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Producing China's Innovative Entrepreneurship: Nationalism, Cultural Practices, and Subject-Making of Transnational Chinese Professionals

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Producing China's Innovative Entrepreneurship: Nationalism, Cultural Practices, and Subject-Making of Transnational Chinese Professionals

By

Kun Chen

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Abstract

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China is rapidly transforming into one of the world's most powerful economies, and the state encourages technological innovation to ensure that this trend continues. In particular, the state entices its citizens to receive education abroad and then return home to apply particular experience and expertise to their homeland's continued development. Yet despite these apparent advantages, Chinese technological products are generally not competitive with Western ones in the global market. Why does this paradox exist? This dissertation explores this puzzle, focusing on how technological innovation is being re-defined and produced by the Chinese government as well as by transnational Chinese professionals within the context of the global economy.

Through archival research, discourse analysis, and 12 months of participant observation and interviews in Beijing, China, I arrive at the following conclusions. First, innovation development in China is constructed by the state as a political imagination driven by nationalistic entrepreneurialism. I call this mode of innovation development "imagined innovation." Moreover, through governing specific people and constructing nationalistic discourses, the state aims at consolidating capital, expertise, and other resources at the transnational level to reinforce state sovereignty. While this nationalistic strategy is successful in attracting foreign-trained Chinese to return to China in order to develop indigenous innovation, these professionals, labeled as "Haigui," also face various cultural obstacles in their everyday operations, which at times impede original innovation from

taking place, due to the utilitarian nature of imagined innovation that favors political agendas and economic profits over cultivating original creativity.

Nationalistic entrepreneurialism creates conditions in which Haigui can mainly rely on the efficient imitation and modification of Western technologies to gain competitive advantages in the Chinese market. However, driven by professional entrepreneurialism, Haigui also find themselves uniquely situated to identify innovative markets as well as develop socially creative practices to manage Chinese employees and promote their products. They do so in part through objectifying themselves by drawing on their cross-cultural experience, thus enabling them to flexibly develop technological and entrepreneurial practices. I call this form of subject-making "reflexive subjectivity" to illustrate how Haigui engage in reflexive thinking as they negotiate the difficult terrain of state power, market variations, and cultural differences.

Therefore, I use the term "innovative entrepreneurship" to articulate the dynamic and multiple ways in which innovation is understood and produced in China under global influences. It is a constellation of political strategies, cultural practices, and business ethics that aims to build technological innovation in heterogeneous socio-cultural contexts. Ultimately, the rise of China in the global economy poses new questions about how to conceptualize innovation, as well as its relationship to international and Chinese markets. This research offers a new perspective on contemporary Chinese culture and politics with respect to innovation, and its arguments offer theoretical contributions as well as insights for policymakers and prospective Haigui entrepreneurs.

For Grandpa,
who is going to celebrate his 99th birthday

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I Introduction: The Rise of Haigui and Cultural Limits to China's Innovation

But Chinese civilization has the overpowering beauty of the wholly other, and only the wholly other can inspire the deepest love and the profoundest desire to learn.

---Joseph Needham (The Grand Titration, 1969: 176)

1.1 The Paradox of Innovation in China

On March 1, 2011, major US news outlets such as ABC news, Forbes news, and Yahoo news, reported that the U.S. Trade Representative Office had labeled China's two well-known technological companies--the top Internet search engine, Baidu[1], and the biggest e-commerce platform Taobao[2] --"notorious markets" due to their piracy problems of copyright and patents. It is not uncommon to hear Western media and companies complaining that Chinese businesses copy Western innovative technologies or violate Western intellectual property laws (see Figure 2). When addressing Chinese IT companies, people both in China and the West tend to draw the connection with their US counterparts (see Figure 2). Why are the two most successful high-technology companies in China considered "notorious" in the West? To unpack China's image as a "copycat" in high-technology fields, the primary motive of this dissertation research is to understand to what extent, and under what conditions, China can produce its own innovation.

[1] http://www.baidu.com
[2] http://www.taobao.com

Figure 1 Copycats?
Three examples of US user interfaces and their copies by Chinese companies
Source: 9gag.com

China US

Figure 2 Leading Chinese IT companies and their US counterparts

What is innovation? First, there is a need to introduce the concept of a "knowledge-based economy." In the mid 1990s, the term "knowledge-based economy" was introduced and popularized in OECD[3] countries as a new type of economy that "depends on the production, distribution and use of knowledge."[4] There are a few characteristics that differentiate a knowledge economy from agricultural and industrial economies. First, intellectual work or services instead of manual labor are valued as a major form of human labor. Then, the value of the products produced in a knowledge economy lies in its intellectual property instead of its material property. Additionally, knowledge-based products mainly refer to new technologies that require high investment in research and development (R&D). Lastly, a knowledge economy enables creative and flexible organizational forms and work structures. Such an economy is developed within conditions enabled under "the regime of flexible accumulation," enhancement of information and telecommunication networks, transnational movements of human capital, reshaping of material and imaginary scapes, as well as the strategic

[3] Organisation for Economic Co-operation and Development, an international economic alliance.
[4] For details, see http://*www.oecd.org/dataoecd/51/8/1913021.pdf*

identification and negotiation of cultural meanings in global capitalism (Appadurai 1996; Castells 1996; Kenney & Florida 2003; Smith & Guarnizo 1998; Inda & Rosaldo 2002; Saxenian 2006;Harvey 1989; Ong 1997).

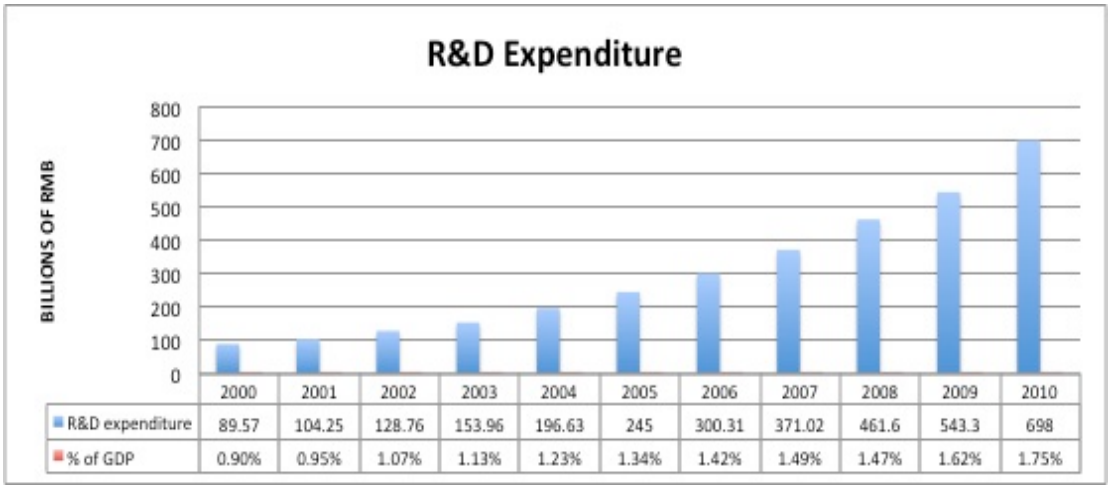
Innovation is one of the most important measurements for a knowledge-based economy, as *it is the ability to bring scientific and technological creativity into use and commercialization* (Cohen 1990; Kanter 1983; Amabile 1988). The national competitiveness in a global knowledge-based economy relies on a national innovation system (NIS) (Nelson 1993). In an NIS, scientific and technological agents and institutions are vital actors in the creation, acquisition, dissemination, and utilization of knowledge (Nelson & Rosenberg 1993). There are three main agents: universities/research institutes, private companies, and government institutions. Their relationships are instrumentally developed to generate creative ideas and implement these ideas into economic production (Etzkowitz 1999; Mowery & Rosenberg 1993). Regionally, innovation can be an economic driver for urban development, and it is measured by the creativity and openness of cities and their people (Florida 2004). Three important measurements of creativity and openness are technology (infrastructure), talents (people), and tolerance (culture). Organizationally, innovation is the ability to successfully implement new ideas and methods to tangibly improve companies' structures, productive efficiencies, and potential to adapt to organizational changes (Amabile, et al 1996).

Innovation heavily depends on human capital and economic capital (Drucker 1989). However, there is a paradox regarding innovation in China. In Western universities, students from China excel in science and engineering programs. Ethnic Chinese[5] engineers play a crucial role in high-technology (high-tech) industries, particularly in Silicon Valley (Saxenian 2003, 2006). Therefore, one may argue that Chinese engineers have identified certain capabilities and human capital to produce innovative technologies.[6] Meanwhile, the booming economy in China is able to provide economic capital for developing technological facilities and financial

[5] Saxenian studied Taiwanese immigrant engineers. In recent years, there has been an increase of Chinese engineers from mainland China in Silicon Valley.

[6] According to China's Ministry of Science and Technology, there are 35 million people categorized as S&T personnel in China, more than any other country. But having the largest number of people working in R&D does not result in producing the largest number of patents and innovative products in China. However, I argue that Chinese students and engineers identify certain capabilities to produce innovative work in Western contexts. It shows when Chinese scientists and engineers are embedded in certain conditions where creativity is valued, they are able to produce original work instead of simply imitating other's work.

investments which foster innovation production.[7] Moreover, the Chinese government has been actively investing in innovation development (see Figure 3). China has become the world's second largest spender in terms of research and development, just behind the United States[8]. Although this rank is measured according to a PPP basis[9], the continuous growth of China's investment in R&D shows the Chinese government's strategic focus on developing science and technology.



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
R&D expenditure	89.57	104.25	128.76	153.96	196.63	245	300.31	371.02	461.6	543.3	698
% of GDP	0.90%	0.95%	1.07%	1.13%	1.23%	1.34%	1.42%	1.49%	1.47%	1.62%	1.75%

Figure 3 R&D expenditure and the percentage of GDP in China (1 Chinese RMB yuan = 0.1540 US dollars) Source: www.sts.org.cn

Despite all apparent advantages in creating innovation, thus far we have not seen many innovative products designed and created in China that can effectively compete with Western technologies in mainstream global markets. It is also difficult to list the names of world-class innovative companies established in China. Why does this paradox exist? Some argue that China does not have mature institutional mechanisms to support innovation production, such as intellectual property laws, venture capital and stock markets, and human capital services such as specialized training, consulting, and professional human resource management. Some may say that it is a matter of time, and that China will eventually catch up, ultimately developing the most advanced technologies in the world. However, from an anthropological perspective, one wonders if there are cultural limits that may

[7] During the Maoist period before 1970s, there was limited funding invested in R&D of new technologies. The economic conditions have been improved significantly after the economic reforms since the late 1970s. Especially in the 2000s, the government funding has been increased in science and technology.
[8] http://news.cnet.com/8301-1001_3-20025751-92.html. Retrieved March 1, 2011
[9] Purchasing Power Parity.

hinder the production of innovation in China[10]. Therefore, this study is an ethnographic exploration which delves into the culture of China's high technology industries, mainly the information technology industry, in order to reveal how and why the Chinese government, as well as high-technology professionals, understand and produce technological innovation in China.

1.2 The Emergence of Transnational Chinese Professionals in High-Technology Industries

Since the 1990s, there has been a dramatic increase in transnational high high-tech business activities across the Pacific Rim. Such activities play a significant role in re-shaping the global economy and power relations among transpacific regions. The globalization of cutting-edge technology raises the following questions. What policies are developed by nation-states in order to maintain or increase competition and cooperation in the global innovation system? How are technologies produced and transferred across these national and cultural borders? What are the political and cultural benefits—as well as obstacles--in the process of the transfer and embedding of technologies? This dissertation addresses these questions mainly within the Chinese context, where transnational Chinese scientists and engineers are engaged in China's innovation development as key players. Particularly, I focus on how the Chinese government is developing technological innovation by creating a model of governing transnational expertise and resources. I also examine how transnational professionals, especially foreign-trained Chinese returnees, react to government policies and programs and thus shape innovative entrepreneurship in various cross-cultural settings in China.

In this research, my main subjects, transnational Chinese professionals, are defined as mainland Chinese who have returned to China after being educated or having lived abroad since the late 1970s. Due to their overseas experience and advanced expertise, these Chinese are identified as a collective group when they move back to China, by the popular label "Haigui" in Chinese, literally meaning "returning from the sea." These professional are an important group to study because they have access to the

[10] In this dissertation, I am not trying to focus on how innovative China can be, but rather, I wish to address whether and to what extent the growth rate of high-tech development can be positively correlated with all the investments of economic and human capital in China.

cutting edge technologies in the West. However, as they have tried to apply Western technologies and managerial knowledge and ethics in China, they have experienced various challenges. Since China's economic reforms and the introduction of the "Open Door Policy[11]," Chinese citizens have left the country more easily to study, work, or travel in foreign countries. Unlike the older Chinese emigration from Canton (Guangdong) and Fukien (Fujian) regions to Southeastern Asia or other continental destinations to seek employment opportunities and better life conditions in the nineteenth century, studying abroad is the most popular way for post-reform young generations in China to go to other Asian or Western countries. They often hold postgraduate degrees, mainly in science or engineering, from Western countries, Singapore, and Japan, and/or have overseas work and living experience. Many of these Chinese play a critical role in innovation development in high-tech clusters such as Silicon Valley and Route 128 in Boston, and are involved in transnational activities across the Pacific Rim (Saxenian 2003, 2006). In a 2002 survey conducted among high-tech immigrants, 44% of mainland Chinese professionals in Silicon Valley traveled back to China within the past three years. In addition, 77% of Chinese respondents claimed that they had friends who were moving back to China, and 43% reported that they themselves were "somewhat likely" or "quite likely" to return to China permanently[12]. In another survey among nearly 3,000 Chinese abroad, 37.1% of respondents claimed that they wanted to open up their own business in China, 28.8% wanted to join multinational companies in Chinese cities, 10.3% displayed an interest in working for a state-owned company, and 9.6% intended to pursue an academic career.[13]

I chose this research topic largely due to my personal identity as an international graduate student studying in the US. Just a few years ago when I first arrived, I was one of the only three social science students among about thirty Chinese graduate students—all of whom were pursuing degrees in science and engineering. This experience caused me to wonder why there were so many Chinese students interested in studying abroad, particularly in science and engineering fields? To answer this question, it is necessary to examine the political and economic background surrounding innovation development in China.

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[11] Initiated in the late 1970s, the policy promotes foreign trade and economic investments and allows foreign companies to enter the Chinese market which were forbidden during the Cultural Revolution between the mid 1960s and 1970s.
[12] Saxenian 2003
[13] The remaining small percentage chose a variety of "other employment settings." Source: http:// liuxuejob.com

After a ten-year period of isolation from the outside of the world during the Cultural Revolution in the mid 1960s and 1970s, the Chinese leader Deng Xiaoping advocated fundamental economic reforms, as well as in science and technology (S&T) in the late 1970s, arguing that China needed to open its doors and learn from Western countries. These reforms led to massive economic development and urbanization (see Figure 4), the emergence of mobile population across various urban and rural regions, changing patterns of land development, as well as reconfiguration of property and personhood (Liu 2002; Hsing 2010; Friedmann 2005; Yan 2003 and 2009; Zhang 2001; Zhang & Ong 2008).

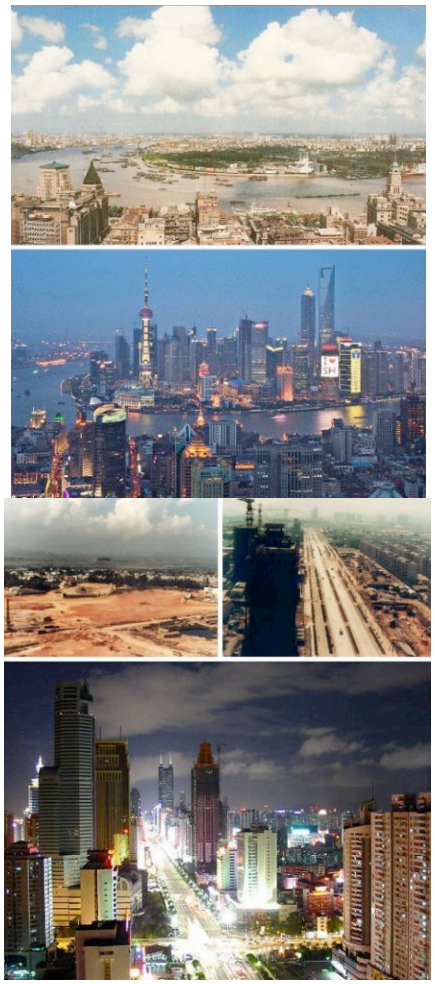

Figure 4 Urban development
Shanghai in 1990 and 2010 (above), Shenzhen between 1980 and 2010 (below), Source: tupian.hudong.com

The "Open Door Policy" allowed foreign companies to finally enter the Chinese market. However, Western companies have been reluctant to develop their most sophisticated technologies in China. Chinese leaders argued that since science and technology were chief productive forces, China therefore needed to develop its own indigenous types of innovation. Towards this end, the government took multiple initiatives and experimented neoliberal governing strategies (Chen & Kenney 2007; Zhang & Ong 2008). First, they built high-technology clusters following what they believed to be the US-Silicon Valley model. There were various benefits granted to high-tech companies located in the cluster, such as tax exemption and reduced office rent. Another strategy was to encourage collaboration between research and industry. Universities and research institutes established companies, and professors became entrepreneurially-minded, working on research projects for private companies. A third strategy was encouraging young people to choose careers in sciences and engineering, and indigenous scientists and engineers were given opportunities to receive advanced training. As a result, researchers and college students were mobilized to study science and engineering, especially in Western countries and bring the Western technologies and knowledge back to China (Zweig et al. 2004). For more than a century, the West remains a certain cachet within the Chinese imagination as a symbol of modernity. Therefore, learning from the West is perceived to be a significant way to achieve technological advancement.

It is in this context that Chinese competed to study science and engineering in Western countries. Since the late 1970s, more than 1.9 million students have been abroad to study, according to the Chinese Ministry of Education. Especially in the second half of the 2000s, there was a significant increase of the number of students studying abroad (see Figure 5). In 2010, almost 285,000 Chinese left their country to study abroad, and nearly half of them chose to study in the United States (US)[14]. For years until 2005, among these people studying abroad, around 80% remained in the host countries, and only 20% went back to China. This outcome sparked a debate among the Chinese public regarding whether sending top Chinese students abroad would lead to losing talent, namely, the "brain drain" problem. It is argued that the brain drain problem exists in many developing countries where the most educated citizens tend to emigrate to developed countries in search for better careers as well as opportunities for personal

[14] http://edu.sina.com.cn/a/2011-03-22/1533200735.shtml, retrieved March 25, 2011

development (Adams 1968, Bhagwati & Hamada 1974). For example, the brain drain problem appeared in Taiwan in the 1960s when a significant number of Taiwanese science and engineering students chose to stay in the host countries after graduation (Kindleberger 1968). Similar patterns were identified among many Indian science and engineering students, who used to be the largest group of foreign students in the US and who remained in the host country, seeking job opportunities in regions, e.g. Silicon Valley (Saxenian 2003).

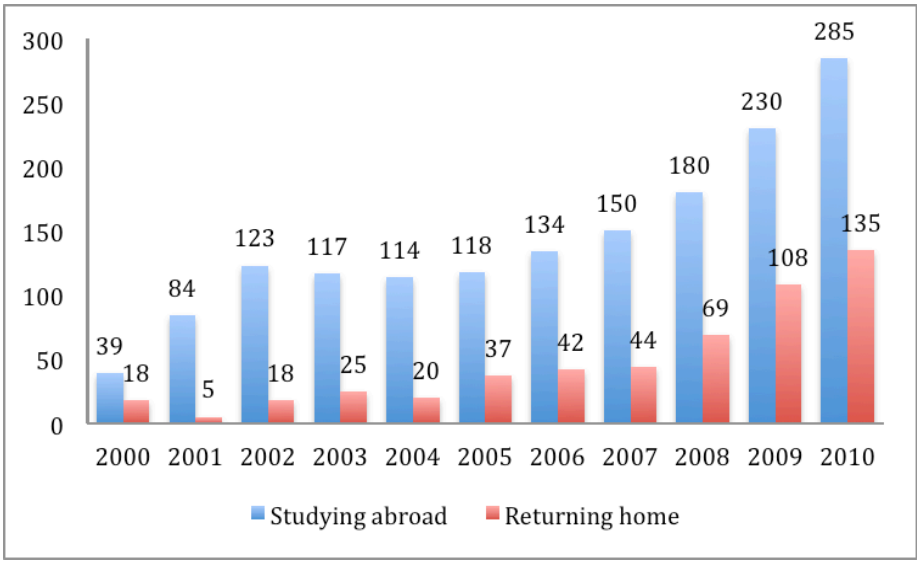

Figure 5 Number of Chinese studying abroad and having returned to China
(in thousands), Source: Wang 2007 and moe.edu.cn

In order to combat "brain drain," the Chinese state has initiated programs to encourage students educated abroad to return to China. For example, in newly developed high-tech zones in major cities, returnee science parks have been established with special incentives for Haigui enterprises (see Figures 6 and 7). Human capital programs grant special rights to Haigui, such as research funds, residence preferences, and other housing benefits. More transnational professionals started to consider job opportunities in China and build ties between China and the West (Bian 1997). Partially as a result of these incentives, return migration among Chinese students and professionals abroad became increasingly popular since the year 2005 (see Figure 5).

Figure 6 Description of the returnee science park in Shenzhen[15]

Figure 7 Exhibition of technological products
Showing the success of Haigui companies in Shenzhen

With intensified global competition, innovation has become an important index of national economic competitiveness. Since 2005, China has also redefined its strategic agenda along these lines. The Communist Party officially announced in their eleventh five-year plan that building an innovative country is China's main national goal. "Innovation" has become one of the most referenced words in official discourses and programs in China, as demonstrated in Figure 8.

[15] In the dissertation, figures without sources are photos taken by author.

Figure 8 A national conference on building an innovative country with the theme of "Transformation, Innovation, and Tolerance." Source: finance.sina.com.cn

With advanced S&T degrees and experience from the West, transnational Chinese professionals—Haigu— are viewed by the government and by the public as pioneers in this modernization movement. Transnational Chinese are not just conventionally seen by the Chinese public as "middlemen" who mediate and bridge local institutions and international corporations, but as independent and active players in China's economic development within global markets (Ong 1997, 2006). Transnational Chinese also play a role in creating a new channel for technological knowledge spillovers and influencing other local Chinese companies to adopt a more professional, entrepreneurial, and innovative agenda in R&D, and help the local economic growth (Liu 2009, Fuller 2010, Breznitz & Murphree 2011). For many Chinese living abroad, returning to China and becoming Haigui remain an attractive option, but one that is accompanied by many uncertainties. For those Haigui who have returned to China, will their Western expertise and knowledge allow them to fulfill their career and personal goals in China? What are the challenges they will face in daily life, and how will they cope with the obstacles that will inevitably come their way? This study seeks to shed new light on these crucial questions that Chinese living abroad frequently ponder.

