzhen (Liang 1999; Wang, Wang and Wu 2010).

Both longtime residents and newcomers shared a common sense that Shenzhen was a city without history when I visited Uncle Huang in 2012. "Shenzhen has no history! It is young, things here have changed so quickly," Uncle Huang told me. After Shenzhen was urbanized in 2004, the collectively-owned land turned into state-owned land and the price of land-use increased. More expensive rent resulted in some foreign invested electronic manufactures moving to smaller nearby cities such as Dongguan and Huizhou. Uncle Huang's workplace was moved to Dongguan in 2006. "However, the new industrial upgrading (产业升级 *chanye shengji*) is coming! Technology innovation and Internet will change the world! If we cannot catch up the wave, we might lose our jobs in the very near future," Uncle Huang sighed. In the discourse around policy, "the industrial upgrading" means the "the transformation of traditional industries to an intensive mode of development with high added value, low energy consumption and low pollution as soon as possible so as to achieve industrial restructuring and upgrading."[34] Distinct from the grand narrative of "the industrial upgrading" created by the state and tagging himself as a worker from "traditional industry," Uncle Huang attributed his own meaning to "industrial upgrading", being that high skilled technicians will gradually take over the jobs of low skilled workers. It seemed that Uncle Huang felt uneasy about the coming change and how it might reshape the opportunities and career trajectories of everyone bound up in the shifting global supply chain.

[32] This is not to say that the central state retreated from market transition. On the contrary, by marketizing central state-owned sectors (such as the China Merchants Group) and state enterprises in Shenzhen, the Chinese state strengthened its power in the market economy (Yang 2001; Pieke 2009).

[33] Shenzhen was nominated as *jihua danlie shi* (计划单列市), a city with independent budgetary status, in 1988. This means that the revenues and expenditures of Shenzhen could be directly linked to the central government. It is independent from Guangdong Province.

[34] Further information on *Shibada baogao jiedu: huijiu weilai fazhan hongwei lantu* (The Interpretation of the Report of the 18th National Congress of the Communist Party of China) is available at: http://theory.people.com.cn/n/2012/1114/c49155-19576851.html.

2.1.3 Shenzhen, De-industrialization, and State-led Urban Renovation: The Rise of the Chinese Market in the World Economy

The local state-led urbanization reshaped Shenzhen into the "first Chinese city without villages and villagers"[35] and integrated Shenzhen into the new urbanization agenda of "building an international commercial-centered city (建设国际化经贸中心城市 *jianshe guojihua jingmao chengshi*)" in 2003.[36] New hi-tech parks were established by the local state to drive information technology enterprises such as Tencent and Huawei, and internationalize them on to the global market. Obsolete factory zones were gentrified into tech-innovation clusters designed as local re-imaginings of Greenwich Village in New York, or co-working spaces in Silicon Valley. An official urban planner who has worked in Shenzhen for 15years explained: "If we say the Communist revolution triumphed in 'rural areas encircle cities'[37] (农村包围城市 *nongcun baowei chengshi*), then the contemporary post-industrial economic development can be seen as a model of 'cities encircle rural areas' (城市包围农村 *chengshi baowei nongcun*)."[38]

The second borderline was completely deconstructed in 2015 by local government to loosen its control on human mobility. In January 2018, the State Council announced formal policies to deconstruct the second borderline of special economic zones and write it into the "history".[39] "Here is no need to set the segregated line anymore because there is no sharp imbalance in economic development between inner metropolitan city of Shenzhen and peripheral city of Shenzhen,"[40] a retired local official told me. Further, as part of mainland China, Shenzhen looks like Hong Kong today. The big, cheap production chain of manufacturers is leaving the peripheral city of Shenzhen and moving to Southeast Asia and other northern provinces in mainland China. Equipped with modern and globalized urban maintenance, the central urban districts are being gentrified into innovative spaces such as expensive residential communities, hi-tech zones, maker spaces, financial centers, and big shopping malls. As was ironically stated by a tech-startup worker: "the economic miracle in Shenzhen today is the tech-innovation fever and the unbelievable house prices."[41]

The existing regional/urban-rural economic inequalities during state-sponsored

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[35] The China Metropolis Daily article *Shenzhen chengshihua tisu, jiang chengwei quanguo shouge wu nongcun chengshi* (The Acceleration of Shenzhen's Urbanization: Shenzhen Will Be the First Country-less City in China), is available at: http://www.china.com.cn/chinese/2003/Oct/432834.htm (Accessed August 8, 2016).

[36] The People Net article *Shenzhen shouci tichu shijianbiao, jiancheng guojiahua dushi zhishao xu shinian* (The First Time that Shenzhen Launched the Schedule: 10 Years Needed to Build up an International City) is available at: http://www.people.com.cn/GB/jingji/1038/2098785.html (Accessed August 8, 2016).

[37] A revolutionary discourse in the Maoist era.

[38] Interview with Fu, an architect working at the Institute for Rural and Urban Planning Shenzhen, October 06, 2015.

[39] The State Council on the Consent to Withdraw Shenzhen Special Economic Zone Management Line (*Guowuyuan guanyu tongyi chexiao Shenzhen jingji tequ guanlixian de pifu*) Please see: http://www.gov.cn/zhengce/content/2018-01/15/content_5256812.htm (Accessed March 12, 2019).

[40] Interview with Wang, December, 2015.

[41] Interview with Liang, November, 2015.

development in the 1980s resulted in many rural laborers migrating to fill shortages in the booming, labor-intensive, export-oriented manufacturing industry. However, mobility refers not only to human-capital inflow, but also to their outflow. The recent state-led de-industrialization of the labor-intensive manufacturing industry and the technologically upgraded industry witnessed an outflow of low-end workers and inflow of high-end workers, mainly young professionals. Considering that contemporary China's industrialization is one of the largest markets in the world innovation economy, many young professionals come to Shenzhen. Holding at least undergraduate professional degrees, most of these newcomers compensate for an emerging labor shortage in professional service industries such as information technology, finance, and various creative industries.

Furthermore, not only Chinese, but also young foreign graduates are starting to come to Shenzhen. Farhad, an informant from Iran with an electronic engineering degree, reported that from his perspective Shenzhen is not only a site to promote design and production processes, but also the biggest market in South China to sell his product. Every large electronic accessory brand gives Shenzhen marketers the lowest price to sell their products, consequently Shenzhen is considered as the biggest market for consumer-end electronics. Increasingly, Chinese customers are favoring fancy electronic commodities that perform as "modern human beings." On the global scale, modes of entertainment, consumption, and lifestyle are tightly bound by the newly invented techno-products such as robotic accessories for smart homes. Parallel to this growing global market for electronic commodities, is the rising tech-innovation fever in China.

2.2 Innovation in China: Late Capitalist Activity and Its Chinese Metamorphosis

The current Chinese innovation fever is grounded in the global rise of the maker movement. The "Makers" that informant mentioned in our conversation are seen as a globally growing group who define themselves as DIY-ers, using cheap open-source electronic kits, software programs, and crowd-funding to make customized industrial products. Thus, they claim to challenge the mass-production of consumer goods. Originating in America and promoted as a social and economic alternative to late-capitalism, the Maker movement emerged in the aftermath of the burst dotcom bubble (early 2000s) and the sub-prime mortgage crisis (2008).It has steadily gained popularity among young people suspicious about the consumerism of the 21st century digital economy.[42] American scholars critical of the passive post-industrial consumption-oriented economy, propose that Makers can be "rugged consumers" able to mediate between self-sufficiency and mass-consumption-dependency (Malewitz 2014). Tech

[42] An American informant who was living in the California Bay area told me that after the economic crisis in 2008, there were more bottom-up group meetings in discussing the function of the Maker movement.

industry commentators wanting to promote an American anti-Fordist culture see the Maker movement as a new chance to accelerate the process of "idea-to-products and jobs" in America.[43]

Fascinated by the spirit of the Maker movement, Chinese techno-hobbyists "de-territorialize" Maker culture and the social codes of the Maker movement, and then "re-territorialize" them in the context of China. Anthropologists and human geographers use "de-territorialization" to explain the disconnection of culture, capital, labor, and place when nation states conduct deregulated control in the domestic market (Harvey 1989; Appadurai 1991, 1996). In 2008, *chuangke* (创客 Maker), a popular concept from California, was imported to China to indicate a group of Chinese techno-hobbyists who used innovative design, free open-source components, and cheap means of production to DIY technology-based products for entertainment (Lindtner and Li 2012; Lindtner 2015; Wang 2019).

In the marketing of the Maker movement, hacker technology and free open-access concepts are appropriated by American Maker culture promoters who are active in the Chinese Maker market. These tools are invented based on licensed open-source electronic accessories that challenge the monopoly of big manufacturers. Like many anti-consumerist activities, the Maker movement calls for classic and romanticized characteristics of post-industrial culture and cherishes personalized Do-It-Yourself products. In practice, the social acceptance of hacker technology, open-source accessories, and online and offline open platforms does not liberate techno-DIYers from the monopoly of manufacturers. Instead, it creates a niche market for niche consumption in the so-called digital age. Later chapters will offer more details on how niche production and consumerism is rising in mainland China. A widely accepted mindset emphasizing "customized production" drives more and more Makers to produce and market customized electronic kits on the rising niche market. In this sense, the American Makers moral imperative to challenge current capitalist production and consumption has been translated by Chinese Makers as an entrepreneurial practice to "explore the niche market of customized electronic products."[44]

2.2.1 "Maker-Innovation is a new business in China!": Nationalizing the Grassroot Innovation Movement in China's Urban Economy.

As "cultural brokers," overseas Chinese professionals played pioneering roles in translating the Maker movement to China (Saxenian 2002; 2003). The son of a Teochew merchant and a Taiwanese American, David Li worked for an American IT company

[43] The Atlantic article Mr. China Comes to America. Please see: http://www.theatlantic.com/magazine/archive/2012/12/mr-china-comes-to-america/309160 (Accessed August 5, 2015).