1.3 Re-Conceptualizing Innovation in the Trans-Pacific Context

In Western contexts, innovation is understood as an important index that measures the economic competitiveness of a country, or the sustainability of

a company, within the global capitalist system of knowledge economies. It is conventionally defined as both the process and the outcome of successfully implementing new ideas and methods into useful applications, as well as their commercialization, to enhance economic competitiveness. At the national level, the capacity of innovation can be measured by R&D expenditures, as well as the nation's percentage of GNP (Gross National Product) devoted to R&D. For organizations, their innovative capacity can be assessed through new product revenue and investment, number of patents and R&D personnel, and customer responses. The capitalist logic of producing innovation relies on its calculative rationality: responding to market-driven conditions, as well as instrumental relationships among the main players in the innovation system, namely, government, industry, and universities/research institutes. The individuals in the innovation system also act rationally with respect towards achieving technological advancement and productive efficiency. In this way, core values of innovation such as creativity, originality, productivity, and the ability to handle risks and failures are cultivated and sustained through scientific assessments and calculative optimizations of human capital and economic capital.

However, this study refines the concept of innovation to include social and cultural aspects that influence what innovation means and how innovation is produced. I define *innovation* as *a socially robust construct--both as ideas and practices--that involves governing and self-governing technologies to achieve adaptability and competitiveness by exerting optimization and mobilization of economic and cultural value flexibly and reflexively* (see Figure 9). Governing technologies are the strategies and practices developed by the authority to administer and control subjects and spaces; self-governing technologies are the strategies and practices developed by the governed subjects to manage and control themselves. At the national level, the authority is the government, and the governed is its citizens; at the institutional level, the authority is the employer, and the governed is its employees. I focus more on the national level in the analysis in this dissertation. Once innovation is understood as the creative assemblage of political optimization, economic rationality, and cultural relevancy, it becomes necessary to narrow the universe of cases that fall within the concept for the purposes of this study. Here, I focus on the active, dynamic aspect of innovation in non-Western contexts under global capitalist influences, where *innovation* articulates regimes and relationships between governing and the governed, technology and culture, and nationalism and entrepreneurialism.

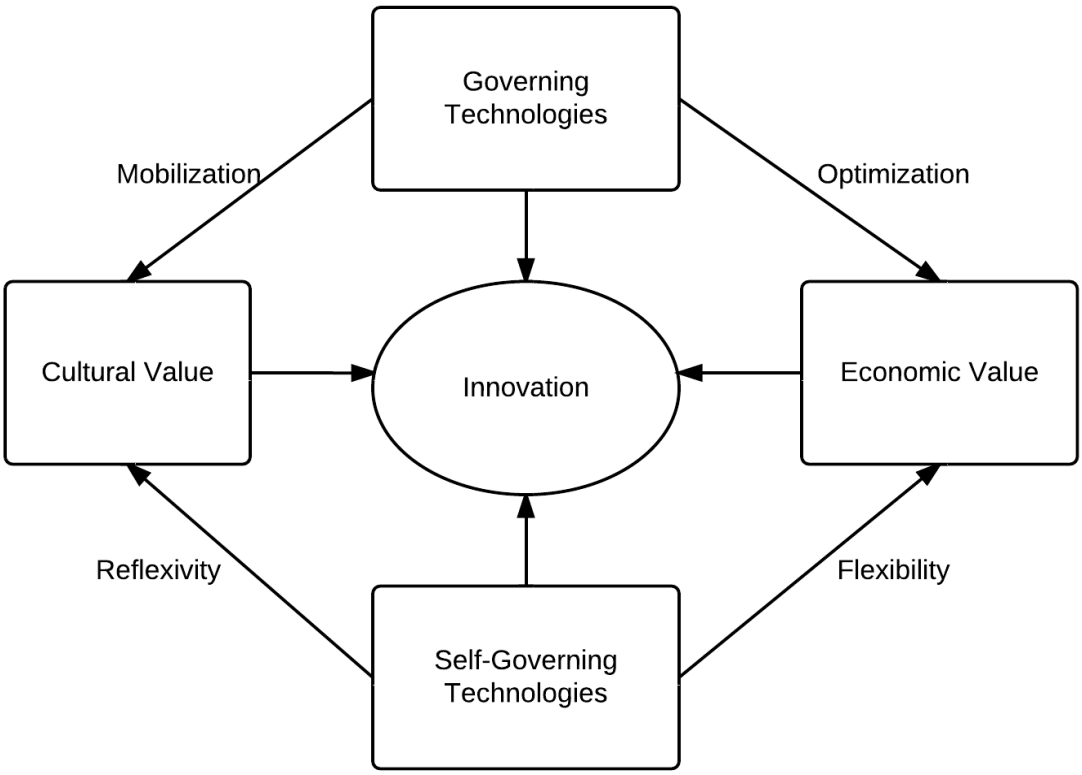

Figure 9 Conceptualization of innovation

First, the idea of innovation goes beyond material and economic conceptualizations to include a political imagination oriented toward optimizing resources for strengthening its governing power. In addition, the production of innovation involves repositioning various culturally relevant elements for innovative agents as creative self-governing technologies. In other words, the practices and relationships among innovative agents are flexible and contingent rather than stable and instrumental, since they are conditioned by the dynamism of transnational and cross-cultural contexts in the global innovation system. Third, the entanglements and negotiations that arise between governing and self-governing technologies engender new social relationships, cultural meanings, and economic possibilities for creating alternative innovation that may or may not be legitimated in global and national markets. Last, the conflicts and contradictions of governing and self-governing technologies also create conjunctures of exclusion and inclusion, both of innovation and innovative agents, depending on their degree of adaptability and self-justification.

Based on the four implications above, I introduce the term "innovative entrepreneurship" to articulate the dynamism and multiplicity of what innovation means and how innovation can be produced in alternative ways. The concept of *innovative entrepreneurship* refers to *a constellation of political strategies and business practices, relationships, ideas, and values that aim to build technological innovation in heterogeneous socio-cultural contexts in response to global competition and local desires*. Innovative entrepreneurship denotes the creative and flexible deployment and optimization of economic capital and cultural values through the state's governing rationale as well as innovative agents' self-governing practices. This dual notion of the governing and self-governing nature of innovation benefits from Aihwa Ong's conceptualization of neoliberalism. In *Neoliberalism as Exception*, Ong (2006) conceptualizes a new mode of political optimization that recasts the conventional (American) neoliberal rationality based on the hegemony of market domination and unregulated financial flows. She argues that Asian governments have developed neoliberal forms in exerting sovereignty and redefining citizenship through strategic administration of special spaces and differential technologies of managing populations. Neoliberalism thus rearticulates the relationship between state power and the market and should be understood as "a technology of government" that is "a profoundly active way of rationalizing governing and self-governing in order to 'optimize' " (Ong 2006: 3). These governing technologies aim to optimize state powers of sovereignty through creating new forms of inclusion and exclusion of certain spaces and populations. Meanwhile, national subjects respond to such governing technologies by developing self-governing strategies to rationally optimize their "choices, efficiency, and competitiveness in turbulent market conditions" (Ong 2006: 6).

As innovation has become the new neoliberal criterion of efficient productivity and economic competitiveness in the global capitalist system of knowledge-based economies, the concept of *innovative entrepreneurship* clarifies how governing and self-governing technologies mobilize and optimize spatial and economic resources as well as intellectual labor and the cultural worth of a country and its national subjects. Along this conceptualization, I emphasize two levels of innovative entrepreneurship: *nationalistic entrepreneurialism* at the state level and *professional entrepreneurialism* at the individual level. At the same time, I examine the entanglements and contradictions of nationalistic entrepreneurialism and professional entrepreneurialism. I suggest the following four arguments to

understand the conceptualization of innovative entrepreneurship:

First, building upon Ong's notion of "technologies of subjection," the political strategies of differently regulating urban space, populations, and the control of travel (2006: 6), *nationalistic entrepreneurialism* captures the political rationality that uses the discourses of innovation in relation to nationalism to develop innovative entrepreneurship. This is done by creating high-tech zones and technological infrastructure, improving the suzhi (individual competence) of Chinese to become "model" citizens, and attracting patriotic Chinese scientists and engineers residing abroad to return home. Building a modern nation that is economically competitive in global markets depends on an upgraded system from an agricultural economy or a low-cost manufacturing economy to a knowledge-based economy driven by intensive intellectual and creative work as well as highly-skilled and educated citizens. In this neoliberal project, the state prioritizes a nationalistic agenda by promoting the discourses of re-building a powerful, independent, and self-reliant nation through indigenous innovation and competent Chinese citizens. These governing technologies shape a "political imagination" of entrepreneurial growth in order to attract and mobilize transnational and national resources and expertise. In order to cultivate innovative entrepreneurship in China, the state creates a spatial imagination of the West that symbolizes technological advancement and a temporal imagination of the future that embodies visionary success. While these imaginary arenas evoke certain symbols of what "modernity" and "innovation" means in China, the political imagination favors learning and copying existing technologies from the West and discourages risky experiments to develop new technologies. In sum, nationalistic entrepreneurialism optimizes the state governing over resources and populations as a political strategy to reinforce state sovereignty.

Second, at the level of individual Chinese professionals, especially transnational Haigui who have returned to China from overseas countries, professional entrepreneurialism is a neoliberal strategy based on "technologies of subjectivity," "an array of knowledge and expert systems to induce self-animation and self-government" (Ong: 2006: 6). It refers to a self-governing technology that relies on risk-taking, flexibility, and reflexive responses to various political and cultural circumstances they encounter in China. In cross-cultural situations, professional entrepreneurialism allows mobile subjects to upgrade their technological and managerial skills through transnational education and work experience, optimize their life choices and

professional resources across national borders, and accumulate economic and cultural capital through entrepreneurial ventures. Innovative entrepreneurship is thus produced by transnational professionals in China as socially creative and culturally relevant practices. Transnational professionals optimize their transnational expertise and knowledge to create innovative markets to identify social needs in Chinese society. They also readjust to cross-cultural conditions in various workplaces by repositioning Chinese values and Western professional work ethics. Moreover, transnational professionals develop flexible strategies to cope with gender and "guanxi"[16] politics (social relationships) in entrepreneurial operations. In this way, through their various cross-cultural, self-governing experiences of professional entrepreneurialism, transnational professionals develop a reflexive mode of thinking and acting in relation to the career and lifestyle conditions they face within transnational situations.

Third, the interrelationships between the governing technologies of nationalistic entrepreneurialism and the self-governing technologies of professional entrepreneurialism engender new forms of innovative entrepreneurship. Through building innovative entrepreneurship, social relationships emerge among innovative agents, new cultural meanings of nationalism and Chinese-ness are constructed, and economic possibilities are created for both legitimate and non-legitimate innovations in global and national markets. Nationalistic entrepreneurialism thus provides certain political preferences and protections for Chinese companies over multinational companies in China. Chinese companies enjoy benefits such as accessing the Chinese market, human capital, and public attention. These companies are defined as innovative mainly based on their success in modifying Western technologies, generating profits, and attracting transnational resources through being listed on overseas stock markets. Nationalistic entrepreneurialism also indirectly allows the flexibility of copying and transferring Western technologies through non-legitimate channels by not emphasizing the implementation of intellectual property laws. At the same time, professional entrepreneurialism opens up possibilities to efficiently and flexibly adopt the most advanced Western technologies to satisfy domestic needs in China. This assemblage of both kinds of innovative entrepreneurialism creates conditions for the rise of

[16] Guanxi is a Chinese word for social networks or social relationships. Anthropologists and sociologists argue that Chinese guanxi embodies profound cultural meanings that are different from instrumental and professional relationships between individuals in the Western contexts. There is a large amount of literature on the social relationships in China, e.g. Guthrie 1999; Hamilton 1996; Hsing 2003; Kipnis 1997; Poggi 1983; Redding 1993; So & Walker 2006; Yan 1996; Yang 1989,1994 & 2002.

“shanzhai” (simulated) innovation, a non-legitimate version of innovative culture. Within this context, it is rational for companies to reject the high-risk experiment of developing entirely new products and technologies, and instead promote the adoption of low-cost manufacturing efforts. In this way, coping existing Western technologies remains the productive logic in shanzhai companies which are mainly sustained by both the market-driven desires in China and culturally driven mentalities among the Chinese population who seek to consume “simulated” Western products and cultures.

Fourth, the contradictions and conflicts between nationalistic entrepreneurialism and professional entrepreneurialism create obstacles, ambiguities, and uncertainties for certain innovative companies and transnational professionals to fulfill their professional and personal objectives. The neoliberal governing of the Chinese state results in the inclusion and exclusion of individuals, companies, and places from making the choices they would under unfettered conditions of political and economic optimization. This neoliberal technology reinforces the misunderstanding and mis-interpretation of some transnational companies and professionals in Chinese society and increases competition between multinational companies and Chinese companies as well as between transnational professionals and local Chinese. The assemblage of entrepreneurial thinking and practices, politics, and cultural conditions in China creates conditions that favor innovation which flexibly combines cultural and market elements, and promotes strategies that enhance the nation's economic capacity to advance within the global economy. Those who cannot flexibly and effectively adjust to the Chinese innovation system therefore develop alternative ways to fulfill their agendas. Some companies exit the Chinese market, while other transnational professionals choose to leave China in order to pursue their career and personal goals elsewhere. Innovative entrepreneurship is thus produced through the governing and self-governing technologies of flexible deployment of economic capital and cultural values in order to strengthen political sovereignty and competiveness in the global knowledge-based economy.

1.4 A Review of Literature

1.4.1 Approaches to Science and Technology Studies

This study connects insights from two literatures: the social studies of science and technology and the anthropology of subject-making. The social studies of science and technology conceive scientific and technological production as political, economic, and socio-cultural practices[17], which constitutes values, norms, and collectiveness[18], which should be understood in situated contexts[19], and which is a result of interactions among multiple players, politics, technologies, and ethics[20]. Within this broad context, this study addresses theories of the relationships between science, economy, and power. Some approaches that are helpful for this dissertation include innovation system theory, the conceptualizations of intellectual property and transdisciplinarity, Actor-Network Theory, the anthropology of scientific ethics, brain circulation theory, and the comparative approach of cultures.

Modern science is usually defined as the major form of knowledge about natural laws and the material universe produced through basic research at modern universities and research institutes. In turn, modern technology is the application of techniques, tools, and scientific knowledge produced through applied research in both academic and industrial institutions. Scientific knowledge is broadly applicable across a wide and rapid expanding frontier of human endeavor, while technological knowledge is developed to solve practical problems based on the refinement and application of the scientific knowledge (Chartand 2003). Fundamentally, scientific knowledge and technological knowledge are meant to contribute to the development of human society and the public good. Therefore, knowledge ideally should not be appropriated by any single member or group, but should be shared in order to maximize social welfare (Chartrand 2003).

Robert Merton (1942, 1973) describes four institutional imperatives as the normative guidelines of perceptions and actions of science in *The*

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[17] E.g. Abu El-Haj 2001; Franklin 1995 & 2007; Latour 1988; Mitchell 2002; Rabinow 1996a
[18] E.g. Hayden 2007; Kuhn 1996; Merton 1942; Rabinow 1996b; Woolgar & Latour 1986; Fuller 1997, 2006
[19] E.g. Bourdieu 1975; Haraway 1991; Latour 1988 & 1993
[20] E.g. Aronowitz 1988; Callon 1986 &1998; Gibbons et al 1994; Hayden 2003; Kanter 1988; Petryna 2005; Ong & Collier 2005; Ong & Chen 2010; Saxenian 1994; Strathern 2004; Latour 1998; Nandy 1983; Sunder Rajan 2006

Normative Structure of Science. "Universalism" denotes the principle that knowledge claims are objective and impersonal throughout all cultures, nations, and religions, and science should not be discriminatory. "Communalism" requires scientists to share their work with others in the scientific community to enhance the common good. Scientific progress is thus achieved through collaboration and cooperation among scientists. A third approach, "disinterestedness," disregards monetary rewards as the motivation for scientists, and instead, rewards come from the peer review process and recognition in scientific communities. Finally, "organized skepticism" allows scientific ideas to be tested and confronted by collective scrutiny in scientific communities. All of these are idealized norms which depict the resistance or hesitation of scientists to involve themselves directly in transforming scientific results into monetary value (Etzkowitz & Webster 1995). Clearly, there is a perceived boundary between scientific work and commercial activities, which different perspectives advocate transgressing in alternate ways.

The Mertonian perception of science is confronted and negotiated when the role of knowledge and the capacity of innovation become central in the economy. One the one hand, the distinctions between basic and applied research have become less clear in a knowledge-based economy (Chartrand 2003). On the other hand, this blurring boundary leads scientists to be involved directly or indirectly in the economic production of scientific achievements. In recent years, the diffusion of knowledge that is channeled through a closer communication and interaction between academia and industry, or more broadly, the alliance of diverse actors in science and the economy, has gained attention among sociologists, anthropologists, and political economists who conceptualize multiple linkages and networks in knowledge production and apply them in alternative ways (Latour 1998).

First, one structural way to characterize the increasing interconnectedness of knowledge production is through innovation system theory. In a knowledge-based economy, the national or regional innovation system plays a crucial role in the development of innovation within the economy (Nelson and Rosenberg 1993, Saxenian 1994). The National Innovation System (NIS) is defined as a network of institutions, policies, and agents that support and sustain scientific and technical advancement in a national context (Nelson & Rosenberg 1993; Porter & Stern 2001; Furman et al. 2002; Crow & Bozeman 1998). Three core actors to an NIS are universities/research institutes (URI), companies/industry, and government

(Etzkowitz 1999; Mowery and Rosenberg 1993). URI-industry relations are myriad and can include labor market related linkages, linkages for the creation, acquisition and dissemination of knowledge, and linkages to create new enterprises that form the basis of high-tech regions (Chen & Kenney 2007). URIs are also the major educational and training institutions where students and professionals gain knowledge and skills and become part of the regional economic labor pool (Jaffe 1989). Linkages between URIs and industry also take a variety of forms as joint R&D (research and development) projects, technology licensing, consulting, internships, and other collaborations between firms and URIs to develop a product or technology (Kodama and Branscomb 1999). OECD[21] countries are actively developing linkages between URIs and private sectors in order to speed up knowledge production and diffusion. As a result, governments provide incentives for universities and laboratories to involve industrial partners in the selection and conduct of their research activities in an NIS (Chartrand 2003).

The second approach to scientific production is the conceptualization of science as a property. Etzkowitz and Webster (1995) in *Science as Intellectual Property* outline a different framework of production of scientific knowledge that illustrates the interconnectedness of academia and industry, science and economy, as well as theory and practice. They argue that the perception of scientific discoveries as something that can be applied in the real world as well as generate wealth is rooted both in contemporary academia and industry. Science, contradictory to the Mertonian norms, has been transformed into a form of intellectual property; a process of "social innovation" (Etzkowitz & Webster 1995:482). This notion of scientific value as a form of property is embedded in the potentiality of scientific discoveries for practical implementation to generate economic profits through linkages of multiple elements in both research and industry. They state:

> The involvement of science in the creation of property is now institutionalized in the university as well as in government and industry. Intellectual property has become as important as the more common forms of material property; indeed, much material property could be neither created nor secured without the intellectual property on which it depends (Etzkowitz and Webster 1995:489).

[21] OECD stands for the Organization for Economic Cooperation and Development. It is an international economic alliance of thirty-four countries primarily located in the Global North.

In a knowledge-based economy, the capitalization of scientific and technological knowledge relies on the central issue of intellectual property. It is not only an epistemological and economic phenomenon but also a political and legal one. The linkages between academia and industry are supported by government policies, and innovation is protected by intellectual property laws (Etzkowitz and Webster 1995:490). The system of producing a knowledge-based product as a form of property is a system that favors a sense of ownership and its protection that is facilitated by technologies themselves, various political, economic, legal, and research institutions, as well as technological or other relevant specialized individuals.

Third, transdisciplinarity is a new trend in the production of scientific and technological knowledge. In *The New Production of Knowledge*, Michael Gibbons et. al. (1994) distinguish a new mode of knowledge production "Mode 2" from the traditional, disciplinary mode of knowledge production "Mode 1." Mode 2 is a socially distributed knowledge production system that allows scientific knowledge to interact across disciplinary boundaries with other dynamic elements in economic and political systems in an innovative way. In Mode 2, knowledge production not only proceeds across different disciplines but is also diffused in society. This idea of transdisciplinarity is similarly raised by Marilyn Strathern (2004) as "a context of application" in which society "becomes itself a factor in the production of knowledge," and at the same time, scientifically reliable knowledge also becomes "socially robust" knowledge (Strathern 2004:71). The legitimacy of scientific knowledge is no longer confined to exclusive scientific communities, but rather society plays a primary role in defining what scientific knowledge is desired and meaningful. There are several important characteristics featuring this new mode of knowledge production: "transdisciplinary," "heterogeneity," "heterarchical and transient," as well as "socially accountable and reflexive" (Gibbons et al 1994: 3, Gibbons 1999). Transdisciplinarity requires "a common theoretical understanding and a mutual interpenetration of disciplinary epistemologies" (Strathern 2004: 70). Heterogeneous skills and experience result in diversity across individuals, groups, and institutions in universities, government agencies, and research institutes as well as industries. Producing and commercializing knowledge in Mode 2 requires a reconfiguration of physical and human capital in the context of application. Knowledge itself thus becomes an innovative commodity that can be consumed at different social sites.

Another approach is Actor-Network-Theory (ANT), developed by Michel Callon's (1986) as well as Bruno Latour's work (1988). This theory articulates the formations of both human and non-human actors with different roles, and conceives of human and non-human actors in a network of alliances with their respective interests that can be translated, negotiated and reconciled. Once the mechanism of ANT creates "a favorable balance of power," a social system comprising both social and natural entities can be shaped and consolidated (Callon 1986:211). However, this process of translation is negotiated by the ongoing displacements and transformations of goals and interests (Callon 1986:223). The equilibrium of the network is constructed and deconstructed by all these negotiations, adjustments, displacements, and transformations of interests. Callon later builds on this idea and explores a new conceptualization of economy in *The Laws of the Markets*. By defining the neo-classical notion of market, Callon (1998) borrows Robert Guesnerie's main idea that denotes three characteristics of market: calculative agencies, possibilities of multiple forms of organization, and their construction and arrangement in an ongoing and transitioning process. Callon (1998) positions calculative actors in a changing and interrelated network of alliance and competition with the assemblages of laws, rules, technologies, tools, knowledge, and expertise. Through continuously calculative interaction, negotiation, and discussion---a process of translation—heterogeneous agents in the network can reach a common understanding and share particular knowledge and beliefs with each other. Thus, Callon (1998) argues that the economy is not just a social construct, but it is an ongoing process of formulation of calculative and rational activities according to certain shared and organized epistemologies and rules.

The idea of the interconnectedness of different actors in a system of knowledge production and application is echoed across the major theoretical understandings in science and technology studies. The role of knowledge, specifically scientific and technological innovation, in the economy is reinforced through the relational functions of multiple agents and structures in these theories. First, the national innovation system theory articulates the relationships between core actors, which varies in different national contexts. For example, the industry-university complex in the U.S. plays a crucial role in innovation, while in China the government is still the most influential actor. Second, the theory of science as intellectual property articulates the categorization of scientific knowledge based on its ownership and economic value. However, it lacks an analysis of the culturally specific

understanding of how the idea of property emerges in society. The "science as intellectual property" approach draws largely from Western ideas of private property, which does not necessarily offer a convincing explanation for the ways in which Chinese perceive knowledge and property. Third, the transdisciplinary conceptualization presents the emergence of new ways of producing scientific and technological knowledge based on their relationship with society in Western contexts. However, transdisciplinary relationships create different forms of socially robust knowledge in China. Lastly, the ANT theory conceives of the production of scientific knowledge as an alliance of rational, calculating actors with specific interests. Yet such a disciplinary categorization and rational agency may not exist in the Chinese context due to deeply rooted cultural and political conditions.

These studies conceive of relationships in the production and diffusion of knowledge as relatively rational, calculative, and instrumental. Their interdependence and collaboration primarily rely on the respective specialties and functions of diverse actors for mutual goods and interests. Moreover, these analyses focus on the institutional characteristics and transformations of knowledge production, overlooking actual practices at the micro level. Anthropological studies are useful in the sense of shedding light on the system of knowledge production as a nuanced configuration of scientific, technical, political, economic, social, cultural, ethical, and legal elements. Through the examinations of daily practices of scientific and technological production and their consequences to different groups of people in different societies, ethnographic studies unveil some specific stories under the macro system of knowledge production. Current scientific and technological production is influenced by many variables that "modern expertise is authorized by institutions, warranted by patent offices, legitimated by prize committees, and…sanctioned by investors" (Rabinow 1996a:14). *Making PCR* is a particular illustration of science as a social practice in which the values of rationality and instrumentality are challenged and reconstructed. Rabinow (1996a) presents a typical example of the discovery of a Nobel Prize invention and the process of how this invention became embedded in economies through contested and interdependent players. The Mertonian scientific norms are being challenged, tested, and reconfigured through the tensions between the academy and industry as well as among scientists themselves.

Moreover, while the West universally celebrates transdisciplinary efforts and success in knowledge-based economies, there is a general lack of

culturally-specific characteristics, particularly of relationships within non-Western or transnational contexts. The constitution of such interdependence may differ among cultures due to historically created and culturally bounded expectations regarding the nature of relationships and perceptions of knowledge, power, and value. One approach views technology transfer and human capital circulation within transnational context—the "brain circulation" model. This approach argues that transnational professionals bring technology to their home countries while simultaneously circulating knowledge with the West (Saxenian 2006). Instead of a one-way migration, human capital is exchanged through the two-way flows of people between their home and host countries. Professionals may act as knowledge carriers and thus enable intellectual resources to be shared across states, rather than be permanently transferred from one state to another. Saxenian's research focuses on Taiwanese and Indian immigrant engineers in Silicon Valley who travel across the Pacific Ocean. There are limits to this model in China, particularly the lack of venture capital, specialized suppliers, government facilitations, and trust-based social mechanisms hinder the circulation of knowledge between the West and China (Chen 2008). Nevertheless, this approach also emphasizes the institutional analyses with limited investigations about cultural practices.

Another comparative approach focuses on how cultural specificities may affect the production of knowledge within two different societies. For example, Lock (2002) argues that distinctive values on the meaning of death between the US and Japan lead to different strategies and practices regarding organ transplant technology. Similarly, Traweek (1988) presents an ethnography on how cultural norms of organization affect scientific communities of physics differently in the US and Japan. Needham (1954) points out that China's lack of "a mercantile culture"—an emerging capitalist order found only in the West, partially but significantly explains why modern science did not develop in China. While adding a valuable culturally-specific perspective, the comparative approach usually puts different cultures in dichotomous and static positions. While China has been striving to catch up in terms of its innovative capacity and general economic development by learning and imitating the models of the West, there are different stories that may be discovered in a dynamic process influenced by various global forces. In this study, I use an ethnographic approach to understand how Western and Chinese cultural elements are constantly mixed and reconfigured by multiple players in innovation systems, such as between transnational Chinese professionals and government officials. The

anthropological study of how technological innovation is defined and produced under the global economy may reveal an alternative way to examine the dynamic and complex interactions among global and local S&T actors.

1.4.2 Approaches to Modern Subject Making

This research also builds upon theories of subject-making in relation to discursive subjectivity, neoliberal citizenship, and modern reflexivity. The notion of subject formation is associated with the ethical justification and the conditions of possibility regarding who we are and who we should be. The subject is created through various forms of personal and interpersonal experiences by being subjected to state control, cultural structures, and through reconfiguring their own awareness of ethics and values as they engage in a process of self-making.

First, a modern subject is created in a social space as a product of discourses. Questioning traditional historical analyses, Foucault (1972) asks a critical question about who we are in the specificities of history and culture. Based on the Kantian identification of the Enlightenment as a time for humanity to employ reason, Foucault further sees the Enlightenment as an age of critique (Rabinow 1984). Rational thinking is put into question, not only in terms of its nature, foundation, power, and right, but also its history and geography, as well as its conditions of existence in the realm of time, space, and actuality (Mahon 1992). It is a philosophical reflection that "problematizes our relation to the present, our historical mode of being and the constitution of the self as an autonomous subject" (Rabinow 1984: 42). The historical consciousness of the conditions of existence and the knowledge of past history is "the principle of a critique" and "a creation of ourselves in our autonomy" (Foucault 1980). According to Foucault, the modern (Western) subject is the production of knowledge and power relations which themselves are historically constituted. Like the diamond as a commodity of which the value is determined by the system of social relations, the subject position of the social agent is constituted by the discourses surrounding him (Laclau 1990). These discursive formations can be revealed by an "archaeology of knowledge," which is an approach to "define discourses in their specificity; to show in what way the set of rules

that they put into operation is irreducible to any other" (Foucault 1972:139). In this way, epistemes—the historical *a priori* that grounds knowledge—are determined by the rules that govern discursive space in particular historical periods (Foucault 1972). "Continuous history is the indispensable correlative of the founding function of the subject. Making historical analysis the discourse of the continuous and making human consciousness the original subject of all historical development and all action are the two sides of the same system of thought" (Foucault 1972:12). The Foucauldian critique of subjectivity denotes a fundamental rupture from the traditional Western epistemes about men themselves as the origin or center of historical processes. The conditions surrounding the possibility of human capacity to know themselves and the world are structured through discursive practices, which themselves are governed by historically constituted systems of knowledge and power. Such conditions of possibility invoke the structuralist notion of "a system of signification," such as the Saussurean distinction between language (langue) and speech (parole), and Levi-Strauss's myth-as-language, but the Foucauldian structure is concerned with "the historical *a priori* as a system of relations" (Liu 2002). This historical system is the "condition of [the] reality of statements" (Foucault 1972: 129) in which subjects are made.

Second, a modern subject is created through flexible strategies and neoliberal practices of self-scrutiny and self-improvement. Historical transformation encompasses the development of a particular mode of self (Liu 2002). Comaroff and Comaroff (1991:I60) articulates a form of liberal personhood arises in a particular historical moment:

> the rise of utilitarian individualism, in particular the celebration of the virtue of the disciplined, self-made man; of private property and status as signs of personal success, poverty as a fitting sanction for human failure; of enlightened self interest and free market, with its 'invisible hand' as the mechanism for arriving at the greatest public good; of reason and method, science and technology, as the proper means for achieving an ever more educated, civilized and cultivated humankind.

In such a historical moment, "self-containing and right-bearing individuals" are "seeking to maximize their own well-being" who create a society "by the sum of their actions and interactions" (Comaroff & Comaroff 1991: I61). This notion of modern personhood is characterized as "self-scrutiny" and "self-improvement" (Liu 2002). In this vein, the modern subject "is capable

of turning himself into self-scrutiny," and specific social values can be "internalized as necessary human qualities" (Liu 2002:114). "Self-control, self-denial, self-esteem, and self-possession" are the fundamental virtues and ethics of "self-improvement" of making a modern liberal subject in everyday practice (Liu 2002:114). While the development of personhood is constructed as a form of individual personality, another form of personhood is understood through the articulation of citizenship. Besides its traditional notion of the legal status or political rights endowed by a certain country, citizenship can be understood as a form of collective identity, individual personality, and sentiment (Sassen 2006). Through cross-border experiences, transnational subjects are able to scrutinize their self-conditions and improve their personhood by accumulating multiple passports and contingent rights (Ong 1999). In the global arena, the Chinese business professionals who favor "flexibility, mobility and repositioning" at the transnational level are able to respond "fluidly and opportunistically" to "markets, governments and cultural regimes" (Ong 1999). This "flexible citizenship" is not only a form of neoliberal subject formation that relates individuals to particular historical moments of political economy, but it also captures the making of a subject by cultivating cultural capital and producing symbolic values such as the strategies and practices of self-improvement (Ong 1999). Such practices are reflected upon by a transnational subject when the subject sees herself as "an object" (Liu 2002: 114) and scrutinizes how to make and maintain subjectivity in a larger picture of historical transformation.

Third, the subject is made through the reflexive practices of awareness and experience. The self-scrutiny of a subject is situated in a relationship between an inner self-consciousness and the existence and experience of the self. The notion of reflexivity is normally raised when dealing with the problem between the inner and outer space of the self (Liu 2002). Taylor (1989: 130) captures the historical character of the inner space within oneself through the concept of "radical reflexivity":

> In our normal dealings with things, we disregard this dimension of experience and focus on the things experienced. But we can turn and make this our object of attention, become aware of our awareness, try to experience our experiencing, focus on the way the world is for us. This is what I call taking a stance of radical reflexivity or adopting the first-person standpoint.

This kind of reflexivity is a conceptual inquiry into the making of a subject by certain kinds of performative practices. The subject is not only able to act and experience in the conditions of possibility under certain historical structures, but her awareness, her ability to experience herself thus becomes an object upon which she can reflect. Historical transformations call for a new mode of thinking about the relation between modernity and the self. Beck, Giddens, and Lash (1994) describe the historical transformation of modernity as "reflexive modernity," in which traditional socially accepted patterns are dis-embedded, and a new order is re-embedded. New social movements emerge that are reflexive, critical, and articulate (Beck et al 1994). Self-reflexivity is a character of modernity, in which the post-traditional society is embedded (Giddens 1994). In the post-traditional society, norms are subjected to the practices of reflexive justifications and scrutiny, and ethics are negotiable to form social and personal relationships. When reflecting upon the global processes of modernity, Giddens (1994) argues that:

> [t]he global experiment of modernity intersects with, and influences as it is influenced by, the penetration of modern institutions into the tissue of day-to-day life. Not just the local community, but intimate features of personal life, and the self become intertwined with relations of indefinite time-space extension. We are all caught up in everyday experiments whose outcomes, in a generic sense, are as open as those affecting humanity as a whole. Everyday experiments reflect the changing role of tradition…

In this way, subjects are continually being made through changing social relationships and norms that are open to negotiation in everyday practice. Conceptually, radical reflexivity, and reflexive modernity present a framework of making a subject reflexively; however, we need to explore a more concrete justification to see how reflexivity is practiced in actual daily experiences.

"Reflexive practices" and "business reflexivity" can provide such a methodological framework rather than a conceptual one. Ong and Collier (2005: 7) use reflexive practices to articulate modern anthropological problems about "how, in various domains, modern practices subject themselves to critical questioning." Through reflexive practices, "the forms of individual and collective life" are "reflected upon and valued, constituted and reconstituted" (Ong & Collier 2005: 7). Ong and Collier categorize three

major forms of reflexive practices: technological, political, and ethical. Technological reflexivity examines "the problem of choosing the most appropriate means for achieving given ends or goals," which can be "technoscientific, organizational, or administrative." In contrast, political reflexivity concerns "the appropriate form and scope of juridico-legal institutions in resolving problems of collective life," while ethical reflexivity deals with "questions of value and morality" reflecting upon "the problem of how one should live" (Ong & Collier 2005: 8). These three forms of reflective practices are intertwined with each other to constitute a form of conduct and a form of modern subject through a specific set of reflexive strategies and practical skills. Similarly, Thrift argues that such practices relate to "the promotion of intelligence about competence within specific problem spaces," and in the modern "reflexive capitalism," "how to solve specific problems" in business management is the central question, which requires reflexive knowledge and strategies (Thrift 1999: 59). Solving specific problems and applying reflexive knowledge to them are internalized by the subject, thus producing a modern subject in a reflexive capitalist system in the era of globalization.

The three approaches articulated above provide the foundation for the analytical lenses used within this study. First, modern subject-making is structured in discursive practices governed by historically constituted "knowledges" and powers (Foucault 1972, 1980; Rabinow 1984). The discourses of China's radical changes shape a post-socialist Chinese self as "being the other," and the anxiety provoked by this otherness of self is articulated in new discourses about what constitutes Chinese-ness in modern China (Liu 2002). Therefore, I choose to explore the contradictions and uncertainties of transnational Chinese subjectivity that is contingently shaped by the discourses of the state, the public, and by transnational professionals themselves.

In addition, neoliberal citizenship is a modern form of subject-making that emerged in response to global forms of political, economic and cultural forces (Ong 1999, 2006, and 2007; Sassen 1991, 1998, and 2006). Transnational subjects improve their self-making by accumulating multiple passports, contingent rights, and different kinds of capital flexibly (Ong 1999). Cross-cultural situations and neoliberal practices introduce further ambiguity within the process of flexible Chinese subject-making in megacities like Beijing and Shanghai (Ong 2007). Based on the conceptualization of neoliberal citizenship, I investigate how transnational

professionals flexibly and opportunistically respond to different markets and challenges at the transnational and local levels.

Lastly, modern subjects consider how norms are subjected to practices of reflexive justifications, problem solving, and scrutiny (Beck et al 1994; Giddens 1994; Liu 2002; Ong & Collier 2005). I examine how transnational professionals reflexively subject themselves to critical questioning and how they subsequently reconstitute their values, norms, and practices in cross-cultural situations. This study employs these frameworks of subject making as well as the social studies of science and technology to examine how various interplays of cross-cultural contradictions and resistances shape transnational Chinese subjects in the process of innovation production. In turn, these practices and discourses construct the political and cultural characteristics of China's S&T development and innovation entrepreneurship.

1.5 Understanding China's Innovative Entrepreneurship: An Overview

The contemporary understanding of science and technology (S&T) in the West usually does not emphasize the political and cultural specificity of S&T innovation production. Moreover, it views S&T actors as fixed categories with stable identities and interests in a homogeneous socio-cultural context. In addition, the practices and relationships among S&T agents are conceived as economically rational, calculative, and instrumental. In this research, I question the conventional notion of "technological innovation" as an institutionalized, rational, and systematic production and commercialization of technological creativity. Instead, I treat "innovation" in China as an open question, which is subjected to politically and culturally specific conditions in response to both global competition and local desires. Therefore, this study investigates state control of science and technology, the obstacles and mobility of Chinese returnee professionals as dynamic and fluid characters, and the entanglements of public policies and cultural practices of technological innovation. Ultimately, this inquiry into Chinese Haigui's practices and discourses provides a lens through which we can better understand how innovation development is configured in China within a globalized context.

My research explores four major areas. 1) "The governing of science and technology": the political creation of S&T innovation by the government, and how this agenda overlaps or diverges from Haigui's understanding of innovation. 2) "The creation of Haigui": the programs and discourses of the Chinese government and the public on creating a category of Chinese returnees, and how these programs and discourses shape and contradict Haigui's self-understanding. 3) "The practice of innovation": the daily interactions and experiences of transnational high-tech professionals in producing S&T innovation, showing how cultural practices are important elements in shaping outcomes. 4) "The subject making of Haigui": how transnational Chinese shape modes of thinking and strategies in the process of producing innovation.

An ethnographic approach provides a bottom-up perspective to understand the political and cultural implications of innovation development promoted by the Chinese government. I argue that the categorization of Haigui does not only represent an emerging global class who enjoy transnational mobility and cosmopolitan life styles, but the construction of Haigui also represents a contingent and complicated process of configuring what modernity means to China and Chinese people. In this process, through the discourses and practices of the Chinese government, the public, companies, and transnational Chinese professionals themselves, China strives to redefine modernity as well as its economic and cultural worth driven by the global competition for innovation (see Figure 10). Haigui, as an epistemological category, destabilizes a static definition of Chinese subjects. Rather, Haigui are a symbol of modern China, as well as a socially discursive site for modern Chinese subjects to experience the entanglement of various ideas and values and reconstitute them as they reconstruct new identities in a globalizing world.

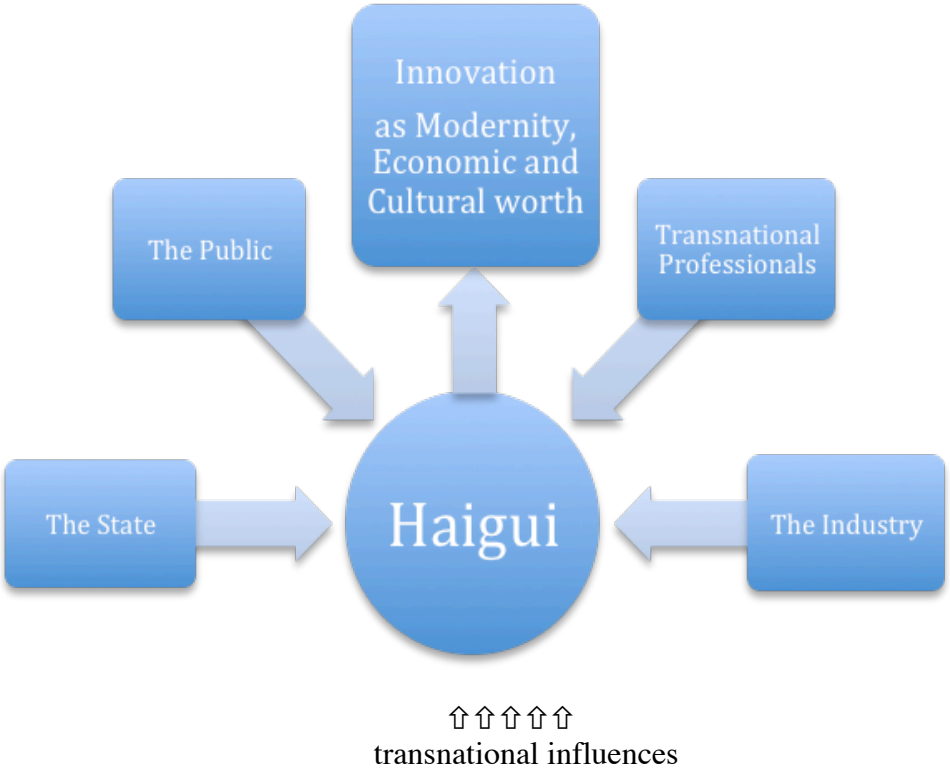

Figure 10 Construction of Haigui

In my research, I develop a framework of innovative entrepreneurship to indicate how innovation is understood and produced in China. Beyond the institutionalization and commercialization of technological advancement, innovation is better understood as an assemblage of political strategies, economic optimization, and cultural practices in China (see Figure 9). In order to capture the dynamism and multiplicity of innovation development in China, I use a diagram to illustrate the production of innovative entrepreneurship, focusing on the role of the state and transnational Chinese professionals (see Figure 11). I argue that innovative entrepreneurship is produced through various dynamic entanglements of the state driven by nationalistic entrepreneurialism and high-tech professionals driven by professional entrepreneurialism in heterogeneous socio-cultural contexts. The details are explained in the following section:

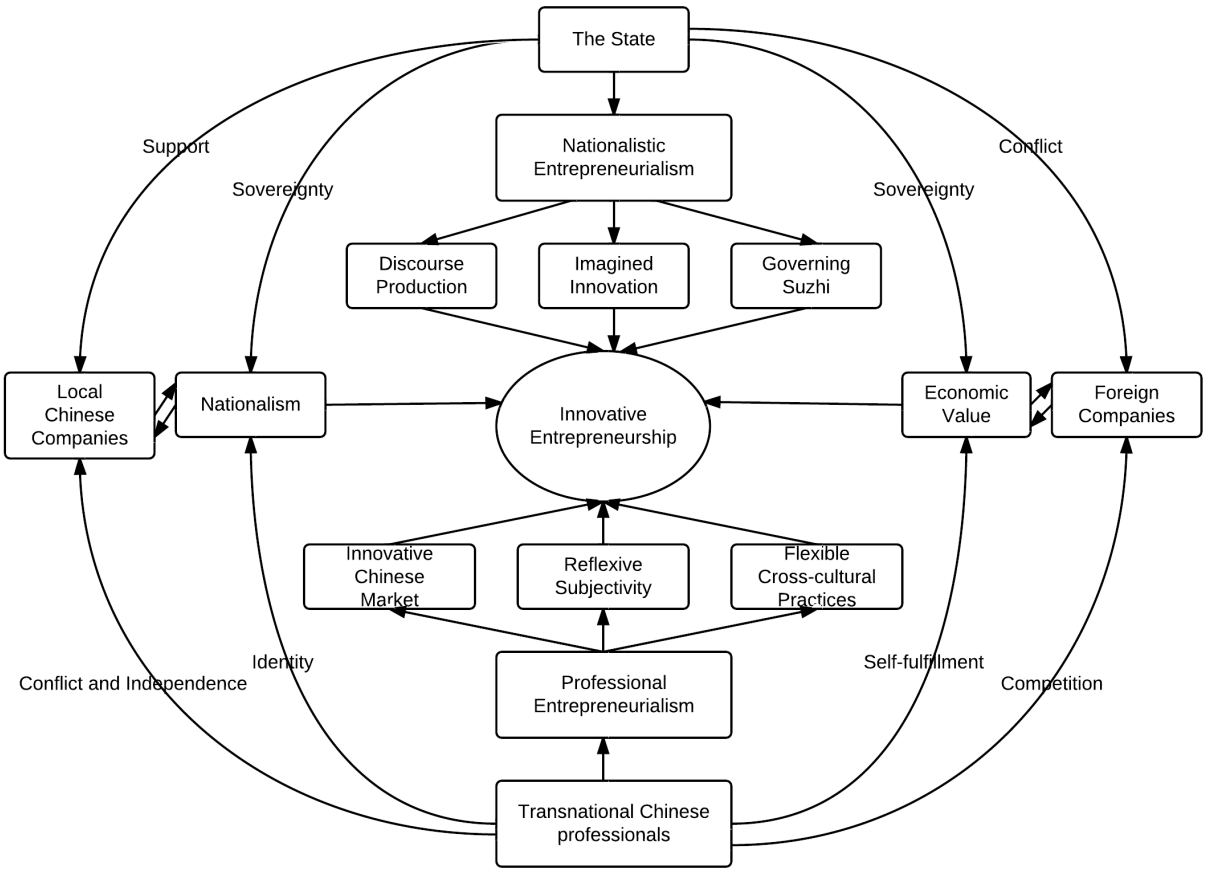

Figure 11 Producing innovative entrepreneurship in China

1.5.1 Nationalistic Entrepreneurialism

As described previously, innovation in the West mainly refers to the capacity of technological creativity and advancement. However, I argue that building innovation in China goes beyond technological development and is strategically constructed as part of a political nation-building agenda. The state government plays a significant role in this process through exerting governing technologies to its optimize political and economic agendas, which I term "nationalistic entrepreneurialism." First, innovation is part of a political imagination that aims to consolidate and govern capital, expertise, and other resources at the transnational level in order to strengthen state sovereignty. As a result, the state government has more power to mobilize resources, administer spaces, and control its populations. I call this mode of innovation development "imagined innovation." Second, the state also

develops various programs and discourses to improve intellectual competence of Chinese citizens and prioritize certain knowledge and expertise in order to mobilize highly-skilled Chinese scientists, engineers, investors, and entrepreneurs both at home and abroad. Third, the Chinese government creates a variety of public discourse to promote the idea of innovation as an important indicator of modernization and development. Meanwhile, these discourses cultivate emotional bonding with a sense of nationalism among Chinese citizens in transnational communities who continue to search the meaning of being Chinese in a globalizing world.