[44] Conversation with Ouyang, November 20, 2015, Shenzhen.

from 1992 to 2003 before migrating to Shanghai. He established the first Maker-space in Shanghai in 2008. He was motivated by discontent that there was an absence of professional spaces for DIY techno-hobbyists to do cost-less and innovative projects in the name of "democratic innovation." In order to affiliate the Chinese Maker movement with global Maker and Maker culture, Li and his friends (respectively working for Google China's branch and an America IT company) set out to establish a Maker-space in Shanghai, called *Xinchejian* (新车间 the new studio). After co-establishing several Maker-spaces and Maker education programs, Li was considered a guru in Chinese Maker circles.[45] Li and his partners proposed that the spirit of the Chinese Maker movement is to create new things by appropriating and upgrading copycat knits. New intellectual contributions support and legitimate their argument that Western-centered intellectual property (IP) systems harm grass-root innovation in China (Prud'homme 2012).

The Chinese government extensively sponsored the translation of the Maker movement in order to develop an innovation-economy and tiny-scale private enterprises in China. The national policy of promoting mass-entrepreneurship is widely practiced by anxious local developers through their new invention of "business platforms"—the online and offline entrepreneurial infrastructures—intended to revitalize local enterprises. Bottom-up innovation campaigns are an alternative for urban developers, a way to reform the current tech-development model. The central government launched a technology development agenda called the Torch Project as early as 1988 to market the technological accomplishments of state-owned science-labs and to internationalize Chinese tech-innovation. This project contributed to the rapid establishment of urban tech-industrial parks in the 1990s. It is during this decade that Chinese IT tycoons including Baidu, Alibaba, and Tencent became rising stars on the world economy.

During the same period, the governments of large Chinese cities accelerated plans to build infrastructures for urban-centered tech-innovation. Starting in the 2000s and with the assistance of returning professional migrants, Bejing Zhongguancun Innovation Way, Shanghai Zhangjiang Hi-tech Park, and Shenzhen Nanshan Hi-tech Park were successively established by local developers to amplify the innovation economy in these local regions nationally. On an organizational level, the success of the B2C (Business to Consumer)[46] Maker business gained the attention of the aforementioned Chinese IT giants. Baidu, Alibaba, and Tencent created their own online crowd-funding platforms to attract Chinese Maker projects and to market these innovations domestically.

Chinese participants are enthusiastic about the expansion of the global maker-movement in China. "It seems that you can do tiny innovative programs with a group

[45] See online-report David Li, founder of China's first makerspace "New Danwei" (*zhongguo shouge chuangke kongjian xinchejian chuangshiren li dawei)*: http://www.szida.org/content-6-2074.html (Accessed August 5, 2015).
[46] Business-to-consumer refers to the process of selling products and services directly between consumers who are the end-users of its products or services.

of innovative minds!" stated Xiao Luo, an informant who regularly participated in open-night activities at a maker space in Shenzhen. However, if we look beyond the pragmatic dimension of this newly emerging urban industry, we can see that the expansion of the global maker-movement is an activity of business creation on the frontier of the Chinese world factory zone. "Maker-innovation is a new business in China!" reported an informant working as a managerial official in Luoyang High-tech Zone. His team and I were interning in a managerial sector of Shenzhen Nanshan Hi-tech Park in 2015. Further, he told me that what is important is that the policy-driven innovation campaign produces business opportunities in this niche market and introduces new standards in the existing hierarchical urban industries.

2.2.2 Maker Activity in Shenzhen: The Recognition of Individuality

As early as 2008, the UNESCO Creative City Network foundation nominated Shenzhen as one of three large Chinese cities (including Beijing and Shanghai), as "the innovation metropolis". As a means of exploring the online economic momentum, the Shenzhen local economic developers and B2C Maker businesses created and/or reformed the necessary infrastructure required to enable maker-innovation in the local area. The Shenzhen Municipal Science and Technology Innovation Council reported that 67 technology-based business incubation spaces were constructed[47] in order to offer free offline space to grass-roots Makers in a two-year period (2013-2014). Further, since 2014 local governments have encouraged grass-roots Maker enterprises by organizing creative and industrial fairs to exhibit the digitally-driven Maker enterprises in Shenzhen.[48] The hope, for these governments, is to broaden the regional movement's influence on global innovation.

Undoubtedly, innovation fever in Shenzhen and the Pearl River Delta signifies a recognition of individualization on this site of mass production and trade. When asked why they came to Shenzhen Nanshan rather than Beijing, Zhongguancun or Shanghai Zhangjiang, my informants offered mind-maps about the differences between these three innovation clusters. There is a mindset today, circulated on social media and in young professional groups, that compared to Beijing and Shanghai, Shenzhen is a *waidiren* (外地人 outsiders) friendly city. Created by the local government in 2012, the city slogans, such as "the people who come to Shenzhen are Shenzhen people (来了就是深圳人 *laile jiushi shenzhenren*)," "Shenzhen, an open city *Shenzhen,* (深圳，一座开放的城市 *yizuo kaifang de chengshi*)," and "open innovation (开放创新