By creating the imagination of innovation, government officials are able to use quantitative measurements, such as the amount of investments and the number of scientific experts, as a way to measure their political achievements, *Zhengji* in Chinese. Officials, especially those at regional and local levels, understand that research and development leading to innovative products takes a long period of time and entails significant risk. However, economic value can be generated by manufacturing and copying existing technologies at less risk and lower cost. Moreover, all of this can be achieved in a shorter period of time; namely, within the officials' term of political tenure.[22] The economic value measured by quantitative data can secure officials' political status and provide evidence of their governing capabilities, while the qualitative description of technological innovation is less relevant and less effective in indicating the officials' Zhengji. Imagined innovation serves mainly as a political tool for the government to strengthen its governing power over resources and people, and it does not emphasize scientific and technological contributions. Therefore, even though investments and experts are attracted to China, appropriate public policies, entrepreneurial cultures, and institutional systems that protect cutting-edge technology have not been effectively implemented in China. While many Haigui's original idea is to develop indigenous technological innovation, their spirit of innovative entrepreneurship is discouraged in such a context of imagined innovation. As a result, imagined innovation generates economic value through manufacturing, copying, and consuming technological products rather than producing original ideas and creative technology.

[22] In order to receive monetary support from the central government, regional and local government officials need to identify certain achievements that reflect their abilities of governing and developing the region. It can also directly affect their promotion within the government. As a result, they emphasize supporting enterprises that can produce economic profits more efficiently, so that they can get support and be promoted more quickly.

The state government also use the agenda of "building an innovative country" to reinforce its governing power over Chinese citizens. The state creates various programs to strengthen competence education, *Suzhi* in Chinese, and prioritize science, engineering, management, and economics as the most desirable expertise. The government also carries out preferable policies to favor Chinese citizens who have overseas education and experience. To respond to favorable policies towards transnational Chinese and governing strategies of population suzhi, Chinese citizens strive to maximize resources for self-improvement and strategically prioritize certain kinds of expertise and experience through the process of knowledge capitalization. In other words, to be a modern Chinese with high suzhi, one should be equipped with desired expertise that can generate economic and cultural value in Chinese society.

To cultivate technological and economic development, the Chinese state uses nationalism as a strategy to promote innovation and attract talented Chinese professionals residing abroad. "Nationalism" is a cultural and sentimental construction that identifies a nation's collective identity. The Chinese state creates various nationalistic discourses and programs to construct modern Chinese subjects willing to devote themselves to the nation-building movement in the motherland. Nationalism also creates preferable advantages for local and Haigui Chinese companies, while foreign companies are either restricted or excluded to the Chinese market. At the same time, transnational Chinese professionals understand nationalism in complex ways. On the one hand, these professionals continue to search for the meaning of being Chinese and the significance of their homeland in their self-making practices. The Confucian ethics of piety and loyalty continue to play an important role in strengthening the emotional and practical ties between these transnational Chinese and their cultural roots as well as kinship networks in China. However, nationalistic sentiments have also become a strategic method used by transnational Chinese professionals (and government officials) for self-promotion in China. As a dynamic symbol, "Chinese-ness" is being understood differently through traditional and metamorphic articulations and experiences in nationalism. While it continues to convey static meanings in Confucian ethics and norms, nationalism transforms Chinese-ness into a certain political and economic reality in contemporary China. In addition, Chinese-ness can also be strategically adopted to fulfill certain nationalistic and pragmatic agendas, and it has been reflexively incorporated into a transnational subjectivity among transnational Chinese subjects.

In sum, the powerful involvement of the Chinese state in defining and governing innovative entrepreneurship is driven by nationalistic entrepreneurialism that strategically optimizes economic value and mobilizes nationalism in order to reinforce its state sovereignty. Those who cannot efficiently provide economic value[23] or go against nationalistic agendas[24] are excluded in the production of entrepreneurship in China.

1.5.2 Professional Entrepreneurialism

Innovation in high-tech business settings in China is not solely applied to producing technological novelty in products, but it is also about how to make products relevant in the Chinese cultural setting through creative entrepreneurial and social practices. These practices are developed by transnational professionals through "professional entrepreneurialism," the self-governing technologies that flexibly and reflexively mobilize economic resources and cultural values. First, transnational professionals try to utilize their transnational networks and expertise to transfer most advanced technologies to China in order to be more competitive in the global markets. However, they need to flexibly adjust Western values in cross-cultural settings in China to cope with cultural contradictions. Second, they need to use their local cultural knowledge to identify the social needs and innovative markets in China, and develop creative social practices to deal with the conflicts with local Chinese and companies. Third, through comparing different markets and cultures, transnational professionals develop reflexive subjectivity to negotiate with the state power, different markets, and cultural domains.

The daily business activities are characterized by certain "cultural practices."[25] I use this concept "cultural practices" in the sense that the beliefs and practices of transnational professionals display complex cultural values, ethics, and norms in the technological innovation building process. Bounded values and norms such as capitalist rationality, individualism, creativity, professionalism, freedom, paternalism, filial piety, and trust are

[23] It refers to companies which prefer experimenting original but risky ideas that may fail. However experimenting risky ideas is one of the essential features to produce truly innovative technologies according to the Western standards.
[24] For example, I will provide a case study about Google's exit from China in the last chapter
[25] There is a large amount of literature that articulates the relationship between economic activities and cultural practices, e.g. Redding 1993; Hertz 1998; Liu 2002; Ong 1999; Weber 1958; Yang 2000; Yao 2002.

reconfigured in the discourses and practices of innovative entrepreneurship. The cultural practices that professionals engage in demonstrate how particular value categories affect China's innovation agenda, and show how different norms structure S&T organizations and practices. In this research, I focus on the following areas of cultural practice: 1) the value of "meaningful" innovation; 2) the creative strategies of production and marketing; 3) the cultural structure of leadership and teamwork; 4) gender relation and identity; and 5) the role of "guanxi"[26] politics in cultivating social relationships.

Advanced Western technologies and managerial expertise brought by Haigui to China usually face significant cultural limitations. For example, innovation has different meanings to Haigui than it does to local Chinese; it is not easy to manage local Chinese employees who are judged by Western standards as not professional enough; local Chinese doubt the expertise of female engineers even when they have extensive overseas experience; and transnational professionals feel frustrated in their attempts to cultivate guanxi networks with government officials and local clients. Unlike local Chinese, who have higher cultural capacity in developing guanxi, Haigui feel that they must spend additional time building personal connections at karaoke bars or by hosting expensive banquets. As a result, many transnational Chinese professionals have realized that applying Western technologies in China entails relying on creative social practices and strategies in a dynamic process of building innovative enterprises. Producing successful, technological products in China requires creating innovative markets that are culturally specific to local customers' needs and perceptions. Moreover, innovative management styles and business practices that flexibly incorporate cross-cultural values and norms are crucial to a successful company. Therefore, embedding a truly innovative product in China is not simply dependent on the materiality of technological advancement but also its creative implementation into a specific cultural context through socially innovative practices.

Through practicing innovative entrepreneurship, transnational professionals have reconstructed and incorporated certain values in a process of subject-making. "Subject-making" in this research articulates the ways in which Chinese subjects create new forms of personal and interpersonal experiences. They do so through being subjected to the control and

[26] See note 16

dependence of the Chinese state and cultural structures, but also through reconfiguring their own knowledge and values in a process of self-making. I argue that the contradictions and interplay between various Chinese and Western values and norms put transnational Chinese professionals into unusual, ambiguous, and difficult situations. However, the ability to displace from the two cultures can often create a liminal space for these professionals to free themselves from one bounded set of rules and to generate possibilities for creativity through dynamic social practices. In a process of addressing various cultural limitations in their daily operations in China, transnational professionals have developed flexible identities and reflexive modes of thinking to negotiate effectively with state power, different markets, and cultural values, which I term "reflexive subjectivity" (see Figure 12).

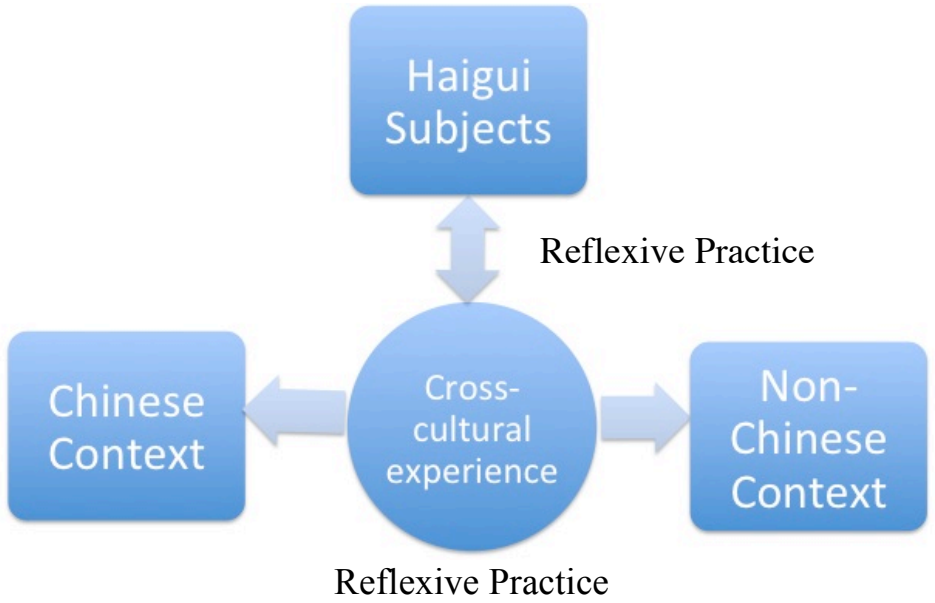

Figure 12 Haigui's reflexive subjectivity in transnational contexts

Reflexive subjectivity relies on the self-scrutiny of a subject who finds himself in relation between an inner self-consciousness and the external existence and experience of the self. The subject is not only able to act and experience within the conditions of possibility under certain circumstances, but her awareness and experiences themselves become an object upon which she can reflect. Transnational Chinese professionals thus reflect upon their own experiences in China through which Chinese and Western values and ethics are subjected to practices of reflexive justifications and scrutiny, and different cultural norms and structures are negotiated, enabling them to form

social and personal relationships and meanings in high-tech settings that depend on the particular context in question. Solving specific problems in everyday business practices and applying reflexive knowledge are thus internalized to the self-making of transnational Chinese subjects. Transnational Chinese have become reflexive subjects who rethink the meanings of being Chinese, as well as how to demonstrate it in practice, living an ethical life in the contemporary globalizing world.

In sum, driven by nationalistic entrepreneurialism, innovative entrepreneurship is also configured by high-tech professionals in cross-cultural contexts through the cultivation of professional entrepreneurialism. These innovative practices include identifying niche markets that can address culturally specific needs of people and developing creative and flexible strategies to manage the production of technologies. However, professional entrepreneurialism is better understood not as a calculative and rational practice, but rather, as the optimization of both economic and cultural values.[27] Meanwhile, innovation development in China is better understood as a dynamic assemblage of nationalistic agendas, economic development, and culturally meaningful practices.

1.6 Methodology

This study draws on ethnographic research conducted both in the U.S. and in China. Before I conducted my one-year fieldwork in Beijing from July 2008 to June 2009, I engaged in participant observation with visiting government officials in Silicon Valley, and also participated within Chinese professional communities in the U.S., both online and in-person. I also visited Beijing, Shanghai, Jinan, and Shenzhen to collect primary data between 2005 and 2008 such as statistical reports and preliminary interviews with officials and high-tech professionals. The next year (2008-2009), drawing on insights gained from preliminary fieldwork, I chose to conduct the bulk of the research in Beijing at two main sites. My primary field site was Beijing Zhongguancun High-tech Zone (ZGC), and the secondary site was the Central Business District (CBD) in Beijing (see Figures 13 and 14). ZGC is China's largest cluster of innovative institutions, and it is the main

[27] In my research, many transnational professionals made their choice to return to China to produce technologies not solely based on the economic profits they would gain, but rather, a balance between maintaining their Chinese identities and fulfilling their professional and personal goals.

destination for Chinese high-tech Haigui who are seeking employment. Similarly, CBD houses most foreign-based companies, and it is a popular destination in which many Chinese Haigui strive to live and work.

Figure 13 Location of Beijing

Figure 14 Map of Beijing
The core ZGC is located in the northwest of the city. CBD is in the central east side of the city. Source: tupian.hudong.com

This study draws on three major methods: archival research, participant observation, and interviews. First, I conducted three types of archival research from July 2008 to August 2008: government documents, mass

media reports, and survey documents. I collected government documents that discussed strategies for building innovation capacity and supporting Chinese nationals to study abroad, programs designed to attract transnational Chinese to work in China, and media reports on Haigui. I also sought out survey data regarding statistics of transnational Chinese including their intended destinations, the degrees they obtained, their work experiences in the host countries, their destinations when they returned to China, and their ultimate job compositions in China. Finally, I compared historical documents about Chinese returnees from the late Qing dynasty in the 1850s to the pre-Cultural Revolution period in the 1970s as well as the return migration in other places such as Taiwan and India.

After the initial archival research, I focused on participant observation at two sites: ZGC and CBD. While there, I studied and compared how Chinese Haigui develop high-tech innovation in two cross-cultural settings: a high-tech startup company run by a Chinese Haigui, and a high-tech startup company established by a foreign entrepreneur. To study China's innovative entrepreneurship in two different business settings, I do not treat the "Western" and "Chinese" cultures as completely dichotomous or in opposition, but as various cultural elements that become (mis)interpreted and entangled in cross-cultural settings where transnational professionals work.

I first spent five months with the Haigui company, spanning August--December 2008. While there, I observed returnees' daily practices in dealing with business, developing research, marketing their products, and interacting with government officials, venture capitalists, and other local companies. Once this portion of the fieldwork was completed, I spent an equivalent four to five months with the foreign company from February--June 2009. As in the Haigui company, I interacted with Chinese employees and observed how they worked with their foreign boss and how they interpreted and fulfilled their company's agenda. During my participant observation, I worked in the office as the assistant to the founder of each company, accompanied the founder to different events, participated in the daily work of the company when appropriate, and interacted with their employees. In addition, I conducted extensive semi-structured interviews with major informants, including Haigui, government officials, venture capitalists, journalists, professors, and other local professionals. I also accompanied some informants to more casual settings, such as restaurants, bars, clubs, and their homes.

1.7 Rethinking Innovation and Transnational Subjects

Innovation development has been seen as an important political agenda in China, and the role of transnational Chinese professionals has garnered recent attention, especially as a way to reverse the brain drain problem. However, Western citizens and academics alike still contend that China lacks an innovative capacity[28]. It also remains unclear whether transnational professionals can significantly help create a more communicative connection between China and the U.S. to address issues such as intellectual property and human capital collaboration. Meanwhile, there is limited literature articulating the political and cultural specificities of the return migration phenomenon, especially with regard to highly skilled workers. While the relationship between culture and capitalism is articulated in various works[29], I delve into the role of cultural politics in S&T innovation in response to global capitalism.

Towards this end, this study examines the extent to which China can produce technological innovation. I argue that there are cultural limits that hinder innovation development in China. First, innovation is promoted as a nationalistic discourse in China. I argue that the utilitarian nature of the political agenda directs resources and educated citizens toward economic development as a way of fostering nation-building rather than risk-taking. Within this nationalistic practice, however, Chinese-ness is being redefined by Haigui. In addition, I argue that the Chinese innovation is produced as a culturally specific practice in China, which is not necessarily relevant to the Western context. I also use ethnographic examples to illustrate how Haigui cope with the cultural challenges in their daily practice of producing innovation. I conclude that the cross-cultural practices of innovation have shaped, and continue to shape, transnational Haigui into flexible and reflexive subjects. The construction of Haigui as an epistemological category shows various ways of what modernity can mean to China. The cultural ambiguities and practices of Haigui also problematize a Western-centered conceptualization of what innovation means in a globalizing world.

Using the articulations of Haigui and innovation, this research examines the impact of cultural politics on innovation in response to global capitalism.

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[28] For example, Kearns 2010; Breznitz and Murphree 2010.
[29] For example, Anderson 1991; Weber 1958; Yanagisako 2002; Redding 1993; Ong 1987; Hsing 1998.

This study offers diverse ways to conceptualize innovation depending on the political and cultural context, and contributes to a more robust understanding of technological development in non-Western societies. The arguments presented here offer a contribution towards the literature of the social studies of S&T and to the anthropology of globalization and the Pacific Rim. Industry leaders and policy makers alike might also find value in understanding the political and cultural conditions of technology transfer and human capital management as well as innovation policies on changing transnational migration in the Pacific Rim.

In this chapter, I have contextualized the global phenomenon of transnational movements of knowledge and experts by tracing the changes of global production from traditional economies to managing human capital and a knowledge economy. I have argued that there is a need to re-map transnational migration by investigating the changes from conventional brain drain problems to brain circulation phenomena. This reconceptualization indicates intensified trans-border activities of high-technology professionals who promote technology transfer at the transitional level. Based on the review of S&T studies and the approaches to subject making, this chapter has offered a conceptual and theoretical framework through which we can interpret innovation developed by the Chinese state and transnational Chinese professionals. By looking at the cultural politics of innovation development and subject-making of Haigui, I have argued that innovation has become a political strategy for governing, and therefore a new form of neoliberal subjectivity is formed to negotiate with the political and cultural structures in the global economy.

The dissertation proceeds as follows: In Chapter 2, I trace the history of how science and technology have been understood and created in political discourses in modern China. I argue that science and technology have always been politically constructed in the Chinese context as a strategy to promote nationalism and to govern its educated elite class. However, different historical periods display distinctive features. In the late Qing Dynasty and the Republican period, developing S&T was focused on learning from the West as a response to the rise of modern science and Western capitalism. In the Communist period, China followed the previous Soviet model to use S&T to build a national defense system. S&T development was restructured in the Post-Mao period through the privatization and commercialization of S&T. In the global era, China seeks to build an innovative country by consolidating international resources. In

China, therefore, innovation has always been constructed as a political imagination with utilitarian characteristics in nationalistic discourses.

Chapter 3 turns to another type of nationalistic entrepreneurialism: the regimes and strategies that mobilize talents and expertise in China. I argue that there is a mode of governmentality of "suzhi," which means the quality of citizens. The Chinese state has created various institutions and programs to train and attract educated Chinese citizens into innovation development. Strategies include courting foreign experts, training indigenous scientists, and sending Chinese students to study abroad. The "Open Door Policy" after 1978 and the democratization of higher education have allowed many Chinese citizens to experience Western culture primarily through educational programs. However, their expertise and overseas experience have become targets of the Chinese state to develop innovation, and thus the Chinese economy. In this way, making modern Chinese subjects ultimately leads to the capitalization of knowledge. Certain types of knowledge and expertise are prioritized and classified as part of a governing strategy. Chinese respond to the governing rationality of the state by maximizing their resources to increase suzhi, which ultimately generates economic value in the Chinese market.

Chapter 4 explores the fragmentation and contentions of the public discourses about transnational Chinese professionals. I analyze the creation of different labels related to these professionals and discuss their public impacts. I also trace public discourses in official discourse, novels, news reports, and online communities that reveal various experiences of Chinese Haigui once they have returned to China. The complex and varied discourses and experiences indicate a certain type of neo-regionalism characterized by mixed tensions and conflicts between Haigui and local Chinese institutions and citizens. But the contentions and negotiations of the discourses created in imagined Chinese communities also allow transnational Chinese to imagine and redefine their cultural identity and ethical strategies as modern subjects.

Chapter 5 illustrates and develops these arguments through comparing two Internet startups where transnational professionals work. I focus on the cultural practices of innovative entrepreneurship to show how cultural values and ethics play a role on the ground in these professionals' quotidian operations. I present conflicts and interactions among Chinese Haigui, foreigners, government officials, and local professionals to support my

contention that transnational professionals have felt frustrated when they interact with local institutions and individuals due to differences in values, as well as varied understandings of producing innovative entrepreneurship. However, they have also developed flexible and creative social strategies to cope with problems. Such practices help them identify innovative markets and produce innovative work specifically appropriate to the Chinese context. These practices eventually cultivate professional entrepreneurialism among Chinese Haigui.

Chapter 6 provides further ethnographic evidence on how Chinese Haigui develop professional entrepreneurialism by mobilizing their expertise and experience to deal with difficulties and challenges in China. By comparing and contrasting their experiences in different cultures, I demonstrate that transnational professionals have adopted cosmopolitan values and comparatively flexible lifestyles. I argue that they have also developed flexible identities to navigate through different situations. In addition, they have shaped a reflexive mode of thinking which helps them scrutinize their self-being. By objectifying and reflecting upon their Chinese-ness, transnational experience, and expertise in cross-cultural settings, they have developed a new form of neoliberal subjectivity. This subjectivity in turn helps them negotiate with state power and traverse different markets and cultural spheres.

Finally, Chapter 7 concludes with the paradigmatic example of Google's dispute with the Chinese state and its impact on Chinese companies in China. It raises questions about how to understand China's innovation development as a nationalist project in which the Chinese government reinforces its political power. I argue that technological innovation ultimately serves a political agenda in China, and the Chinese state plays a significant role in the neoliberal movement promoted by global capitalism. After summarizing the main cultural limitations that hinder innovation in China, I explore the rise of Chinese high-tech companies and a new trend of innovative entrepreneurship in China: Shanzhai (simulated) products and Shanzhai culture. With the tremendous changes that economic growth and consumption patterns have engendered, as well as innovation development in China, the rise of China in the global economy poses new questions about how to understand innovation and its relation to the global and Chinese markets. This research aims to address these issues so that China's new innovative power and its global impact can be better understood by academics as well as successfully utilized by Haigui entrepreneurs.

II Imagined Innovation and the Politics of Knowledge Economy

On a hot afternoon in mid July of 2008, I was sitting on a bus, traveling to China Polytechnic University[30] to meet my informant, who was a founder of an Internet company in Beijing. The bus was full of people, most of whom were students and young professionals living in Zhongguancun (ZGC), an area in the northwest of Beijing. From the window, I could see that the sky was exceptionally blue, and University Avenue was extremely clean. Although inside a crowded bus, most passengers seemed to enjoy the wonderful day. A beautiful day with a blue sky was rare in Beijing. The municipal and environmental improvements were the result of preparations for the 2008 Olympics, as the government had invested large sums of money to improve Beijing's environment.

The city was full of tourists and sports fans from different parts of the world due to the Olympics. Although I had lived in Beijing previously for four years, I had never seen Beijing with so many foreign visitors and Chinese tourists. But the city did not seem too crowded thanks to the regulation of the number of cars allowed in the city every day. Everything was in good order. People lined up to get on the subway and bus. Bank tellers were much more friendly than usual. Drivers remained within their own lanes and followed traffic laws. I was surprised by the way an international event could change the social order so dramatically within such a short time.

The long bus trip passed by quickly due to the live TV program being shown on the bus. With excitement in his voice, the host shared up-to-date information about the Olympics. After discussing the performance of Chinese athletes in the games on that day, he shouted proudly:

> Our Beijing Olympic Games are not only the most successful games but also the most innovative one in history. The games are supported by the most advanced information and communication technologies, and all the stadiums are equipped with the most sophisticated networks and

[30] It is a fake name. All the identifiable made are coded for confidential reasons.

> architecture designs. Moreover, these technological products are our indigenous achievements. They are the world's No.1. technologies! It is a high-tech Olympics! It is an innovative Olympics!

"High-technology" and "innovation" are two popular words in public discourses to signify modernity and advancement in China. Although I was not quite persuaded by the content of his talk, the announcer's enthusiasm and exaggerated facial expressions were quite amusing during the long trip to ZGC.

The bus passed by my college, where I studied for four years in the early 2000s. Through the window, a very familiar building came into view: my old dorm. Suddenly, I felt nostalgic about those wonderful years as an undergraduate student at this university that produced thousands of high-tech professionals in ZGC. However, I did not have any memories of other tall buildings, because they were built after I left for the US in 2002. As I passed the other universities on the avenue, the bus made a left turn onto Chengfu Road. Once very familiar to me, I didn't recognize this road anymore. Eight years ago, this was a dirt road due to the massive construction projects being undertaken. Today, however, it had been transformed into a clean street with trees and new buildings on both sides (see Figure 15).

At the stop of Wu Dao Kou, I got off the bus. It was the stop for the University Science Park, where my informant's company was located. I looked up at the skyscrapers; their glass windows were dazzling in the sun. I did not know this area anymore. Where were those small vendors I used to buy my favorite egg wraps from? Where were those street shops that sold handcrafted artwork? In front of me, I saw a Starbucks Coffee, where a few professional-looking guys were working on their laptops or talking on their cellphones. I saw a sign with a few colorful English letters on the top of a building, which read "Google." I realized, with a start, that this was their Beijing headquarter. In addition, there were some stylish bars with advertisements in English, German, Japanese, and Korean. Fashionably dressed young women were seated at tables in their windows, chatting and laughing together. It was clear to me that this entire area was undergoing tremendous change: new buildings, new companies, and new lifestyles.

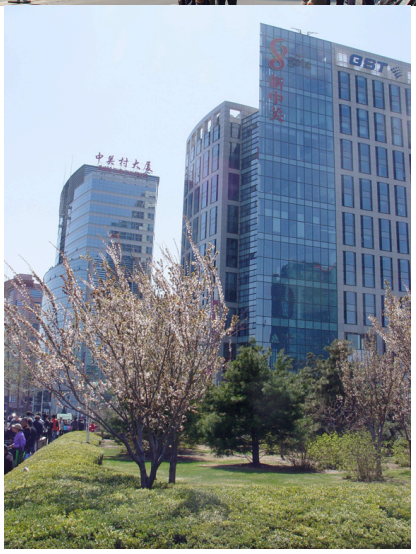

Figure 15 New ZGC

This is the heart of Zhongguancun (ZGC), the largest high-technology (high-tech) zone developed by the Chinese government, sometimes known as "China's Silicon Valley." According to the official ZGC website[31], there are 39 universities and 140 research institutes located in ZGC. In the late 1980s, the Chinese government started to develop this area from a "university village" into a high-tech cluster. Within two decades, almost 20,000 high-tech companies moved into ZGC. Especially in the past decade, the growth rate of the companies was extremely high. Seventeen new university science parks and 29 incubators for returnee star-ups have been established in the area since the late 1990s. Each year, one-third of the start-ups and venture capital investment in China go into ZGC. Its official government website reports that the companies in ZGC play an important role in developing high technology such as new energy, new materials, bio-

[31] www.zgc.gov.cn

technology, and information technology. The Chinese government considers ZGC a successful model of linking academic research and economic development in order to build China's knowledge-based economy.

This concept of a "knowledge-based economy" first emerged in the West at the close of the 20th century. In 1996, the OECD (Organization for Economic Cooperation and Development) defined a "knowledge-based economy as one that "depends on the production, distribution, and use of knowledge" (Chartrand 2003). Different from traditional agricultural or industrial economies, the new concept of a knowledge economy relies on intellectual creativity and firepower as its major productive forces. In other words, in a knowledge-based economy, the production of material goods has been supplanted by the production of knowledge-based products, and intellectual work has surpassed manual labor as the major form of work that people undertake. Innovation is one of the most important aspects of a knowledge-based economy. Here, innovation mainly refers to technological innovation: a process of successfully bringing new problem-solving ideas and technologies into use, as well as the generation, acceptance, and implementation of creative ideas, processes, products, or services in economy by a larger group (Kanter 1983; Amabile 1988; Cohen 1990). In short, it is the capacity to connect knowledge with economic production. In turn, by fostering a culture of innovation, modes of production, lifestyles, and ways of thinking undergo radical transformations in societies that value the increasing role of knowledge production in economic development.

Knowledge stems from human beings' epistemological and cognitive modifications about the world, which cannot be disconnected from the capacity of individual talent and creativity. But whether individual skills and discoveries are activated, and then channeled into knowledge production that can be applied to economies and human societies, requires collective support within the organizational and interorganizational context (Kanter 1988). One of the hallmarks of a knowledge-based economy is the capacity and diversity of knowledge diffusion among different actors and agents. In the production of knowledge, multiple actors are linked in a complex web of relationships. They create, transfer, and disseminate ideas in order to advance the application of knowledge, and thereby maximize the contribution of science and technology to economy and development (Chartrand 2003).

The significance of the interconnectedness of the agents in knowledge production is not only captured in knowledge-based economies of the West,

but also increasingly acknowledged in fast-growing economies such as China and India. Western countries tend to value the productivity and rationality of a knowledge production system that is heavily dependent on the instrumental collaboration of innovative actors such as high-tech companies, governments, and universities. However, the establishment and nurturance of the relationships that link these agents in non-Western societies may have their own cultural specificities that are engendered by historical, political, economic, and societal conditions.

This chapter provides a way to understand how scientific and technical knowledge have been developed in modern China. By tracing a genealogy of modern science and technology in China, mainly through the involvement of the Chinese state, it is possible to understand how knowledge has become interconnected with economic production, and how innovation itself is understood. Through articulating the relationship between knowledge and economy, between multiple institutions and organizations of innovation, and between agents actively participating in the process of innovation development in China, we may discover alternative means through which knowledge, power, and value are conceptualized

Specifically, the chapter focuses on two main questions. How were science and technology understood and developed throughout modern Chinese history, and how did the idea of innovation appear in China to articulate the interconnectedness of knowledge and economy? After a brief discussion of the Chinese epistemology of knowledge and science in relation to economic values, the chapter turns to China's response to the rise of Western modern science and technology during the Imperial and Republic periods of China. This is followed by a discussion of building scientific modernization during the Communist period and the creation of a knowledge economy during the Post-Mao period. Finally, the chapter concludes with some cultural implications of innovation development in China.

I argue that the production of new knowledge involves not only scientific and technological experts, but also political and economic agents. Modern science and technology in China are products of historically situated cultural politics, and they have undergone various forms of imagination, romanticization, and strategization in China's political agenda. The West remains an imaginary space and reference for China to define what modernity should be. With the emergence of the idea of knowledge-based

economies in the West, Chinese leaders have defined innovation as an important symbol of modernity. However, the Chinese version of innovation is not simply a measurement of technological advancement and economic capacity. Innovation development has become a nationalistic strategy to attract and govern resources, both nationally and internationally. By creating an imagined image of the future and of modernity, the Chinese government is able to strategically mobilize human and economic capital, as one governing technology driven by nationalistic entrepreneurialism. In China, the process of innovation building has retained economic value as the essence of what it means to be modern.

2.1 A Genealogy of Innovation in Modern China

2.1.1 Chinese Epistemology of Knowledge

Knowledge has been highly respected in Confucianist traditions throughout Chinese history. Those who are equipped by knowledge are consequently bestowed with respect, reputation, and power in Chinese society. Similarly, another major form of knowledge—science— has been historically perceived as a prestigious field in China. In ancient times, scientists were not only considered "intelligent" and "sacred." but they also represented an elite, educated class that was afforded high social rank. A common proverb by Wang Zhu articulates this concept: "The pursuit of knowledge is superior to all other ways of life." Even today, this proverb is commonly recited, popularizing this idea in Chinese culture. It is a pervasive understanding among Chinese that to be a scholar or intellectual is to occupy the top rung of the Chinese social ladder.

Joseph Needham (1954) argues that the specific characteristics of "Asiatic bureaucratism" reinforced the high esteem placed on knowledge learning. It was cultivated through the social and intellectual structures in medieval China (Wang 1993: 2). The Imperial Examination system was the major institution to sustain the priority of knowledge learning. In order to gain a position within Imperial governments, one had to pass a test demonstrating a high level of knowledge about Chinese traditional political and social theories. This institutionalized form of knowledge learning and assessment lasted 1,300 years from the Sui Dynasty in 605 to the Qing

Dynasty in 1905. It was a possible way for a lower-class commoner to climb the social ladder; by excelling in the examinations, one could become a scholar or an official. This process embodied an even more "rational" and "modern" logic and strategy of governmentality than its counterparts in medieval Europe (Wang 1993; Woodside 2005).

Meanwhile, other strategies are institutionalized to reinforce the idea that scholars are ranked on the top of China's hierarchical society. At very young ages, Chinese children are told by their parents to "study hard in order to become great scientists or scholars in the future." In school, positive stories and images of scientists and scholars are printed in textbooks. In addition, there are mystical tales about someone's fate with regard to intelligence that can be divined by observing bodily features. For example, a widespread Chinese saying is that "the less hair a person has, or the bigger a person's forehead is, the smarter this person will be," because this is a common portrait of scientists and scholars in various historical accounts.

There is also a popular cultural myth with respect to one's fingerprints. The number of the fingerprints which display circle patterns rather than random curves is associated with one's fate. If a person has only one finger with such circle patterns among his/her ten fingers, this person is doomed to be poor; two signifies having a small amount of money, three or four means the person will be working class; five or six: business professionals; seven or eight: government officials; and finally, a person with nine or ten circle patterns will achieve the highest social status: a scientist. Such a superstitious claim about bodily characteristics in Chinese culture signifies the myth that the more someone's fingerprints have circle patterns, the better position this person can be endowed naturally in his or her life. It is extremely rare to have nine or ten fingerprints of circle patterns, and it resonates the scarcity or difficulty inherent in becoming a scientist. Clearly, the social ranking of scientists is perceived as the most prestigious class, above government, business, or working class positions.

The Chinese epistemology of knowledge has three implications. First, it is a historical tradition for Chinese scholars and intellectuals to closely bond with political elites. In some cases, scholars and intellectuals themselves were officials working for the imperial government; in other cases, they were mutually dependent upon each other to fulfill their social, political, or scholarly responsibilities. At the same time, political institutions were major systems that sustained the production of knowledge, both ideologically and

practically. These institutions also played an important role in transmitting the Confucian ideology of knowledge and science. It is for this reason that the discussion of science and technology in China requires us to pay special attention to the role of political institutions and actors in the context of China.

Second, the Chinese epistemology of knowledge in the Imperial Examination system emphasized learning classic texts. Students gained knowledge by memorizing and applying ancient classic works in order to understand contemporary problems. It was important to repeat what the ancient texts said, sometimes without obviously addressing who the author was. At the same time, scholars and scientists usually developed a mode of thinking based on relying on previous knowledge when it came to learning. Today's knowledge production, including scientific discoveries, is heavily influenced by this tradition of learning from the classics. I argue that this historically and culturally rooted practice plays a crucial role for Chinese in developing an understanding of intellectual property and creativity today that is different from the West. Although there are economic and legal factors to explain the limits of the development of intellectual property and creativity in China, the cultural understanding of knowledge plays an important role. To Chinese, knowledge should be shared and passed from generations to generations just as the ancient Chinese. To Chinese, it is not easily accepted and understood that knowledge should be a "property" that is privately owned. On the contrary, knowledge should be free. Moreover, Chinese are still very resistant to the idea of connecting knowledge with "profane" money, despite the fact that commercialization permeates all aspects of Chinese lives in contemporary Chinese society. Chinese tend to think that: "if certain knowledge is free, why should I purchase intellectual property from a private source?" Just as the Confucian classics were passed down and freely shared among any who wished to learn from them, many Chinese believe that this model is appropriate to knowledge production today. Additionally, classic works and ancient scholars are highly respected, to the point that Chinese children are not encouraged to challenge either the classics or their teachers. Instead, new knowledge should be based on previous knowledge to solve emerging problems. However, while culturally consistent, the prestigious role of intellectual authority hinders the motivation of Chinese to develop grassroots creativity to some extent.

Third, historically, it is a strong belief influenced by Confucianism that intellectual work is superior to any other type of work, and therefore should

be separated from farming, manual labor, and commercial activities. Confucius famously argues in the *Analects of Confucius (Lun Yu)* that "men of honor live for morality and justice, while men of turpitude live for self-interest and profits." People involved in commercial activities were much less desirable in Confucian traditions, and "brain workers" were discouraged from conducting activities for profit. The respect for knowledge and the distaste for profiteering have been institutionalized throughout Chinese political and educational systems. For a long period of time, pure knowledge and for-profit business have occupied different classes within China's hierarchical society. This gap contributed to the fact that it might take a long time for scientific and technological knowledge to find practical applications that generate economic value, let alone undertake intellectual investigations with the main purpose of making a profit. I argue that this cultural understanding of knowledge is also a main reason why the idea of innovation or linking pure science to industrialization and commercialization was not actively developed in China throughout its history. This cultural approach is evident throughout the 20th century, even as scientific knowledge was increasingly applied to economic production in the post-Mao era.

2.1.2 Responding to the Rise of Modern Science and Technology

The Chinese political regime were historically responsible for guiding epistemological changes with regard to the relationship between theory and practice, between science and economy, and the desire for increasing innovative capacity. Until approximately the 15th century, China was still a global leader in technology. With the development of Western Europe and the rise of capitalism, however, China increasingly lagged behind Europe and later the European settler states, particularly the U.S., in the development of new technology and economic growth. This was followed by the rise of the science-based industries at the end of the 19th Century. The reasons for the decline are not entirely clear. However, by the 19th century, China no longer played a significant role in the global economy, nor was it a contributor of new technical or scientific knowledge (Needham 1954; Adas 1989; Mokyr 1992).

Developing modern science and technology during the late Qing Dynasty and the Republic Period (1850s-1940s) focused on learning from

the West and building China as a modern nation. The Opium War and consecutive wars between the Western countries, as well as Japan in the 19th century, forced China to open its doors to the outside world, despite remaining a self-sustaining economy for thousands of years. On the one hand, the Qing government and Chinese intellectuals came to understand the power of Western modern science and technology in military technologies and engineering such as military weapons, steamships, and transportation and communication systems. However, the government also realized that China was relatively lagging with respect to modern science, and saw the need to catch up with their Western counterparts.

From 1860s, "Yangwu Yudong," the "foreign affairs movement," was initiated by the Qing government, aiming to learn from the West and to adopt Western technologies. Since the 1890s, the Qing and Republic governments adapted the Western model to build modern universities and research institutes in major cities such as Beijing, Shanghai, and Tianjin. The government believed that building modern institutions would be essential to help Chinese students enhance their understanding of modern science and technology. At the same time, it would encourage scholars to develop science and technology through institutionalized research (Chen & Kenny 2007). In this way, development during the late Qing Dynasty and the Republic period focused on adopting Western science and upgrading China's engineering infrastructure. The government planners did not envision science and technology playing a role in the economy, but they believed that scientific and technological development would help China regain power and prestige in the world, as well as defend the nation from potential Western invasion.

2.1.3 Building China's Own Modernization

However, during the late Republic period, invasion, political unrest, and civil strife wracked China, thus hindering scientific development. Upon the establishment of the People's Republic of China in 1949, Western powers isolated China politically, thereby isolating China from the Western world in general. During this socialist period, China adopted the Soviet Union's model of comprehensive, specialized universities and created a large network of research institutes that were highly disciplinary (Pepper 1996; Chen & Kenney 2007). At the time, the majority of Chinese scientific and

technological research was focused on military-related endeavors such as the development of nuclear weapons, satellites, and jet-propulsion technologies.

After China's successful satellite launch, there was nationalist enthusiasm for science across the nation. Combined with advances in nuclear technology, China appeared poised to not only catch up with the West, but to surpass their "imperialist enemies." However, Chinese leaders and the public had a vague vision of the role of science within the economy. To them, scientific and technological development was a nationalistic tool to proudly show the world the capability and strength of China and the Chinese people by building a modern nation with a powerful national defense system. This was one of the "four modernizations" according to the Chinese government's discourses of "a modern country." The discourse of four modernizations included industrial modernization, agricultural modernization, national defense modernization, and scientific modernization, but science actually played a central role within all four types. The nationalist discourses were popularized by the media that was controlled by the government, and institutionalized in the educational system from elementary schools to universities. For a few decades, building a country of "four modernizations" was a dream shared by many Chinese citizens who aspired toward achieving this goal (Ching 1984).

During the Maoist Period, research projects were centrally planned, and the central government was responsible for appropriating resources to them. Chinese government planners explicitly accepted the linear model of innovation and assumed that "technological development [follows] naturally and easily from basic and applied research to technological development and eventually to innovation" (Lu 2000; Bush 1945). For them innovation was "an organized collective activity, governed by research laws," and these beliefs led to an extremely linear and rigid model (Segal 2003). This assumption proved unfounded, however, and few research results were applied to industrial production. For all intents and purposes, the science and technology system was segregated from industry (Chen & Kenney 2007). From the perspective of economic development, researchers had few linkages or interactions with industry, and the centralized command system for allocating research efforts led to a limited scope and range of research activities (Lu 2000).

2.1.4 Restructuring Science and Technology

Whatever forward momentum the S&T system developed in the 1950s and 1960s, it was brought to a halt between 1966 and 1976 while the Cultural Revolution roiled the nation, leading to an even greater isolation of the country from the outside world. After the death of the Communist Chairman Mao Zedong in 1976, Deng Xiaoping became the Chinese leader. He advocated fundamental economic reforms, arguing that "science and technology are the chief productive forces" and that China needed to open its doors and learn from Western nations. As a result, the government began reforming the old systems and embarked upon creating a somewhat market-oriented economy, launching the "Open Door Policy," decentralizing fiscal and managerial control, redefining public and private ownership, and encouraging new linkages between research and production (Segal 2003; Lu 2000). It was the first time that Chinese leaders started to recognize the role that technological innovation could play in economic development.

This recognition was particularly reinforced by the ideas introduced from the Western companies that entered the Chinese market in the 1980s. More generally, these multinational corporations (MNCs) brought technologies Chinese considered advanced, and, just as importantly, management techniques and alternative perceptions about technology transfer (Kogut 2004). Over time, under the pressure from the Chinese government, many MNCs established research and development centers (von Zedtwitz 2004). Chinese had opportunities to be exposed to advanced technologies, and Chinese private sector firms often were able to absorb advanced ideas from foreign high-technology companies through a variety of channels.

However, due to a lack of systematic political, legal, and social regimes for intellectual property in China, foreign investors were reluctant to practice their most sophisticated technologies to China despite government prodding. The Chinese government recognized this problem. Jiang Zeming, the successor to Deng, in the mid 1990s stated the Chinese position in this way in the National People's Congress:

> New ideas are the very soul of national progress and are indispensable to the development of any country. If we do not have our own

> autonomous ability to create innovation and just depend on technology imports from abroad, we will always be a backward country… …As we continue to learn from others and to import advanced foreign technology, we must remain focused on raising China's ability to do research and development on its own.

The government continued to pressure foreign firms to do research in China, but also tried to strengthen its intellectual property protection and encouraged Chinese firms to improve their research capacity. During this period, the Chinese leaders and the general public became less interested in the inherent antagonism between capitalism and socialism but started to think about strategies and practices toward building a modern nation with economic power.

The central government initiated a series of reforms that would encourage and mobilize the communication and collaboration between research and economic actors. One of the most important reforms came in the early 1980's, when government was driven by a desire to lower the cost of supporting the universities and research institutes (URIs), drastically cut their funding. For URIs, the only option was to search for alternative sources of funds. The most significant of these was the establishment of URI-affiliated firms that were meant to generate profits that the URIs could use to fund their operations. As a result, the previous centrally planned system was transformed, and URIs became more self-reliant in order to attract resources (Chen & Kenney 2007). For example, Lenovo, today the world's fourth largest computer technology company, was originally a spinoff of the Chinese Academy of Sciences, China's top research institute. In 2005, Lenovo successfully acquired IBM's PC division, demonstrating their aptitude in securing resources independently from the government.

In addition to encouraging greater linkages between the URIs and URI-affiliated enterprises, the government initiated the Torch Program in 1988. This national program was designed to target high-technology development. Mainly, the government worked on establishing fiscal and legal services for professorial and student start-ups, strengthening patent laws, building new technology industry zones (high-tech zones), innovation centers and software industry bases near URIs, providing innovation funds for small technology-based firms, and supporting the establishment of university

science parks. A commitment of the government to the further introduction of a market economy was accompanied with a focus on improving China's technical knowledge base (Leydesdorff and Zeng 2001; Mu and Lee 2005). The Torch Program also eased regulations, provided support for building facilities to attract foreign high-tech companies, and encouraged the establishment of indigenous high-tech companies in special zones throughout China. These high-tech zones were built in close proximity to URIs with the goal of promoting linkages between researchers and firms. According to the Annual Report on China's Torch Program, 53 high-tech zones have been established since 1991. These zones have experienced rapid growth, though as Cao (2004) points out, much of this growth has been in product assembly and thus does not represent Western conceptualizations of high technology.

Figure 16 ZGC High-Technology Zone

Established in 1988, Zhongguancun (ZGC) is the first and largest high-tech zone in China, located in the northwest of Beijing (see Figure 16). Although it has expanded to ten different sites in Beijing, the original site is still the most famous due to its geographical proximity to the best universities in China. With rich human and research resources, ZGC has become the most attractive destination both for multinationals and for local high-tech enterprises (Cao 2004). It is reported that the total revenue of ZGC companies in 2009 was RMB 1200 billion (nearly $190 billion USD) and the annual growth rate was 20%. ZGC represents a new form of governing, which Ong defines as "graduated sovereignty" (2004, 2006). She argues that the emerging relations between market and society have led to flexible

experimentations with state sovereignty. In response to global capitalism, the state has adopted spatially selective liberalization and created various approaches to governing special zones by exercising different legal and economic controls. This graduated sovereignty has developed neoliberal opportunities for institutions and citizens by creating new forms of productive relations and life strategies. As an example of graduated sovereignty, ZGC provides companies with various kinds of economic incentives in addition to human capital, such as reduced rental fees for new start-ups, tax exemptions, and housing benefits designed to attract high-tech companies. These treatments grant citizens special rights with respect to economic and social capital so as to attract more high-tech professionals and companies to reside in ZGC. Therefore, ZGC is the primary field site for this research, as it is arguably China's most important, and oldest cluster of high-tech companies, professionals, universities, and research institutions. Many of my informants live and work in ZGC, and one of the companies where I did participate observation is also located at one of the university science parks in ZGC (see Figure 17).