[47] A list of incubators in Shenzhen: http://www.szsti.gov.cn/services/resources/incubators (Accessed March 7, 2016).
[48] I interviewed a cadre working in district Technology and Innovation Bureau of Shenzhen City, November 11, 2015, Shenzhen.

kaifang chuangxin)"[49] were frequently mentioned in my discussions with informants. As a capital city, they believed Beijing to be too political to conduct market-oriented innovation led by professional newcomers.[50] In the world economy Shanghai played an important role, incarnating industrial modernity in the late-Qing China (1843-1919). However, this *entrepôt* economic region was strongly nationalized in the 1950s and turned into an economic center co-constructed by place-bound economic networks in the Yangtze River Delta in the 1980s. Whether true or false, this exercise of mind-mapping can, in some sense, explain why increasing numbers of young professionals want to realize their personal dreams in Shenzhen. In 2014, Li and his partners expanded the Shanghai Maker community in Shenzhen and together with Shenzhen Open Innovation Lab (SZOIL) established the Intel foundation and the Shenzhen Industrial Design Association (SIDA) to create a networking and technology platform for young newcomers and to link the bottom-up innovation campaign with the local industrial system. Joining in this tidal turn of the national economy, young Chinese and non-Chinese people including students, overseas professionals, and global adventurers, have been drawn into Chinese innovation clusters to earn their first buckets of gold.

More and more practitioners have joined the Maker movement in Shenzhen to initiate changes in their business and production models. Eric Pan, a Shenzhen-born former Intel engineer, ran a workshop studio and a small factory that produces open-source electronic components for the growing customized niche market in Shenzhen. Unlike most hardware electronic knits producers who work with business-to-business (B2B) sales models in the export supply chain, Eric Pan established an online business-to-customer (B2C) business model to reform his former B2B marketing system. As a former engineer at a large company, he discovered that the old-fashioned B2B business model cannot fulfill the needs of the emerging numbers of techno-hobbyists. Instead, he began selling online electronic components directly to individual customers. This direct-sale B2C model was often copied by other followers of the Maker movement. Like B2C pioneers such as Eric Pan, Chinese Makers began releasing their ideas on international online platforms such as IndieGoGo and Kickstarter to attract individual buyers and to ask for crowd-funding to turn their ideas into products.

The recognition of "individuality" in Shenzhen is also an emerging governing strategy, an adaptation. This followed new trends in local and global economic movement. The local grass-roots innovation of businesses was immediately noticed by the local authorities. Eric Pan and David Li are examples of this. In spring 2014, when Eric Pan's startup, Seeed Studio, received series A funding from IDG Capital Partners, an American capital funded investment company, it bought and undertook the authority

[49] Shenzhen's government launched a propaganda video "The people who come to Shenzhen are Shenzhen people" (《来了，就是深圳人》) to express the liberal social atmosphere and the promotion of individuality in Shenzhen, available at: https://v.qq.com/x/page/w0332y3bzyp.html. Other articles published in official media declaring and branding Shenzhen a young, open, and active city in South China, are available at: http://fashion.qq.com/a/20171130/037887.htm and Xinhua News: http://www.xinhuanet.com/local/2016-05/10/c_128972504.htm (Accessed September 20, 2016).

[50] Interview Yang, Futian, November 10, 2015.

to organize a Chinese version of a Maker Fair. His Maker space, Chaihuo, was visited by Premier Li Keqiang after the ceremony of the first Maker Fair. Later, he was nominated to join the 2015 Chinese People's Political Consultative Conference in Shenzhen. Subsequent chapters will further articulate how local authorities join the construction of new economic activities in Shenzhen.

2.3 Innovation in Transition: New Market, New Code, and New Division of Labor

The export-oriented economic development agenda made Shenzhen a world-famous site, as it "is the biggest cheap 'copycat' portable phone wholesale center."[51] It has attracted many entrepreneurs from African countries and the Middle East to buy in and sell out to their home countries, earning profit from the price differences. Buyers come during the busy season and live in temporary residential areas in the cities. The story of buyers who settle in cheap guesthouses in Hong Kong, buying and smuggling low-end "copycat" electronics like smart phones and MP4s from Shenzhen, are recounted in Gordon Mathew's work, *Ghetto at the Center of the World*. Mathew's main argument is that day-by-day globalization regulated by commodity chains and less-regulated by (neo-)liberal states has produced low-end globalized stop-over sites such as Chungking Mansion in Hong Kong. In his book, he concludes that should this low-end globalization stop in Hong Kong, it would restart in Shenzhen if the flocks of international low-end product buyers resettled in mainland China. This has turned out to be partly true: hundreds of foreigners from all over the world, and from different social backgrounds, now come to South China's coastal cities, such as Guangzhou (Gordon, Lin and Yang 2017) and Xiamen (Lehmann 2014), seeking opportunities.