Figure 17 A university incubator in Beijing

Since 2005, China has also redefined its strategic agenda. The Communist Party announced in their 11th five-year plan that "building an innovative country" is China's main national goal. "Innovation" was officially adopted as a term to indicate the competitiveness of China in the global market. It also was used in various discourses to refer to the meaning of modernity backed up by advance science and technology. For example, in 2009 the government changed the name of the "ZGC High-Technology

Zone" to "ZGC National Innovation Demonstration Zone." In various official discourses, "innovation" was mentioned as a new symbol of successful reforms. To Chinese leaders, the increase of innovation focused on the increase of overall research and development (R&D) capacity, financial funding, technological facilities and infrastructures, as well as the number of S&T personnel, publications, and patents. Currently, the government strives to build an innovative system in which government, URIs and industry are allied through increasingly trans-disciplinary and collaborative linkages. While the antagonistic orientation toward the West has gradually declined, a nationalist desire for reaching the top of global scientific and technological development still has a fundamental impact on political leaders and scientists. From this perspective, policy makers still consider it the responsibility of intellectual and political elites to help the "Middle Kingdom" resume its position as the world's most powerful nation. In the post-Mao era, scientific and technological achievements are not simply symbolic indicators of the country's modernization, but material foundations of innovation that can be applied to generate economic growth.

2.2 Imagined Innovation in a Knowledge Economy

When I conducted my fieldwork in China, principally through interviews and participant observation in ZGC, I found that innovation had been highly promoted in Chinese government official discourse, such as news reports, statistical documents, and government files. I argue that presenting innovation in China is a strategic creation of what I call "imagined innovation," one type of nationalistic entrepreneurialism. Based on its vision of the imaginary "West," a symbol of modernity, the government has identified a vision and promise future and a vision of the future with unlimited potential for further development. This vision is transmitted through statistical evidence and official channels to demonstrate China's technological growth boosting national pride and faith in the future. The goal of imagined innovation is to attract more economic investment and human capital both domestically and internationally to further build China as a modern nation. With this goal, the Chinese government has published annual statistics and documents to show significant developments in the economy and in innovation over 30 years of economic and S&T reforms.

News reports and government documents show that each year, many scientists have increased their reputation in the name of developing world-class technologies. They highlight multiple science parks producing enormous revenue each year in information and communication technology (ICT), biotechnology, new material, and new energy industries. In addition, Chinese companies with an innovative orientation have started to gain international recognition such as Lenovo, Huawei, Haier and ZTE, and professors at various URIs have worked actively with industry to transfer technology and commercialize scientific patents. Finally, hundreds of incubators have been established in major Chinese cities to promote entrepreneurship.

The official discourse presents the idea that China is successfully developing its high-tech industry, and has significantly increased its innovative capacity. The government has tried to build faith, not in the present, but in the future with images of forthcoming achievements. There is no doubt that China has created opportunities to enhance technological development and has achieved significant progress in economic development. Nevertheless, there exist certain barriers that hinder China's further development in science and technology towards becoming a world-class innovative country. China's "imagined innovation" has its limits.

First, innovation development is largely reflected in quantitative discourses. The state has adopted quantifiable and statistical methods to produce certain facts and knowledge as a governing technology, which is both materialistic and narcissistic to promote the self-identification of the country (Liu 2009). The government, though emphasizing innovation, has in practice been more interested in simple quantitative statistics such as rates of growth, numbers of firms and patents, and value of exports (Cao 2004, Chen & Kenney 2007). Both the government and companies report growth reflected as quantifiable numbers instead of the qualitative improvement of products and development (see Figures 18 and 19). When I interviewed some government officials in Beijing, they were very excited and proud to show me statistical reports and told me how much growth the high-tech zones had achieved. They also took me to their exhibition room, where statistical graphs and tables were presented to show the success of high-tech programs. However, no comments or descriptions were made about how a technological product was developed differently from previous technologies,

or what qualitative contribution the new technology would make to everyday life. To government officials, a quantifiable measurement is considered an easier and more scientific way to indicate growth and achievements, while using a qualitative measurement to explain an innovative product is more complicated. Therefore, quantitative measures are given priority in identifying how much economic value is produced, which can paradoxically hinder the creation of truly innovative technologies. As we can see, the production of innovation is situated in specific political and social contexts.

Figure 18 Statistics showing the S&T development of the science park in Beijing

Second, this strategic emphasis on presenting "impressive" numbers that demonstrate rapid S&T growth leads the Chinese government and companies to adopt vague definitions of what innovation and high-technology are. Although these high-tech zones have experienced rapid growth, much of this growth has been in product assembly, and thus does not represent Western notions of high technology (Cao 2004). In China, personal computer assembly is considered ''high technology,'' while few in the United States would define it as such. Meanwhile, because firms considered to be in high-technology receive tax and other benefits, these incentives encourage firms to stretch the definition of "high-tech" so that they can declare themselves as working within that industry (Chen & Kenney 2007). An informant on the Internet shared his experience when he tried to apply for a company license in China. He wrote:

> I wanted to apply for the title of 'high-technology company' for my company, so I visited the Municipal Science and Technology Bureau. It seemed the vice-chief of the Bureau did not understand my technology at all. Finally, I realized that a high-tech company did not really have to produce 'high technology'. The key was whether the company could generate economic value and pay tax to the local government. Once you pay a certain amount of tax, your company could be titled as 'high-tech' no matter if you sell vegetables or soy sauce.

Although I would not argue that his experience is representative of all Chinese cases, it does show that in some local areas, government officials are not concerned about what kind of high-technology can be produced. Rather, the key is whether or not tax revenue will be generated by the firm, thus promoting economic value.

Figure 19 An incubator hallway decorated with the achievements of companies in ZGC

Third, although the Chinese government has a specific political agenda in developing innovation, my fieldwork showed that government officials varied in terms of their political and economic motivations in this area. While some of them had a genuine vision, most of them understood producing innovation as a way to generate economic incentives, as well as a way to accumulate their own political capital (Zhengji in Chinese). During my fieldwork in China and the US, I interacted or interviewed over 40 government officials both at the central and local levels, and discovered

three predominant types: idealistic, eclectic, and practical.

The "idealistic" government official was genuinely interested in learning how the West understood and produced technological innovation. They were enthusiastic in describing their vision of a "Chinese Silicon Valley," and believed that China needs true innovation to upgrade its economic structure to move from manufacturing to designing products. In contrast, while "eclectic" officials have a vision for technological innovation, they are aware of existing problems and Chinese "characteristics" that hinder its development in China. These officials favor creating crafting world-class technologies in China, but they prioritize increasing employment opportunities, increasing social awareness of creativity, and developing more human capital. In their view, China's cultural characteristics render these goals a more feasible alternative.

However, the largest percentage of government officials I have met with can be classified as having a "practical" orientation toward innovation. I first met officials with this orientation in the USA, where I assisted a group of top Chinese officials visiting the United States for three weeks. These highly ranked, central government officials were visiting the US in order to learn how intellectual property laws were successfully implemented in the US, and how American high-tech companies used laws to protect their technological products. At the final workshop on intellectual property law at a top American university, some Chinese officials complained that the workshops were not useful and "too theoretical," because they did not learn how the US government actually enforces intellectual property laws and how the government solves specific problems in this area. Meanwhile, some officials gave away the documents and books on innovation and Silicon Valley distributed in this trip to me, because "they were too heavy" since they bought too many American souvenirs on the trip.

During a meeting with a top semiconductor company in Silicon Valley, the government officials were not pleased to hear that the company complained about the lack of intellectual property protection in China. One Chinese official even openly confronted the company executive, not only because she didn't agree with the American's assessment, but also because it was shameful for China to be "attacked" and lose "face" in an international situation. The officials also complained to me about their food, the transportation service, and their hotel accommodations during their US visit. As highly ranked officials in China, they thought they had lost "face," since

the accommodations were not “luxurious” and “high-class” enough. They told me if such a business trip were arranged in China, guests would have received much better services with very “fancy” accommodations. It was all about “face,” which Chinese people valued as a way of maintaining a public image and reputation among others. It seemed that examining a critical problem of innovation was less important than maintaining their public reputation during the trip.

The officials also complained to me that their schedule was too tight. They were occupied with visiting companies and taking classes, with little time left over for visiting tourist sites. To them, visiting a foreign country on a business trip was also a vacation. Although there were a few tourist sites on the officials’ agenda, they requested even more time, and to visit additional locations. For example, on one day they were scheduled to visit a company that had a legal issue about intellectual property in China. However, the officials asked me to negotiate a shorter meeting with the company so that they could use the extra time to visit Disneyland instead. I had to inform the company about rescheduling the business meeting. The company not only agreed, but also bought an admission ticket for every official as a gift, which the Chinese delegation was very happy to receive. From the American company’s perspective, their goal was to please the officials so that they would help them solve their intellectual property issues in China.

From my observation, the social interactions with local US companies and responses of government officials on their trip in the US obviously showed different expectations between Chinese officials and US executives in terms of how to do business. On the one hand, the US companies did not have sufficient cultural understanding about how to build Chinese guanxi networks with Chinese officials. They ignored those officials’ mentality as being someone “elite” and “highly respected” in their own societies where a social hierarchy is fundamentally important in structuring social relationships. They treated Chinese officials as other Western business partners with whom professional and horizontal relationships would be effective to conduct businesses. This cultural “ignorance” resulted in complains and even confrontations among Chinese officials. One the other hand, as a result of my interactions with these Chinese officials, I had to admit that some of them, even the most highly-ranked, did not present a certain degree of professionalism in the eyes of Westerners in order to fulfill their political responsibilities in the international arena. The Chinese

officials had a different understanding of the public and the private. They did not distinguish what was professional and what was personal on this trip. There seemed to be a norm among officials that visiting tourist sites should be included as part of the business trip. Their satisfaction with the trip was evaluated by the "pleasure" of the trip instead of what they could learn from taking classes (which they thought were not practical) or from negotiating with US companies. The different expectations and understandings of certain work ethics and values result in conflicts and misunderstandings in cross-cultural settings.

2.3 Cultural Politics of Building China's Innovation

This chapter has sought to demonstrate that China's scientific and technological innovation has corresponding cultural implications. First, it is a complicated process that has been driven by the imagination of the West and of future achievement. This "imagined innovation" is driven by the state nationalistic entrepreneurialism. Chinese nationalism desires and claims for nation-building through recovering from political turbulences and wars, as well as resuming its previous status in the world as a powerful and civilized nation. The nationalist discourses that celebrate China's rise on the global stage have been distributed through media, schools, and among the public, and they inspire a sense of pride in being Chinese across the nation. This regained sense of self-awareness and self-confidence has, in fact, heavily relied on Western definitions of modernity in imagining their future. The memory of Western imperialist invasions provokes a defensive desire for stability and dignity in Chinese society, which is generally institutionalized across the country. And yet, increasing global competition, especially from the West, forces China to switch its attention from internal political struggles to economic and technological innovation. In addition, China regards the advanced economic and technological development in the West as a successful model, and is eager to apply the Western model to its own development. Therefore, Chinese leaders and scientists tend to rely on Western standards to evaluate their own work.

For example, scientific findings that are published in English in Western journals are regarded as higher quality than comparable findings published in Chinese journals. There is a lack of trust and confidence in their own

peer-review systems. Moreover, there are numerous discussions and comparisons between the science parks in China and Western high-tech clusters such as Silicon Valley. Nation-building through the mix of nationalism, imagining the West, and future modernity has profoundly influenced Chinese actors and institutions as they create new systems of innovation. Improving China's creative capacity is a nationalist, meaningful, and sacred task, strategically constructed by official discourses.

The second implication is the cultural features of power relations among innovative actors within the system. Different from Western countries, the government in China plays a central role in cultivating relationships. The ultimate decision-making power of the Chinese government leads to the government's monopolistic role in the system of innovation. However, there are variations among officials in terms of understanding what innovation means to China. I have shown that mobilizing economic and human capital in innovation development is a "practical" strategy for self-development, and it is one that most Chinese officials adopt in order to accumulate political capital. Government officials enjoy their prestigious status over researchers and businessmen, since they have the ultimate authority to decide whom to fund, whose projects to support, whose intellectual property to protect, and whose products to promote favorably in the market. It is true that there has been some decentralization of power and resources since the Post-Mao reforms, and URIs and companies can achieve alternative ways to develop on their own. However, the government still plays a crucial role in policy making and directing the market and public media trends, which can directly or indirectly influence the agendas of URIs and companies.

This asymmetric power relation forces UIRs and industry, especially the private sectors, to develop close relationships with the government for funding, as well as political and legal support. These relationships are not instrumental ones similar to those in the West, but they are subtle and complex social relationships. In Chinese, such relationships are characterized by informal "guanxi," for formal purposes, which require long-term personalistic and emotional investments. Guanxi in most cases implies hierarchical relationships, in which the lower party presents loyalty and respect in exchange for assistance and protection from the higher party (Yang 1994). These particularistic relationships are maintained by the practice of gift-giving which characterizes social reciprocity in China, creating a kind of "gift economy" (Yang 1989, 1994; Yan 1996). Given the crucial role and power of government, foreign as well as local companies

need to have a particular department or a pool of staff which focuses on developing these government relationships. URIs that maintain closer relationships with government are secured with greater resources and support. At the same time, the notion of particularistic guanxi also has an impact on the relationship between URIs and industry. Professors who have better social skills to develop personal guanxi with companies are more likely to have collaborative projects or get funding from industry.

The third implication is associated with the problems and contradictions between academia and industry. They challenge the traditional perception that knowledge is sacred and should not be oriented toward profit. Although there are increasing collaborations and interdisciplinary activities between URIs and industry, the involvement of professors and researchers in market activity is not fully recognized or legitimate. URIs and professors who collaborate in this way are harshly questioned by those who insistently see schools as a sacred place that should be completely free from "the stink of money." Conservative academics are afraid that the pride and prestige of knowledge is made vulnerable by "profane" money-chasing activities. Therefore professors who are involved in outside profit-making business are being challenged and criticized by their peers in academia as well as outside conservatives.

Ironically, although collaboration between academia and industry is encouraged by government, the traditional perception about the sanctity of knowledge is profound. Some professors have to conceal their "part-time" jobs in industry in order to avoid such criticism that may cause their own academic community to lose "face." Nevertheless, with limited experiences of involvement in economic activities, URIs have a less clarified identification of their role in economy. It jeopardizes the main functions of URIs in conducting scientific and technological research and generating human capital among the youth. Entrepreneurial URIs are constantly teased by the media as always looking for money (in Chinese "forward" and "money" have the same pronunciation, thus "looking forward" can also be interpreted as "looking for profit"). Graduate students raise complaints among fellow students, and implicitly to the outside, regarding professors' exploitation of students in doing non-academic research that is solely for economic profit. In this way, the relationships between academia and the market are constantly configured and negotiated by the ongoing conflicts and confrontations in China's innovation system.

This chapter has reviewed the multiple ways of understanding the relationship between S&T and the economy through the discussions of the linkages between government, industry, and academia in a knowledge-based economy. In the West, the interconnectedness of scientific and technological knowledge and economy is acknowledged in the innovation system, and the collaborations of different actors are considered essential for increasing creative capacity and producing more marketable and valuable technological products. However, the process of building and nurturing such relationships in China requires us to use an alternative way of understanding the specificity and complexity of the historical, political, economic, and social-cultural conditions. In the case of China, such a process of collaboration-building relies on its nationalist discourses and fundamental historical and cultural traditions deeply rooted in an epistemological and cultural structure in China society. The ongoing negotiations and reconfigurations of the epistemologies and practices of relationships in the Chinese innovative system will be revealed in more detailed ethnographic work in latter chapters.

III Governing Suzhi and Capitalization of Expertise

It was a cold morning on November 26, 2005, but the People's Hall of Beijing was full of warmth. Within its confines, hundreds of political and scientific leaders were celebrating China's second successful human spaceflight, Shenzhou Six. The event was followed by the visit of a team of national political leaders and scientists to the home of Qian Xuesen (Tsien Hsue-shen), a 94-year-old space scientist, whose good wishes for a promising future of China's space science perfectly concluded the celebration. The entire event was broadcast to more than 1 billion Chinese through CCTV, the main Chinese TV channel sponsored by the central government.

The snapshot above is a classic example of how certain symbols of science and technology are constructed by political leaders in China. The celebration, complete with the attendance of highly respected scientists, are symbols created by the Chinese state to reinforce the importance of science and technology and to nurture a sense of nationalism among Chinese citizens. Qian Xuesen is one of the heroes in the movement of this scientific triumph. As the "Father of Chinese Rocketry," Qian has been considered one of China's most influential scientists in the 20th century for his contributions to China's space research. In the 1930s, Qian was sent by the Chinese Republic government to the Massachusetts Institute of Technology (MIT) and later to the California Institute of Technology (Cal Tech) to study the physics of aeronautics. After graduation, he worked as a professor at MIT and co-founded the Jet Propulsion Laboratory at Cal Tech. While in the USA in the 1950s, Qian lived under virtual house arrest and became the subject of a five-year secret negotiation between the U.S. and People's Republic of China. He finally returned to China in 1955. Although not officially documented, it is said that the Chinese government released twelve American prisoner of war pilots from the Korean War in exchange for Qian's return.

Scientific achievements such as the success of spacecraft launches are accompanied by celebratory "rituals" which worship scientists as "heroes,"

because these individuals can conquer nature, including space, and help China regain its strategic position in the world. Chinese scientists such as Qian Xuesen not only represent key symbols of China's technological development, but the government believes they are pioneers, spearheading China's rise to a modern world power. Therefore, these scientists have become symbols of China's modernization as well as an integral part of China's nation building process through nationalist strategies and discourses. During the past 150 years, constructing and developing educated Chinese citizens had been one political agenda initiated by the Chinese government as they strive for "modernity."

This chapter, following Foucault's idea of governmentality, looks at different ways that the Chinese government exercises nationalistic entrepreneurialism to produce certain groups of citizens to fulfill its political agenda, as well as the specific rationalities and techniques the government adopts to govern these subjects. Particular focus is given to how Chinese intellectuals and professionals are constructed through the governmentality of educated citizens. In short, I argue that the knowledge of modern science and technology has been prioritized as the major form of expertise that would help China regain its power in the world system. Therefore, a small group of elite Chinese have been viewed as crucial players with "sacred" tasks to "save China" in nationalistic discourses. By emphasizing the importance of quality education in the development of Chinese citizens, the Chinese government is able to mobilize human capital as a way of governing its population. This governmentality of the population leads to further classification of the population based on their education, and further classification of the value of knowledge based on disciplines. Such a governing strategy of human capital leads to the capitalization of particular types of knowledge. As a result, it shapes modern Chinese subjects by strategizing their personal and career development as a form of well-being in contemporary China.

3.1 Making Modern Chinese Subjects

3.1.1 Educated Citizens as Disseminators of Western Ideas

In the mid 1800s, with the expansion and threat of Western imperialism and colonialism, the Imperial government believed China needed to adopt Western technologies to upgrade its national defense system and infrastructure. This strategy led to China's Foreign Movement (Yang Wu Yun Dong in Chinese), which was initiated in 1861 by the Imperial government. The government bought modern technologies and weapons from Western countries and established factories that manufactured boats and machinery (Porter 1979). However, spending money to buy Western products and relying on Western experts would not fundamentally change China's backward technologies. The government believed that simply training indigenous scientists and engineers would solve the problem. Sending scholars to study technology in the West was one strategy. Therefore, beginning in the mid-1800s, young students were selected and trained in Beijing, and then sent to the US, Europe, and Japan to learn modern science and technology.

Rong Hong (1828-1912) is considered to be the first modern Chinese person who studied in the West. Convinced by an American missionary, Rong Hong and two other students decided to study in the US in 1847. Rong finished his studies at Yale University and returned to China in 1854, working in business and later in government with different responsibilities. A strong believer that learning from the West would help China, he proposed that the Imperial government could send more Chinese to study in the West, and led a group of thirty young Chinese male students to the US in 1868. Rong's story symbolized China's opening the door to the outside world and the emerging strategy of sending young students to the West between 1872 and 1881 (Bieler 2008).

In early 1900s and 1910s, a few schools were established specifically to prepare young students for a Western education, carefully selecting their students from different provinces. One school became one of the most prestigious universities in China today: Tsinghua University. By 1905, 8,000 students were sent to Japan alone[32]. During that time, Chinese students who studied science and technology in the US shared the dream to build a democratic and modern China. In addition to the involvement of the Chinese government, the US government played an important role in creating a pool of Chinese students studying in the West as well (Wang 2004). In the discussion of the Boxer Fellowship program, Wang (2004: 210) writes:

[32] http://www.thecorner.org/hist/china/lqreform.htm, retrieved March 1, 2010. Japan is often considered a Western country in Chinese society due to its modern technology and its open strategies to embrace various Western values.

> The US Government encouraged such tendencies in an effort to influence the future direction of China. It stimulated in the in the early 1900s, for instance, that the United States would return part of the indemnity it received from China for the Boxer rebellion of 1900 against foreigners only if the Chinese Government used the funds to send students to the USA. The resulting Boxer fellowship program brought hundreds of elite Chinese students and scientists to the United States from the 1910s to the 1940s. Yang (Chen-ning Franklin Yang, the first Nobel Laureate who were born in China) was one of the so-called Boxer scholars and, indeed, made the history of the Boxer program a central part of his address at the Nobel banquet in 1957. Recounting his ambivalent feelings about the Boxer program, Yang said, "I am in more than on sense a product of both the Chinese and Western cultures, in harmony and in conflict."

Like Chen-ning Yang, some Chinese students chose to be based in the West in order to access world-class research resources and develop cutting-edge research. However, many others returned to China after graduation and found employment in the fields of modern physics, chemistry, biology, and engineering. These scientists functioned as agents to bring Western scientific knowledge to China, and their major scientific work focused on the dissemination of pure theories in science or technological applications in building China's basic infrastructure such as railroad, bridges, and factories. Thus, the first generation of Chinese scientists and intellectuals educated in Western modern science came into being. However, in addition to scientific and technological knowledge, some students who studied abroad returned with liberal ideas and became influential political leaders in China. Some examples include the first President of the Republic China, Dr. Sun Yat-sen, his wife Soong Ching-ling, Soong's younger sister Soong May-ling, and May-ling's husband Chiang Kai-shek, who was the successor of Dr. Sun. These foreign-educated individuals represented China's elites--a class of intellectual and political leaders.

3.1.2 Educated Citizens as Scientific Heroes

After World War II abroad and domestic conflict at home, by 1949 the Communist Party had established the People's Republic of China. During

the 1950s, while China closed its doors to most Western countries, the Soviet Union kept a close relationship with Maoist China. As "an older brother," the Soviet Union sent scientists to China to help the country enhance its scientific development in various aspects. Nevertheless, faced with a shortage of first-rate scientists, the Communist government adopted three measures to develop a science talent pool. They encouraged the talent pool of scientists: "(a) inducing Chinese scientists to return from abroad, (b) sending students to the Soviet Union and Eastern Europe for advanced training, and (c) developing a program of graduate training in China" (Lindbeck 1961:18). The Communist government understood the role of scientists in China's development and nation-building, and therefore put a great amount of investment in strengthening the pool of scientists. Among those who studied in the Soviet Union, some became political leaders in China, such as Jiang Zeming, the successor of Deng Xiaoping, Li Peng, previous Prime Minister, and Liu Huaqing, previous General Commander of Liberation Army Navy.

However, while the Soviet Union provided support to Chinese scientists and intellectuals, the strategy to attract overseas Chinese scientists to return was challenged by some Western governments. For example, the US government forbade Chinese nationals, especially scholars in science and engineering, from returning to their homeland. "The ensuing McCarthyist 'Red Scare' targeted, among others, Chinese scientists suspected of left-wing activities and associations. These measures greatly alienated many Chinese scientists and engineers" (Wang 2004: 211). The Geneva Conference between China and the US government resulted in a changing strategy to govern Chinese scientists and engineers. Accordingly, the US government allowed Chinese to leave the US for their motherland in exchange for returning US prisoners of war. Qian Xuesen was among many chief scientists who answered the call of the government, returning to China from the West and applying his expertise to various research institutes, including the Chinese Academy of Sciences, China's leading scientific research facility.

Among the returned scientists in the Maoist period, experts in space and satellite research as well as nuclear technologies were given much public attention in the official discourses produced by the Communist government. In those discourses, scientists were fashioned into "heroes" of China's modernization in the nation building process. For example, with the label of "Liang Dan Yi Xing," nuclear and space research scientists were created as

symbols of China's modern science and technology. "Liang Dan Yi Xing" refers to missiles, nuclear bombs, and man-made satellites. One of the most famous "Liang Dan Yi Xing" scientists was Deng Jiaxian, who Mao Zedong called "the pride of Chinese scientists and technologists." He was sent to the US to study physics and returned to China in 1950 to do pioneering work in nuclear research. As the "founding father of China's A-Bomb and H-Bomb," he directed China's national research on the nuclear defense system and contributed to the development of China's atom and hydrogen bombs. In 1986, he died of cancer caused by the nuclear radiation he encountered in his work. Deng was considered to be a modern hero and a dedicated son of China, a respected scientist who devoted his life and his career to developing China as a modern technical nation.

Similarly, during the Maoist period, the Chinese government developed programs to attract intellectuals and scientists to return to China and sent students to study in Soviet Union. Meanwhile, the government targeted specific areas of technology, particularly those that would enhance the national defense, and scholars and students were trained in related fields. Specific knowledge and expertise were given value in nationalistic discourses and programs during this period.

3.1.3 Educated Citizens as Economic Players

Before the economic reforms in the late 1970s, Chinese intellectuals and scientists were romanticized through nationalistic programs and discourses as heroes who would save China and help the nation regain its power on the global stage. However, after the Cultural Revolution in the late 1970s, China's new leaders started to redefine the political agenda and focused on economic development through reforms. During the restructuring of scientific institutions, scientists were no longer purely funded by the government, and they were allowed—even encouraged—to collaborate with private corporations (Chen & Kenney 2007). Meanwhile, scientists could be exposed to most current scientific and technological development in the West through collaborations with multinational companies that were beginning to enter the Chinese market.

At the same time, the Chinese government reinitiated the program of sending young students and elite scientists to study abroad in the 1980s. Although earlier generations of students usually came from an elite class, either with a strong socio-economic background or as the top students in school, the new cohort's backgrounds were highly diverse. For the first time, Chinese individuals were allowed to apply to study abroad on their own, without government selection or support. This change led to the democratization of studying abroad, especially during the 1990s and 2000s. It also allowed the emergence of different types of services for studying abroad beyond government support. Under the economic development, knowledge was also undergoing transformations and became commercialized through different types of private and public institutions.

For over 130 years--from 1847 when Rong Hong studied in the US to the economic reforms in 1978--only 140, 000 Chinese had studied abroad[33]. However, this number dramatically increased after the economic reform was implemented and education was increasingly privatized. From 1978 to the end of 2010, over 1.9 million Chinese from mainland China have studied abroad in over 100 countries. In 2010 alone, more than 280,000 students went to study abroad, representing an increase of 24% from the previous year[34]. However, after earning a Master's or Ph.D. degree mainly in a scientific or engineering field, more than 80% of these students would choose to remain abroad, having secured employment in high-tech industries or academia. The Chinese government as well as the general public were concerned about losing "talent;" namely, the "brain drain problem."

Recognizing their expertise, and seeking to reverse the "brain drain" problem, the Chinese state has initiated various programs and opportunities to attract overseas Chinese experts and elites to work in China. For example, in high-tech zones in major Chinese cities, returnee science parks have been established to host start-up companies built by Chinese returnees. They are provided with special incentives, such as reduced office rental fees, tax incentives, business incubator services, and other resources. The government has also initiated a few human capital programs to invite experts to return. These programs, such as the "One Hundred Expert Plan" of the Chinese Academy of Sciences and the "One Thousand Expert Plan" grant special rights to returnee experts in the form of funds for housing, research, and living expenses. In addition, the government has created scholarship

[33] http://news.xinhuanet.com/newscenter/2009-01/03/content_10596719.htm, retrieved March 1, 2009
[34] http://edu.sina.com.cn/a/2011-03-22/1533200735.shtml, retrieved March 25, 2011

programs for overseas Chinese students as a way to encourage them to return home and serve their country. Since 2005, the government has increased its investment in sending students to study abroad in national exchange programs. It is reported that before 2005, national programs supported 3,000 Chinese each year. This number increased to 7,000 in 2005, and again to 20,000 by 2010.[35] The return rate for students in the national programs was 97%, compared to the rate of 20% of those who were self-supported. Chinese who have returned from other countries are encouraged to establish high-tech companies within science parks in the high-tech zones in major cities in China.

Since the 2000s, many overseas Chinese began to return to China, or constantly travel between China and their host country, seeking opportunities engendered by China's political stability and economic growth. Although scientific and technological research is still highly valued, the government's current priority is to attract Chinese scientists and engineers living abroad to return in order to contribute to the home country's economic development. Therefore, for this new generation of Chinese educated abroad, returning to a university or research institute is not their only option; rather, the government focuses on creating opportunities for generating new start-up companies. As the nation-building project of modern China focuses on building its economic base in the global economy, scientists and scholars have been transformed into calculative and collaborative agents. Their goal is to build China as a nation through applying their scientific expertise and training to strategies for economic growth. In this way, the nationalistic vision of the Chinese government is less focused on building a national defense system as in the Maoist period, and the collaboration between science and the economy has been the primary focus.

3.2 Governing Suzhi of Modern Chinese

Chinese intellectuals and scientists have been viewed as an elite class with crucial knowledge and expertise to lead China's modern nation-building project. Developing educated Chinese citizens has been one of the main priorities within the Chinese government. Although there are different

[35] http://www.chinazhigongparty.org.cn/hwly/lxychy/200911/t20091127_2567.html, and http://www.dl0086.com/education/dispdetail-1955.html, retrieved March 1, 2011

historically specific focuses throughout Chinese history, the expertise embodied in Chinese modern subjects is one of the important measurements to classify Chinese citizens differently. It is a symbol of the "suzhi," meaning quality, of Chinese citizens.

One of the most famous scholars and reformers in the Imperial period, Liang Qichao (1873-1929) stressed the importance of increasing the quality of the Chinese people as the fundamental way of reform. Yan Fu (1854-1921), another prominent scholar, advocated the quality of people as the basis of saving China, while the institutional reforms were an external sign for the development of China (Kipnis 2006). This perspective advocates creating a small group of highly qualified elites, who would then become the ultimate saviors of China. In this way, governing suzhi has been a strategic political agenda, constructed since the Imperial period. In today's China, the government is trying to increase the "suzhi" of the overall population. One strategy is the use of suzhi in birth control discourses. "The focus on raising population quality elided the nature/nurture distinction by involving both, as captured in the slogan yousheng youyu (superior birth and superior education)" (Kipnis 2006). The discourse of "Yousheng Youyu" was closely associated with the one-child policy initiated in 1978. To regulate the size of the Chinese population, the government carried out this population control policy and implemented it effectively, particularly in urban China. In this discourse, having one child was considered the superior method of family planning, and raising one child was promoted as a better way of increasing that child's quality. The training of the only child in a Chinese family was stressed as the fundamental way to achieve aspirations for success (Fong 2004).

Increasing the only child's quality through education is another discourse about governing the population in China. This governing strategy to control Chinese, especially children and young adults, was "Suzhi Jiaoyu," literally meaning quality education. In English it is often translated as "competence education," because it is not about the quality of the education system, but rather education that can raise the quality of the population (Kipnis 2004). Suzhi Jiaoyu has been democratized in various educational discourses in China since the late 1990s. Suzhi should be understood in a plural form that involves three qualities: bodily quality, moral quality, and intellectual quality. As modern high quality citizens are desired in China, Chinese schools and families try to implement such Suzhi Jiaoyu among the young generations of Chinese.

The product of a successful Suzhi Jiaoyu--a quality Chinese-- can earn suzhi (competence) to fulfill his or her social and individual responsibilities (Anagnost 2004). Therefore increasing suzhi is considered a neoliberal self-governing technology to increase surplus value (Yan 2003, 2006). The ability to study abroad and contribute to China's nation building is considered one of the signs of suzhi. In this way, suzhi is a classificatory measurement, a way to distinguish Chinese citizens into different groups. Chinese with advanced degrees and overseas education experience are usually considered "Gao Suzhi," meaning high quality. People who do not have a quality education are usually categorized as "Di Suzhi," meaning low quality. In 2005, the Chinese government further proposed to define the high quality Chinese who had overseas education. The definitions were officially implemented as policies to classify high quality Chinese returnees into eight different groups so as to grant certain benefits and rights to these Chinese citizens.[36] In public and official discourses, Chinese with foreign education and experience are considered high quality, talented individuals. This idea plays a significant role in shaping the strategy of schools and families to cultivate quality students. It has further reinforced the trend in society to study abroad as a way to become desired Chinese citizens.

3.3 Commercializing Knowledge and Expertise

The classification of the population based on one's level of expertise led to the idea of the commercialization of knowledge and expertise. The old idea of knowledge as power was transformed into knowledge as value. In the Post-Mao era, to many Chinese citizens, knowledge was no longer directly related to changing the fate of China, but rather the quality of knowledge embodied in a person was the fundamental element that would create personal value in the Chinese job market. In China, a college degree became the necessary criterion sought after by employers. In order to enter a top college program, students had to take extra classes outside of a school classroom setting. These classes were offered by private educational institutions or individual tutors. Public school teachers generally took on these additional teaching responsibilities as a private, part-time job in order to generate more income for themselves. The classes taught by well-known

[36] http://edu.newzgc.com/html/2007/6589.htm. Retrived March 1, 2008.

teachers were competitive in terms of admission, and the tuition could be even more expensive than full-time public schools. Over and above these classes to prepare students for college entrance exams, parents also sent their children to take additional lessons to increase their suzhi, such as violin, piano, dancing, and painting. In addition, overseas education is considered highly desired and valuable evidence to evaluate suzhi. Parents are willing to pay most of their savings for their children's overseas expenses. Parents believe that cultivating intellectual and cultural capital in their children will be translated into future economic value. Though rigorous and time-consuming, these extra educational opportunities are believed to train their children to become "high-quality" Chinese, thus enabling them to compete within China's fierce job market.

Along with the trend of the democratization of studying abroad, various forms of private institutions and services to promote studying abroad emerged in the late 1990s. Education consulting firms helped parents and their children to develop educational plans and prepare application materials for them. Once their children could get admitted to a Western college, parents would fully support their children financially. Usually, tuition and living expenses amounted to thousands of dollars, a sum that required a lifetime of savings to accumulate. However, parents believed that foreign education would be a good investment for their children, allowing them to eventually become desirable and competitive citizens within Chinese society.

One of the most successful educational services of this type is the New Oriental School. This institution was established in 1993 initially to provide English tutoring, but came to focus on educational services for Chinese who planned to study abroad. Their major services included GRE and TOEFL test training, oral English skills, and application preparation services. I myself was among many young Chinese students who paid hundreds of dollars to study English at New Oriental. In the late 1990s, with 500 other students, I sat in a big classroom studying GRE questions. We shared the same dream: going to study abroad after high school graduation in China. We went to class twice every weekend, spending a few hours sitting in the classroom, listening to the teacher who told us "secret" techniques to take the exam successfully. The classroom was always full of laughter, because a sense of humor was a distinguishing characteristic for New Oriental teachers. They made fun of the government, the "imperialist enemies," and themselves. This sarcastic spirit shaped the culture of New Oriental. Those

who achieved high scores on the GRE and TOEFL exams credited the fun, useful training program that New Oriental provided.

New Oriental was one of the key reasons why Chinese students excelled in ETS (Educational Testing Service) tests compared to students in other countries, even those in the US whose native language was English. In the early 2000s, ETS sued New Oriental for illegally copying, publishing, and selling ETS test questions. But it did not affect the success of the company. New Oriental has developed from a small private tutoring service to an international educational corporation, listed on the New York Stock exchange, with more than 40 schools, 400 centers, and 700 million students in different parts of the world. It has become the largest private educational service in China, and its founder, Yu Minhong, is considered "the richest teacher in China" with a personal wealth of almost $1 billion USD. Its goal remains to help students learn languages and excel in language tests in order to prepare them to study abroad, thereby eventually becoming "high quality" Chinese. Although the tuition at New Oriental has increased dramatically over the years, many parents believe that it is a good investment and continue to send their children to study at New Oriental, especially those who plan to go abroad.

The value of an overseas degree and expertise gained through work in foreign countries is also acknowledged and promoted by the Chinese government. Each year, the central and regional governments organize various events to encourage Chinese studying abroad to return to serve their country. Groups of local government officials and company executives tour overseas universities and meet Chinese students in Western countries (see Figure 20). Transnational Chinese professionals consider these events a convenient platform to expand their professional networks and access first-hand information about career opportunities in China (see Figure 21).

In the fall of 2006, I visited one of these events, held at a fancy hotel in Santa Clara, California, where over 400 Chinese professionals living in the US gathered together in the heart of Silicon Valley. Most of them held post-graduate degrees in science, engineering, or management, and they were looking for opportunities by meeting officials and companies representatives from China. Among the Chinese political and industrial leaders, there were vice-mayors of a few coastal Chinese cities, local government science and technology department directors, heads of research institutes, and CEOs of high-tech companies located in regional science parks.

At the event, I saw a Chinese girl who appeared to be in her late 20s reading the brochures by the entrance. She was wearing glasses and a plain but neat suit. When asked why she had come to the event, she replied that she was finishing her postdoctoral work in biology at a top American university and planned to return to China. She heard that some research institutes from her hometown were hiring at this event, so she wanted to meet the people from the institutes and find out more details about their research. When I probed further, she stated that she wanted to return to take care of her parents in China who were getting older. Moreover, her hometown was developing very fast, and she heard that institutions were expanding their research and giving researchers a great deal of freedom and support, especially those who have studied in the US. In sum, she believed that returning to China would be a good opportunity to utilize her expertise, as well as to develop her own career.

Figure 20 A government official speaking to transnational Chinese

Figure 21 Transnational Chinese expanding professional networks in Silicon Valley
Source: Roger Chen via hysta.org

However, another individual whom I met at the event had a different plan. A software engineer with a dual MBA/MS degree, he was currently working for a large American company in Silicon Valley. He and two friends had developed a software program and wanted to open a company to commercialize their product in China. He told me that the local government representative in Eastern China was very supportive of their business proposal, and they wanted to meet him in person to discuss more details. However, he did not want to go to Beijing, because, as he stated, there were too many companies, which created more intense competition for limited resources. A small city close to Shanghai was a more attractive option for him and his partners, because they could attract more attention and their expertise could be more valued by the local government.

A subsequent conversation revealed an additional perspective. While talking with a Chinese local government official, it was clear that the government was quite interested in attracting Chinese with post-graduate degrees from top universities in the US. However, when this official learned that I was studying social science instead of engineering or management, he was hesitant to show me more details about his program. This was not the first time that my social science discipline was not given the same attention by local government officials or company executives from China. They did not consider social sciences as desirable or practical expertise which could help them generate economic value. For them, work experience in American high-tech or finance was desired as it was perceived to be practical and

valuable, along with education in science, engineering, and management. As a result, engineers and managers working in Silicon Valley were the primary target of their tour in the US. In today's China, knowledge and expertise are highly stratified based on their potential economic value to be generated in the short-term.

In addition to international tours organized by the Chinese government, large-scale events are held in China, and global experts are invited to these events to collaborate with Chinese institutions (see Figures 22, 23, and 24). In November of 2006, I went to Shandong, a province located Southeast of Beijing. This event, the "Fourth Recruitment Affair for Global Experts of Shandong," Hai Qia Hui in Chinese, was held in the capital city, Jinan, between the 17th and 19th. It was one of the regional governing strategies of the Chinese government to attract global human capital, especially those Chinese who have studied and/or worked in Western countries. In China, similar events are held in different regions, mainly in the Eastern and Southern areas of the country, but Hai Qia Hui in Shandong is considered to be one of the largest and most effective ones It was reported that 521 "high quality" experts with 1,197 projects were presented at this event, including 263 Chinese experts with overseas degrees, 101 foreign experts, and 157 postdoctoral researchers from Chinese institutions. More than 15,000 people visited the event, and by its conclusion, 629 collaborative agreements and 103 contracts were signed with a value of RMB 2.1 billion ($3 billion USD).[37] However, I noticed that all of the projects and experts were mainly drawn from science or engineering fields The Chinese government strategically prioritized certain kinds of expertise and knowledge as the most valuable contribution to their local economy.

[37] http://www.chinanews.com/lxsh/2010/11-22/2671106.shtml, retrieved December 1, 2010

Figure 22 A transnational Chinese signing the contract with the local government

Figure 23 A transnational bio-technology expert presenting his research at the conference

Figure 24 A group of transnational experts at the conference

In order to attract global experts to work in their province, the Shandong government gave event attendees with overseas experience many incentives to attend, including paid round-trip airfare, hotels, and meals, and arranged visits to some famous historical sites. The experts were considered to be "first-class" guests and received "first-class" accommodations accordingly. They stayed at one of the most luxurious hotels in Jinan and were treated to expensive dishes at every meal. When the experts were transported by shuttles to tourist sites, they were escorted by local police cars, using their sirens to clear a path through the traffic. In China, a police escort is considered a high-class way in which to give guests "face" and acknowledge their importance. Various local TVs and newspapers reported the gathering of world-class talent as one of the biggest events of the year. In this way, local government officials considered the numbers of experts who were attracted to work in Shandong and the amount of capital associated with signed contracts as their own political achievements, Zhengji, a form of political capital.

Among the experts who were invited to the event, a young professionally-dressed woman caught my attention. At her assigned booth, she was showing potential Chinese collaborators her portfolio with many complicated designs on each page. She was an architect working in the world's largest architecture firm in San Francisco, with a BA from the top architecture program in China and an MS from a top university in the USA. However, after working for a US company in the Bay Area for a few years, she wanted to return to China. Shandong is her hometown; therefore, she was excited to attend the event and explore potential opportunities. She told me that it was not easy for her to make her final decision, because she received quite a few invitations from local Chinese institutions. These institutions were competing for her expertise since they had no experts with overseas experience, and they considered her knowledge very useful. Despite the difficult decision, she was certain that she would return. As she explained, "China has much more opportunities. I am just one of the hundreds of architects in my company, but I will be given much more attention by Chinese institutions, since my expertise is rare and valuable here."

Another man also shared with me his ambitious plan. He was in his early 40s and had a stable life in the US, after receiving a Ph.D. in pharmaceutical science. However, he was not fully satisfied with what he had achieved in

the US. As a researcher, he developed a new type of medicine and obtained a patent in the US with two of his professors. Now he wanted to utilize the resources provided by the Chinese government to promote medicine in China. With two American colleagues, he visited this event in Shandong to find a local government sponsor and potential business partners. He truly believed that China would be the future of biotechnology, and he wanted to enter the Chinese market as early as possible and be part of the fast-growing development. Since no one in China could develop such biotechnology, he believed his expertise would be highly valued by local Chinese officials and clients. Like the architect and biotechnology expert, many other attendees at this event had similar visions and dreams about utilizing their knowledge and accessing local resources in order to increase their self-worth in China through their career development.

3.4 Governmentality and Self-Governing of Chinese Subjects

This chapter has demonstrated that modern Chinese subjects have been constructed as agents with certain forms of knowledge according to a historically specific Chinese political agenda. Throughout China's modern history, the knowledge of cutting-edge science and technology has been prioritized as the most valuable expertise to help build China as a modern nation. However, there are different approaches to understanding scientific and technological knowledge embodied in educated citizens in China. Scientists and intellectuals cannot be understood as internally monolithic groups of educated experts. Instead, they are given specific meanings differently according to the complexity and contingency of their political, historical, economic, and social situations.

With the threat of Western imperialism and colonialism between the 1850s and 1940s, the Qing and Republic governments considered training a group of elite scientists in Western countries as an important way to "save" China through adopting modern technology. During the Maoist period, nationalistic discourses promoted a small group of elite Chinese scientists as patriotic heroes to help China build a powerful national defense system. However, in the Post-Mao era, education has become democratized. Younger generations of Chinese have become entrepreneurial in terms of developing and utilizing their knowledge for self-development in this fast-growing country. The government views modern Chinese as essential human

capital for economic development in response to the competition presented by global markets.

Utilizing and prioritizing knowledge and educated citizens is a strategic agenda of the government to control the population and govern expertise, one form of nationalistic entrepreneurialism. Suzhi, or quality of the population is an essential target in this governmental rationality. Based on this rationale, the Chinese government has created various programs to promote certain types of knowledge within the educational system. Specific knowledge and expertise have been capitalized through both public and private programs and institutions in China. Meanwhile, Chinese citizens have developed certain strategies to prioritize their career and personal choices. This self-governing strategy of professional entrepreneurialism has been incorporated into the making of Chinese subjects and has defined what it means to be a modern Chinese as a form of well-being in contemporary China.

I have argued that making modern Chinese subjects is not only an individual experience, but it is an integral part of a nation-building project driven by nationalistic entrepreneurialism that is historically constituted. The process of nation-building has shaped the identity of educated citizens differently according to various political, social, and economic agendas. However, it does not mean that educated citizens always function as the agents of political leaders in fulfilling the political agenda of nation building. For example, scientists do not always act uniformly in relationships with political elites. "Often people holding very different outlooks regarding science--scientists and nonscientists alike—coexist within a given society, though they may tolerate each other uneasily because the issues that divide them are fundamental, never hidden completely from view. When they do confront one another, the conflicts are often spectacular, sometimes revealing themselves as profound crises of cultural and social values and illuminating deep social rifts" (Miller 1996:8). The ideological and political contentions between scientists and other groups constitute a force that shapes the nation-building process—a force which is both contingent and situational. In order to understand identity politics of modern Chinese subjects, ethnographic methodology can reveal the political, economic, and social forces that influence its production. The following chapter focuses on how a specific group of modern Chinese subjects with overseas experience are constructed through official and public discourses, and how this

construction overlaps or diverges from the self-understanding of these subjects.