However, diverging from the process of low-end globalization, as outlined by Mathew, are Shenzhen and the current Guangzhou. The new scheme of "innovation China" is gradually replacing the low-end globalization which was embodied by the cheap or counterfeit goods trading nexus in South China. Big trading ports have experienced acute urban gentrification because of urban planning. The state-sponsored urban innovation drives market transition. In order to adapt themselves to this new market, the urban newcomers have started to invent new codes of production/invention and business. Stimulated by this industrial upgrading, the labor market has fallen into new patterns of labor division. The following section will introduce and explain these new transitions in relation to Shenzhen's urban techno-innovation.

2.3.1 Market Shift

Shenzhen's Huaqiangbei electronics market is a prime example of the market shift that

[51] Interview Farhad, November and December, 2015.

this section will outline. Often tagged as the biggest market of copycat electronics in the world, the Huaqiangbei electronics market attracted merchants from African and Middle Eastern countries to buy cheap cellphones and other electronics to meet the demand of their markets. The central government attempted to dispel the negative image of Chinese products by launching a series of policies to punish producers of counterfeit goods and passing laws and regulations on intellectual property issues in China. Following the central government's "double-purge" regarding counterfeit goods and infringing intellectual property, local government launched a purge of Huaqiangbei electronics market.[52] Cui Di, a 28-year-old e-commerce startup owner who is running his Teochew family enterprise, remembers the days when "a lot of merchants had to quickly destroy the fake goods otherwise they would be harshly punished by the *dajiadui* (打假队 the troops to crack down the counterfeit goods)."[53] After the *dajia* period, the Huaqiangbei electronics market zone was no longer a hub for cheap "copycat phones." In 2016 when I did my fieldwork in the Huaqiangbei Electronic Zone, Cui Di had transformed his traditional business into an e-commerce online platform with an offline shop in an 'incubation center" of the electronic market.

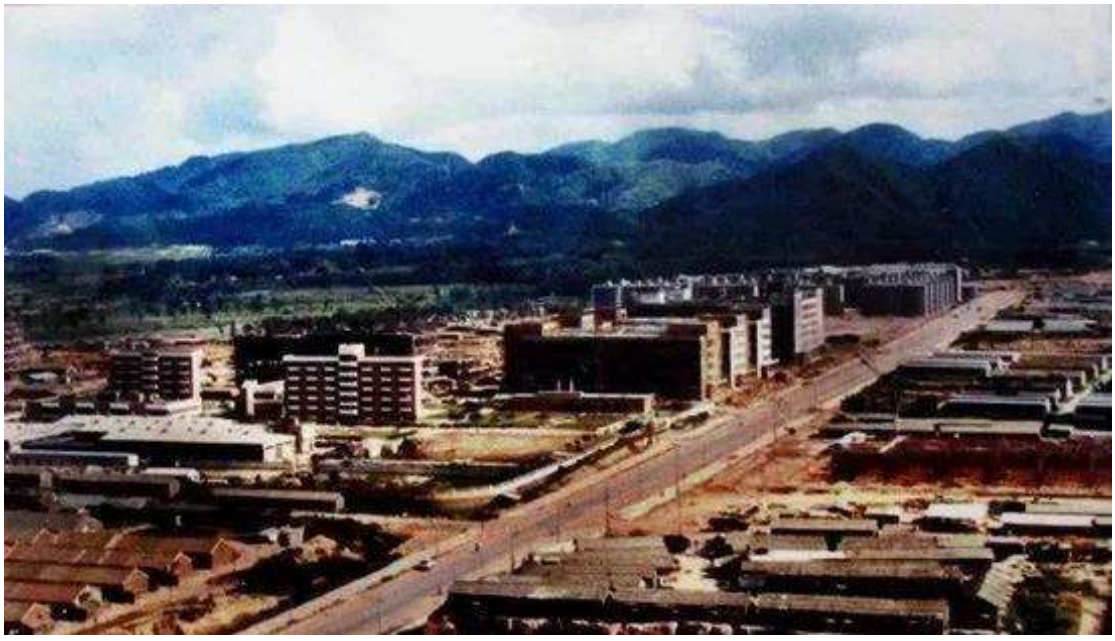

Figure 2.1 - Huaqiangbei market zone, the late 1980s. ©Sina Finance

[52] For more information about the influence of this policy purge, see "The Cleansing of Copycat Cellphones," available at: http://finance.ifeng.com/news/tech/20130103/7507386.shtml (Accessed August 8, 2015).
[53] Interview Cui, Huaqiangbei, November 22, 2015.

Figure 2.2 and 2.3- Huaqiangbei market zone, 2016. ©Yujing Tan

The psychological and institutional strategies to build up China's innovation market seem successful so far. Wanting to learn what day-to-day business is like for a practitioner of electronic innovation in this new environment, I accompanied an informant to Huaqiangbei Electronic World. Farhad is an Iranian expat working for Faragostar Electronic Co., Ltd, a large Iranian electronic hardware enterprise that designs and assembles CCD cameras[54] for overseas markets. China is one of their target markets. Farhad's job was to collect reliable electronic accessories for CCD cameras in Shenzhen. When we met in the summer of 2016, he was searching for opportunities to sell his own products on the Chinese market. This buying tour with Farhad, and the never-ending chat with a local female salesperson, highlighted for me two main market shifts concerning the global supply chain.

Firstly, China is seen and imagined as potentially the biggest consumer-end products market in the world. The foreign customers I met in Shenzhen Huaqiangbei Electronic World were not only "big buyers" of electronic components, but also individual professionals and opportunity seekers who legally or illegally affiliate themselves with the local workplace to start their own businesses in Shenzhen. In other words, more and more individual foreigners (not only company expats) are becoming producers, joining in the production of Chinese brands/goods which meet the needs of the broadening domestic markets. At the Huaqiangbei market I met Darko, a Latvian industrial designer, who buys samples of hardware electronic knits to produce small scale customized products for the Chinese market. He established a startup with his Chinese business partners.

Secondly, China's market shift has produced a new stratification of "global chance seekers" in Shenzhen. This situation was explained by Xiao Ling, the boss of a small store operating both retail and wholesale hardware electronic knits businesses in Huaqiangbe: "There are more and more Euro-American individual customers coming

[54] CCD camera is a video camera that includes a charged-coupled device (CCD), which is a transistorized light sensor on an integrated circuit.

to Huaqiangbei. They are not ‘big buyers.’ They are working here. Several years ago, most of the foreigners walking on this street were Middle Eastern people and African people.” Far from being racists who classify people’s capacity by biological difference, female salespeople like Ling are sensitive to the nationality of their foreign customers. They also have specific marketing mind-sets towards their customers with different nationalities: “People from Middle Eastern countries are rich for sure, but not all of them. We test their consumption capability by investigating how many samples they buy the first time. New African buyers keep a low profile. They are rich but they do not require large-scale order. I call them ‘new’ because the old African buyers were really poor. They were ‘smugglers with big black suitcases’ buying cheap ‘copycat’ cellphones. Those who come from developed countries, like Americans and Europeans, are working around Huaqiangbei. They come and buy several sets for working with their Chinese business partners in nearby incubation centers.”

The stratification of global chance seekers in the Chinese market appears to be accelerated by the Chinese market shift. The shift from an export-oriented economy to a consumer-driven innovation economy asks for professional workers with diversified professional backgrounds to answer the sophisticated demands of both Chinese domestic markets and overseas markets.

2.3.2 From “Copycat Production” to the “China-innovation”

“加快建设创新型国家。创新是引领发展的第一动力，是建设现代化经济体系的战略支撑。”
“Accelerate the building of an innovative country. Innovation is the first motivation to lead development and a strategic support for building a modern economic system.”

— Xi Jinping, the General Secretary of the Communist Party of China, the President of the People's Republic of China, and the Chairman of the Central Military Commission. (Delivered at the 19th National Congress of the Communist Party of China, October 18, 2017)

Due to the decline of China’s RMB dollar and price of made-in-China low-end products becoming uncompetitive because of the rising cost of the labor force over the past decade, most export-oriented merchants have had to re-orient their business strategy and not depend too much on the overseas market. Informal merchants in Huaqiangbei have had to reorient their marketing strategy in the domestic market or upgrade their image in the global supply chain from “cheap manufacturers” to “innovative designers.” As the digital economy plays an important role in the Chinese domestic

"industrial upgrading"[55] the newly established startups in Shenzhen are not only dealing in the hardware business, but also the software business; that is, they produce and sell both tangible and intangible goods on the market. Digitalization has already challenged the world economy which is bound to both (re-)production and consumption. Here, I do not wish to indulge too quickly in a theoretical discussion of digitalization and how it changes people's perceptions of everyday life. Yet, tech-entrepreneurs and startup employees do participate in a certain double-selling of tangible-intangible goods, in line with the requirements of the consumer market, regardless of how they may be driven by policy: "Young people, including me, cannot live without internet and our portable electronic device. It is our duty to produce such smart products to meet the demand of our consumers, including me," Zou Yang, a startup employee working as "product manager" of a startup, told me.

Export-oriented merchants of copycat goods are joining the techno-innovation campaign for two reasons: the state-sponsored "de-industrialization" of the industry, and the fear of punishment. Commodities sold in Huaqiangbei electronics market are "upgraded with more added-value by application of new tech-innovations."[56] These new inventions include varied electronic commodities from smart phones to customized electronic devices in their own brands, such as power banks, consumer-end robotic devices and health data calculators that can be affiliated with Apple or Samsung smart phones using digital platforms offered by companies like Tencent, Baidu, and Alibaba.

However, Cui attributed this market change not to the purge of counterfeit goods, but to rising domestic consumption: "More and more Chinese people would like to buy these innovative pieces of stuff, not only foreigners. So, we are expanding commercial franchises in inner mainland China." This outlook fits well with the central state's policy that manufacturing goods are to be upgraded with the assistance of information technology to further the supply-side economic reforms.

The re-valuation of Chinese grassroot tech-innovation is intertwined with the invention of a moral code to turn the global imagination of "made-in China" and "copycat China" into "innovation China." Copycat, *shanzhai* (山寨) in Chinese, means a botched imitation of foreign products.[57] During the early period of export-oriented industrialization in the 1990s and 2000s, *shanzhai* products were always seen as a representation of China's low-end production and innovation starved system. However, in the current situation, Maker production with copycat systems in Shenzhen and the Pearl River Delta has become a positive activity created by the emerging self-identified techno-hobbyists (Lee and Hung 2014).

[55] Each of startups I encountered in Shenzhen are bonding their business and development strategies with the internet industry, echoing the state-supported "Industrial Upgrade with the Internet" (互联网+产业升级 hulianwang jia chanye shengji).
[56] Interview Cui, Huaqiangbei, November 22, 2015.
[57] The term Shanzhai reflects the playful attitude of Chinese mass media readers towards Chinese producers copying Western producers. It also reflects the self-deprecation of both makers and consumers, often associated with the statement that 'there is no innovation in China, only copying.'

Many of the techno-hobbyists I encountered told me that they wanted to design and produce copycats modifying the appearance of "authentic" products, positing this practice as innovation. In order to perform as innovative subjects rather than copycat producers, these maker-entrepreneurs rebrand "copycat China" into "innovation China" by giving copycat production a positive meaning with terminology and mindsets borrowed from the American Maker movement. "Products always consisted of hacker technology and disruptive innovation to renovate Western-designed manufacturing products. The ambition of making copycat is what I call the spirit of Makers." This was stated by an industrial designer, Xiao Bo, who wants to sell his copycat smart bracelets. The forerunning overseas Chinese Makers, like Li and other foreign self-defined Makers I encountered in Shenzhen, have joined the reproduction and promotion of this idea, "copycat is the innovation in China."[58] They believe that in the outsourcing system of the global economy, intellectual property (IP) is a tool to maintain the high-value position of "western designers" and the low-value position of "eastern manual labors." "This is unfair that Westerners have owned the discourse power for a long time," said Xiao Bo: "Why not Chinese *zhanzhai* is an innovation?"

The nationalistic moral revision of copycat production in China is actually grounded in the fact that the intellectual property (IP) laws in China support young people rebranding their production into high-end innovation. The gap between "copycat China" and "innovation China" was very much bridged and supported by the modification of IP laws in the country. Xiao Bo's bracelet looks the same as what Nike has already made. "But how about the intellectual property? Will you be sued by big companies like Nike?" I asked suspiciously. "No, I try my best to modify the appearance of my smart bracelet, use different operating software system and open-source knits to support it. They cannot sue me," he proudly answered. "The Chinese copycat designers always try not to break the intellectual property law, we want to use our *shanzhai* goods to tell the world that *shanzhai* is the innovation with Chinese characteristics!"

2.3.3 The Division of Labor in the Innovation Economy

Grass-roots tech-innovation pioneers come from declining export-oriented enterprises. Against the economic background of export-oriented businesses falling from dominance in the Chinese market, Huaqiangbei electronic market zone experienced a reshuffling of divisions of labor and modes of business over the past decade. This was explained to me by Cui Di, who has support from his strong Teochew merchant family. Teochew merchants dominated the business network in Shenzhen after the Reform in 1978. In his uncle's generation, their business was buy-in-and-sell-out. However, the

[58] David Li: Shenzhen has inherited the culture of Silicon Valley, "copycat" is innovation. Please see: http://www.yicai.com/news/5364934.html (Accessed December 10, 2017).

so-called supply-side economic reforms pushed the younger generation to conduct more diversified business based on 'tech-innovation'. Cui Di stated that "There are not many large-scale standardized overseas orders in our family enterprise." He added that to sustain their business in Shenzhen, they had to reorient their business strategy to fit the diversified global and, especially the domestic orders: "I believe China would be the biggest market for our own products just as state mentioned in the economic policies." Following state-led policy changes, Cui Di registered his own startup in an incubation center in Huaqiangbei.

The decentralized, flexible working structures are replacing rigid, centralized ones. The tiny-scale startup model is highly appreciated and appropriated by young Chinese tech-professionals. "We do not need to clock in with our name-card every day. It is also unnecessary for us to report our schedule to an admin manager, because we do not have an admin manger. Actually, the managers are ourselves," Xue, a 26-year-old startup runner, told me. Expectations of such workplace autonomy are directly represented by another phenomenon, being the increasing number of professional employees in large local tech-enterprises running their own startups with their peers, performing as their business partners. They choose incubation centers to embed their off-work-business in. The decline of the export-oriented electronic market has resulted in many "trading centers" (a type of shop with extensive networking resources regarding manufacturing chain and salesperson groups in Huaqiangbei) declaring bankruptcy in the past decade. Huaqiangbei Group, a state-owned enterprise that has controlled the land use of Huaqiangbei Electronic World since it was built in 1982, gentrified the empty offices of these former "trade centers" and transformed them into "incubation centers" that could re-group new people and capital.

Generally, there are three main changes in business and working models in Shenzhen. Running parallel with the changes in the domestic innovation economy, the new division of labor is based on the reorganization of market and industrial societies.

First, enterprises following the tiny-scale startup model are booming in Shenzhen, yet are also grounded in a larger scale supply chain within the information technology industry. This is not only because the state gradually lost its role regulating company-scale and individual investment due to changes in China's Company Law in 2013,[59] but also because local high-tech tycoons outsourced their development projects to those booming startups. For example, a young graduate working at Tencent, the biggest Chinese internet company, told me that the company outsourced more than 40 percent of its projects, distributing the projects to different tiny startups due to a fear of leaking commercial secrets. During my fieldwork, I discovered that while some of my informants were formally working in large local enterprises, they were also the founders of two or three startups. When asked whether their bosses at Tencent permitted part-

[59] The Amended Company Law in 2013 no longer requires a minimum amount of registered capital to run a company. That is, it has become much easier to register and start running a private small-scale startup in China. Here is a document from China Company Law website depicting the comparison of the old and revised version of company law in China, please see: http://www.cngsf.com/duibi.htm (Accessed December 10, 2017).

time entrepreneurship, they replied that their off-work-business is acquiesced to by their bosses. Further, after starting their own company, they received outsourced projects from their formal workplace. Xue reported that 40 percent of their current business was outsourced from Tencent.

Second, digital economy plays an important role in the Chinese domestic "industrial upgrading."[60] Digitalization has already challenged the world economy, which is bound to production-reproduction and to consumption. As depicted in chapter four, the startup runners integrate economic value with morality in marketing. Imagining and advertising their startup enterprises as direct outcomes of the "industrial upgrading with Internet," they differentiated their businesses from the "old-fashion business model which is producing goods in mass-scale assembly lines and sell them at cheapest price."[61]

The new moral discourse appropriated in these startup enterprises also echoes the larger economic situation where, over the past decade, labor costs have risen five-fold and professional technology designers have become the new working class[62] in Shenzhen. To legitimate their design service, previously neglected by mass-manufactures for a long time, these tech-entrepreneurs have fashioned themselves as tech-designers, implying aesthetic value and differentiating themselves from standard mass-manufactures. To do this, the prices of their design-based products increased being justified by their "design capability" which, for them, is not perceived as a labor cost. This leads to the third changes in the urban tech startup working pattern. As explained by Luo Li, a Hakka tech-entrepreneur, "We do not produce low-quality cheap products to meet standardized mediocre consumers. We design and produce customized products for diversified tastes of our customers. Most importantly, we sell goods to those 'wise' consumers, with a special aesthetic sense, who are not irrationally chasing luxury products. It is our turn to maintain the price and customer network not only for profitability, but also for producing goods with aesthetics and utility."[63]

Third, the new corporate outsourcing management model produces increasing demand for startup enterprises and the new division of labor they entail. The important profitability of the new market shift is dominated by intangible aspects of production: namely, marketing, brand development, and design. As Jennifer Bair (2005) argued, "as intangible aspects of production become important for the profitability and power of lead firms, 'tangibles' (production and manufacturing) have become increasingly commodified, leading to new division of labor and new hurdles for developing-country producers to overcome if they wish to enter these chains (Bair 2005: 165)." In Shenzhen, more and more young professionals are establishing their tiny-scale startups

[60] Each of the startups I encountered in Shenzhen are bonding their business and development strategy with the internet industry, echoing the state-supported "Industrial Upgrade with Internet" (互联网+产业升级 hulianwang jia chanye shengji).

[61] Interview Zou, 19-11-2015.

[62] Here I do not intend to dive into the pool of debate around "class issues." I intend to bring "class issues" back in the second chapter of my thesis.

[63] Interview Luo, 18-07-2016.

and assembling functional teams based on—even though they may not recognize it—a new division of labor roles: those who have specific management skills perform as "Chief Executive Officer," those who have information engineering and design skills perform as "Chief Technology Officer," and those who have broader social networks with potential investors gain the position of "Chief Financial Officer." By appropriating these fixed symbolic names, startup runners gain agency, working as managers of their own skilled labor force in this consumer-technology industry.

2.4 Conclusion

Current changes in industry and consumer markets have me rethinking Gordon Mathew's argument as one of the starting points for my research: how might the reset of low-end globalization be changed by the reconfiguration of industrial upgrading, consumer markets, and state-supported domestic tech-entrepreneurialism in China? How could we reinterpret "market transition miracles" to better understand the role of SEZ under so-called "global recession?" How are people, capital, power, technology, and ideas co-producing the "miracle" via their mobility and "innovation," even while regulated by a series of institutions, expectations, and desires?

I argue that rather than focusing too much on the commodity chain, as is often done in current understandings of globalization, focusing on how the supply chain proceeds will help us understand more about who makes what, in which way, and causing what kinds of social consequences within and without the contemporary nation state. This is especially true, I argue, in connection with issues of social inequality, class stratification, etc. In this context, tech-entrepreneurs-to-be are those who have diversified social-economic backgrounds, namely "social capital" and "economic capital." Their specific ideas on techno-innovation may be disparate, but they have common goals in Shenzhen: establishing tech-entrepreneurship, taking risks, building "a home," and making changes via doing "new things."