IV Discourses of Haigui and the Transnational Chinese Publics

In late September 2009, the topic of "Haigui," Chinese returnees from foreign countries, appeared on the front pages of newspapers and the Internet in China. The reports all related to an incident that happened on September 17, when an engineering researcher named Tu Xuxing jumped out of the window from the 11th floor of a building on the campus of Zhejiang University, one of the top universities in China. This 32-year-old young Haigui returned to China after graduating with a Ph.D. in civil engineering and completing postdoctoral work at Northwestern University. Just three months after his return, he committed suicide, leaving his wife and 3-year-old daughter forever. Why did this young, educated man with a seemly promising future end his life in such an extreme way? His last letter, published widely in various media outlets, expressed his helplessness and disappointment with the reality of academia in China. Tu wrote, "…at this moment, I realize my decision (to return) was made rashly. I have not expected things that would happen after my return. I thank my friends for their warnings about my decision. The reality of Chinese academia is cruel, unreliable, and ruthless; however it was ignored due to my overconfidence."

Tu's death immediately generated tremendous debate within the Chinese media as well as transnational Chinese communities. The central debate focused on what kind of Haigui China needed, what problems the mechanism of Chinese academia produced, and how Haigui should perceive the meaning of return and adjust to the environment in China. In this way, the public discourses about Tu's death revealed problems and tensions between Haigui and local Chinese institutions and individuals. Chinese academia was condemned for a common situation in contemporary Chinese society: a lack of credibility and regulations. With genuine hope for doing research in China, Tu realized that the promises the university made for him would not be implemented, and he was not able to cope with his desperation and anger. While challenging the existing problems in Chinese institutions, the public also doubted the ability of Haigui to readjust to this new environment. Through public discourses generated from news reports and online forums, both local Chinese and Haigui went through a process of rethinking the relationship between Haigui and the Chinese society, as well as the construction of Haigui as modern Chinese subjects.

In the Foucauldian tradition, a "discourse" refers to a body of thought and writing that can construct certain "truths", objects and meanings of knowledge, and power relations. Foucault defines discourses as "systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak"(Lessa 2006). The production of discourses is controlled, selected, organized, and redistributed through specific procedures "whose role is to avert its power and its dangers, to cope with chance events, to evade its ponderous, awesome materiality" (Foucault 1972: 216). To present certain realities and make sense of the world, discourses are created and governed by "rules of exclusion" based on "objects," what can be spoken of; "rituals" governing where and how one can speak; and "the privileged or exclusive right to speak of certain subjects," or who may speak (Foucault 1972). The "rules of exclusion" are an exercise of power which defines knowledge and truth through legitimized representations of ideas and institutions. Subjects are defined and constructed through knowledge and truth produced in discourses according to certain power rationality and strategies.

If the Foucauldian discourse helps us understand the social practices of power and subject formation, Habermas provides an alternative way of understanding the construction of the representations of subjects to challenge the hegemonic power of the state and capitalism. Habermas argues that a "bourgeois public sphere" can produce rational debates and critical discussions to form a reason in reconfiguring the state, social structure, and institutions in pursuit of a civil society and human goods. He (1962: 27) defines the public sphere as:

> a sphere of private people come together as a public; they soon claimed the public sphere regulated from above against the public authorities themselves, to engage them in a debate over the general rules governing relations in the basically privatized but publicly relevant sphere of commodity exchange and social labor. The medium of this political confrontation was peculiar and without historical precedent: people's public use of their reason (*öffentliches Räsonnement*).

In Habermas' view, people in the public sphere freely offer their own opinions and express their feelings or dissatisfaction about the state in

rational deliberation, which ultimately can influence the state authority. The public sphere can not only institutionalize specific interests as well as the relational opposition between the state and society, but it can also institutionalize the practice of rational, open, and critical discussions about politics, which Habermas calls a "communicative action" (Habermas 1962, White 1988). The communicative action is structured through interpersonal linguistic communication within an institutionalized moral framework, which ultimately develops a mode of rationality. As a symbol of modernity, communicative rationality characterizes a civil society and is anchored in the social form of human life (Honneth and Joes 1991). Communicative rationality sustains the creation of counter-hegemony discourses and shapes modern subjects through their social and linguistic practices in the public sphere.

Following Foucault's idea of "discourse" and Habermas' view of "public spheres," I explore possibilities of constructing modern Chinese subjects through various kinds of discourse represented by the reconfiguration and contention of power relations. In this chapter, I focus on the different types of discursive productions of "Haigui" as modern Chinese subjects through an ethnography of online Chinese communities and an analysis of their discourses. In contemporary China, how are Haigui subjects constructed and shaped by various forms of discourses? What are the rationalities and effects of these discourses? How shall we understand the emerging ways of producing discourses that challenge traditional forms of power and definitions of Haigui subjects? On the one hand, the social reality of China is represented through public discourses such as newspapers, official documents, and TV programs often governed by the state. As a channel of implementing nationalistic entrepreneurialism, these "official" discourses construct certain ways to define what modernity means to China and what a modern Chinese subject should be in Chinese society. On the other hand, the social practices of discursive productions shape various forms of new publics, such as online forums and social networking platforms such as Facebook and Twitter. While it is arguable whether a Habermasian public sphere exists among Chinese online communities, Chinese subjects do develop a certain communicative rationality of professional entrepreneurialism to negotiate with the state version of nationalistic entrepreneurialism and redefine what Chinese-ness means to them. Modern Chinese are revisiting what constitutes a meaningful life, which is not necessarily reconciled with the state's discourses on the same.

"Haigui" in popular discourses has become a major term to describe Mainland Chinese who have overseas experience but have returned to China. If one Googles "Haigui" in Chinese, one finds over 7.5 million results. As a label of returnees, Haigui is constantly applied by the Chinese media and among transnational professionals in the West. Why and how did Haigui become a term to label a certain group of transnational Chinese? How do various discourses construct the image of Haigui? How do public discourses affect transnational Chinese overseas? I first discuss how this term has become popular and why Chinese has used different labels to describe transnational Chinese professionals. Then I examine three different discursive examples to show the construction of Haigui by the public and transnational professionals. Lastly, I summarize the implications of public discourses on shaping Haigui as modern Chinese subjects.

I argue that the construction of Haigui in discourses reflects a complicated process of how different groups of Chinese perceive and construct Haigui in various discourses. In this process, Haigui signifies a dynamic symbol of Chinese subjects, whose meanings have undergone redefinition throughout time in the Post-Mao era. These redefinitions contribute to the creation of strongly held stereotypes of Chinese returnees in China's modernization movement. Second, there are various contradictions and debates among the official discourses, on-line forums, TV programs, and novels about Haigui. Through examining three different discursive examples, I demonstrate how the category of Haigui is constructed by the Chinese public as well as transnational professionals. In short, the contingent reflections of Haigui lead to new kinds of tensions between local Chinese and transnational Chinese, which I call "neo-regionalism." At the same time, I argue that an emerging "imagined public sphere" among Chinese on the Internet challenges the hegemonic definition of what Haigui should be according to the official discourses, which generates the possibility of redefining what it means for them to be Chinese.

4.1 Creation of Labels and Their Public Impacts

4.1.1 Haigui Vs. Tubie

It is reported that "Haigui" was first used in 1999 in a Star TV[38] interview with Dr. Wang Yaohui, a well-known social entrepreneur in China. Dr. Wang himself did graduate work Canada and England and has since returned to live in China. Currently, he is the Vice-President of the Western Returned Scholars Association / Chinese Overseas-Educated Scholars Association—the most influential organization among Chinese returnees under the leadership of the Secretariat of the Communist Party Central Committee. During the interview, he stated that Haigui meant "returning from the sea," so it could be used as a label to describe Chinese people who return from overseas countries like himself. In 2002, the People's Net, the official website of the Chinese Communist Party, published their definition of Haigui: "Compared with local Chinese who study and work in China, Haigui refers to a person who has experience studying or working overseas".[39] Since then, Haigui has become a term that journalists and the media use to distinguish Chinese who have overseas experience in China from Chinese who do not. This term has also been adopted by transnational Chinese to identify themselves due to their shared educational and working backgrounds outside of China.

The Chinese word "Haigui" is composed of two Chinese characters: "Hai" and "Gui". "Gui" is both a verb and noun meaning "return." "Hai" literally means "ocean or sea." Moreover, in Chinese culture, "Hai" usually refers to a boundary between an overseas place and the inland. For example, *Analects of Confucius, Yan Yuan,* teaches Chinese that "all within the Four Seas are brothers," meaning humans need to treat each other well in the world. The term "four seas" refers to an encompassing region. Another famous scholar in Han Dynasty, Liu Xiang (77 B.C.-6 B.C), in his classic writing *Shuo Yuan, Bian Wu* wrote "nine states are within four seas." The term "nine states" is an old expression for mainland China, and the term "four seas" refers to the oceanic areas surrounding the mainland. In Chinese historical writings and art, ocean/sea is usually romanticized as a mysterious and exotic space that exists beyond China. Therefore, when describing

[38] Star TV is a Hong Kong based TV station which became popular in the transnational Chinese communities in the 1990s.
[39] http://www.hudong.com/wiki/%E6%B5%B7%E5%BD%92 , retrieved April 1, 2010

people who study and live far away from the inland, “Hai” is used to indicate people’s geographical and personal background related to their overseas experience in foreign countries. Haigui then can be understood as a label to describe a group of people who have returned to China from overseas, with a possible connotation of having had an unusual and exotic experience. Finally, the pronunciation of Haigui is the same as that of “sea turtle” (see Figure 25). Therefore, informally, transnational Chinese who have returned to China are teasingly called “sea turtles,” by local Chinese. To distinguish Haigui from local Chinese, another term-- “Tubie”-- has become popular in public discourses to describe local Chinese. “Tu” means soil or inland, and “Bie” is a term of turtle. Compared to “sea turtle/Haigui,” “inland turtle/Tubie” has a stereotypical and discriminatory connotation. It implies that local Chinese have limited knowledge or experience and are somewhat shortsighted. In this manner, the labeling dichotomy of Haigui and Tubie leads to a discriminatory categorization of Chinese who either have overseas experience or do not.

Figure 25 The media portraying Haigui as sea turtles
Source: 365jia.cn

In the late 1990s and early 2000s, the term Haigui was portrayed by the public media as an image of success: a graduate degree from an overseas university, a successful, high-income career, and a cosmopolitan lifestyle with an appreciation for culture and art. China’s Wikipedia, Hudong.com, describes Haigui as individuals with:

> advanced technology, venture capital expertise, advanced management knowledge from the West, as well as interpersonal

> experience and social capital between China and the West. Chinese who have overseas educational experience have naturally become pioneers. "Haigui" not only bring back advanced management and technology knowledge, but also create markets and values. In China's modernization development, they are playing an increasingly important role. People's Net claims that most Haigui are the elite within Chinese society. [40]

A few Haigui frequently appear on TV channels such as CCTV[41], the largest Chinese TV channel, or on the cover of magazines as images of successful model citizens in China. These figures include Zhang Chaoyang (Charles Zhang), the founder of sohu.com, a main Internet portal web service; Li Yanhong (Robin Li), the founder of baidu.com, the biggest Internet search engine service in China; and Deng Zhonghan (John Deng), the founder of Vimicro, a fast-growing semiconductor company in China. They all grew up in China, earned Ph.D. or Master's degrees in science or engineering from American universities, and started careers in China. They are representatives of Haigui promoted by the public media in China as successful, innovative entrepreneurs contributing to China's technological and economic development. The public believes that these Haigui share a few common attributes. First, they have social capital, which helps them build connections easily in China with the support of certain important figures behind them. In addition, they have rich individual capital, which includes education from elite institutions, advanced expertise, and economic and human capital. They also possess strong adaptability, the ability to devise flexible and practical strategies, and an adventurous, risk-taking spirit.[42]

Successful Haigui also appear in various official publications. In 2007, Dr. Wang Yaohui published various books through China Development Press, a publisher of the Development Research Center of the State Council. The two books, *Reflections of 100 Chinese Returnees* and *Contemporary Chinese Returnees*, reflect an official account of Haigui, sponsored by the Chinese government. In *Reflections of 100 Chinese Returnees*, Wang presents 110 interviews and stories of successful Haigui. These stories summarize these model Chinese citizens' individual experiences and social responsibilities. In the preface, Wang (2007: 2) wrote:

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[40] http://www.hudong.com/wiki/%E6%B5%B7%E5%BD%92 , retrieved April 1, 2010
[41] Chinese Central Television is the Communist Party's central television station.
[42] http://blog.sina.com.cn/s/blog_4894898b0100glf3.html. retrieved March 2, 2010.

> Overseas studies allowed Haigui to have opportunities to live outside of the motherland and to learn, compare, and experience the differences of crafts, institutions, and cultural roots (between China and the West) over long distance. This long distance makes people self-conscious, calm, painful, and even lost, however, it will finally allow people to understand deeply, reciprocate warmly, and work for change enthusiastically.

Wang argues that the Haigui overseas experience provides them with a pilgrim-like journey for personal growth, which ultimately prepares them psychologically and professionally to share in the social responsibilities of the motherland. He (2007: 3) states:

> the Sartrean and Habermasian humanism among public intellectuals has influenced and motivated Haigui. As a group of intellectuals, the category of Haigui itself signifies the meaning of righteousness, contribution to the country, and social responsibilities. Haigui themselves mention that "a Haigui not only needs to focus on personal career development, but also be a socially responsible citizen who can contribute to public services"…They reflect upon themselves: "The treasure of overseas experience is not just so-called cutting-edge knowledge, but independence of his character, freedom of ideas, and relevant values. Even these values cannot be applied in China at the moment, they will be have influences on themselves and become an integral part of his well-being and duties".

While the Haigui experience presents challenges, ultimately these returnees will contribute to China's development in meaningful and important ways. Wang's statements reflect an official version of how the state government wants to portray Haigui. The role of Haigui is legitimated in the official discourse as "model" Chinese citizens who share social responsibilities and play a significant role in the nationalistic movements of re-building China into a modern nation.

In a later book, *Contemporary Chinese Returnees*, Wang indicated that Haigui constitute a new Chinese social class. He presents official statistics on Haigui and analyzes Haigui's roles in different fields in China in order to illustrate that that Haigui play a significant role in China's economic development. Wang contends that Haigui are active contributors to entrepreneurship beyond traditional academic work when they move back to China, and that they become highly transnational across national borders,

maintaining networks between China and the West. In addition, Haigui work for multinational companies, but are increasingly involved in local corporations, and some Haigui work with government to help improve China's economic and proto-democratic reforms. In this way, Haigui help Chinese institutions to become internationally-oriented. Wang's arguments attempt to legitimize the existence of Haigui as a new generation of elites in China who are distinguishable due to their overseas experience, connection, and values. Moreover, his accounts try to build a positive image of Haigui in the Chinese official discourses. Over the past 30 years, the official discourses of the Chinese state endowed this group of Chinese with certain legitimacy as pioneers in China's modernization movement.

As the term Haigui was promoted by a few official Chinese media channels such as People's Net, CCTV, and official accounts published by the State Council, the returnees themselves received immediate attention, not only in the media, but also among Chinese employers. It created a market for talented individuals with overseas experience, because Chinese employers believed Haigui were naturally endowed with advantages such as knowledge, expertise, and "international" values. Local Chinese imagined the Haigui experience beyond the "four seas," and they believed it would help companies to "modernize and advance" in accordance with international standards. Competition among companies for Haigui in the job market was fierce, and compensation for Haigui was usually much higher than local Chinese with equivalent degrees from Chinese universities. Multinational companies prioritized overseas experience as a preferred quality when advertising for job candidates. The dichotomous categorization between "Haigui", or transnational Chinese, and "Tubie", or local Chinese, continued in public discourses and human capital management in workforce for years.

4.1.2 Haiou, Haidai, and Haibugui

In his book, Wang predicted that increasing numbers of Chinese living abroad would decide to return to China, and as this situation played out, new terms were introduced to differentiate among different types of Haigui. Certain transnational Chinese are labeled as "Haiou." The term "Haiou" refers to seagulls in the Chinese language. Metaphorically, Haiou are very flexible, just like seagulls flying freely above the ocean. The public media started to use this term to describe transnational Chinese in the mid 2000s

who constantly travel between China and foreign countries. They usually have their family and business in Western countries but still participate in various activities in China. Therefore, they have to fly back and forth between countries, maintaining their family and career networks. Generally, the spouses and children of Haiou' remain in the West, so Haiou do not become permanent Haigui residing in China. In contrast with the flexibility and mobility of this subgroup of transnational Chinese, they are paradoxically inflexible due to their familial ties to Western countries.

Another term--"Haidai"--has appeared in public discourses in recent years. In this word, "Dai" means waiting or idle. Haidai refers to a group of Haigui who cannot find a job; thus, their status is on hold. The pronunciation of Haidai is the same as "seaweed" in Chinese. Therefore, seaweed is a slang term, referring to Haigui who are still looking for employment. Metaphorically, sea turtles can come to the beach when they hatch, however, seaweed remains in the ocean, floating and idle. This term became popular because, in the late 2000s, Haigui gradually lost their advantages in the job market, and many of them could not find satisfactory jobs in China.

There were various discourses to explain this phenomenon. First, with a dramatic increase of Haigui in the Chinese job market, Haigui were no longer a scarce resource, and recruiters had more choices when searching for elite Haigui to fill upper level positions. Therefore, some Haigui were unable to find employment that matched their income expectations. At the same time, among Haigui themselves, there were variations in terms of expertise and experience. The earlier generation of Haigui who left China in the 1980s and 1990s were usually highly selective students who gained financial support from Chinese scholarships or fellowships from top American universities. These were elite, hardworking students with solid research experience, and therefore most desirable to potential employers.

However, in the 2000s, the number of Chinese studying abroad dramatically increased, which expanded the population of job candidates with this type of experience. Reasons for this increase are varied. On the one hand, families could provide more financial support due to increased family income engendered by the economic development in China, so the younger generation of Chinese could pay for their own studies abroad. On the other hand, many local agencies began to provide GRE and TOEFL tutoring and application assistance for studying abroad, thus increasing acceptance rates for Chinese applicants. Moreover, some Western universities actively

courted Chinese international students in order to raise revenue via the ability to charge higher "out-of-state" fees for their instruction. All of these factors combined to result in a wider pool of Chinese who studied abroad at the university level.

No longer were these students the "cream of the crop" as in previous years; in fact, some could not pass China's college entrance exams. Among these young Chinese students, some went to undergraduate or even high school programs, and some simply wanted to have the title of "Haigui," so they attended unaccredited schools in order to get degrees more easily. Therefore, compared to earlier Haigui—top students with solid training from Chinese universities, seeking post-graduate education in the West--the younger groups of Haigui were much less desirable or qualified in terms of their skills and expertise. As a result, when they returned to China, they found an increasingly restrictive job market in which they could not compete, thus becoming "waiting seaweed," or Haidai.

Often Haidai is used by local Chinese to discriminate against Haigui who once got attention and favorable benefits in the public media and among employers. This reinforced the tension between local Tubie and transnational Haigui. As a result, the public image of Haigui was no longer stereotyped as a model of success. In the mid 2000s, a large number of public accounts doubted the government's preferable policies to attract Haigui and companies' strategies to favor Haigui employees over local Chinese. For example, one of the largest Internet portals posed an article titled: "'Foreign degrees' are no longer desirable: Post-80s[43] 'Haigui' become 'Haidai'."[44] The article presented an example of a 24-year old Chinese man who could not find a job in China after spending $100,000 (US dollars) and six years studying in Australia. The man said:

> all my relatives and friends welcomed me warmly when I came back. From their words, they were jealous and expecting me to get a top position immediately…I have been to more than ten interviews with many companies, but I realized that it was more difficult for me to find a job than those who graduated from top Chinese universities. Employers were doubtful of overseas degrees, unless the degrees were from Harvard or Cambridge…I am not qualified for higher positions, but I do not want

[43] Post 80 is a term to describe Chinese who were born between 1980 and 1990. They are not in their 20s and are the main generation of young Chinese professionals.
[44] http://edu.163.com/11/0310/18/6UQ91VO500293L7F.html, retrieved March 10, 2011.

to go for lower positions either. In this situation, I feel I do not have any advantages except speaking a foreign language.

Figure 26 The media portraying Haigui companies in trouble
--"they cannot fit the Chinese business environment"
Source: cnstock.com

Once a high-class label for elite Chinese citizens, the term Haigui was being redefined by the public media portraying Chinese returnees who did not "successfully" find a job and failed to contribute to China's economic development. Due to the Haidai label, Chinese employers discriminated against transnational Chinese seeking jobs in China. The public media began portraying Haigui as Chinese whose expectations were higher than what they were qualified for in reality. Many Chinese employees complained that Haigui lacked certain cultural knowledge and social capital to work with local Chinese employees or clients in the Chinese working environment, despite their advanced overseas experience (see Figure 26). In addition, Haigui expertise did not often translate to the Chinese market. Many Haigui had limited working experience before they returned to China, and they were too "academic" to adapt to the professional world. Many doubts were raised among local Chinese employers and public media about whether their investment in Haigui could bring them equivalent returns.

These emerging negative discourses about Haidai indicated that Haigui were losing their previous advantages in public discourses. These public discourses made many Chinese still living abroad rethink their decision about returning to China. Although intrigued by opportunities in China, they

feared that they might become Haidai as portrayed in the media. A new term started to become popular in 2008: "Haibugui". The media adds "Bu" between "Hai" and "Gui." "Bu" in Chinese means no. This term is used to describe those Chinese abroad who are not willing to return to China.

There have been various accounts discussing the phenomenon of Haibugui in the public discourses in the recent two years. For example, a blog posting presented a major reason for the phenomenon of Haibugui.[45] The author argued there was an embarrassing reason for Haibugui comparing local Chinese and Haigui:

> Can Haigui make sure that they are more successful and richer than Tubie who have never been abroad? In fact, nobody is certain about this, no matter where you earn your Ph.D. The problem is, when you return to China, America will become the past. All people can tell how capable you are and what kind of material life you will provide for yourself and your family. It is very possible that your college mates (who have never been abroad) in Beijing or Shanghai have been successful and have bought two or three apartments, while you have to face the expensive real estate market (in China). Looking at your $30,000 in your hand which you have worked hard to earn, will you be sure you will have a more comfortable life than those (Tubie), even if you can find an okay job? These are questions a lot of people would fear, because when returning, everything will be transparent. They (local Chinese) will not think like 'he is in the US'. Without the glass ceiling (between China and the US), there will be severe competition. However, pragmatism is highly valued in China. Nobody (in China) will care how many degrees you have or how deep your intellectual background is. They will watch how much money you can make and how big your house is. Eventually, people (Haigui) would regret "I wish I did not study abroad' and 'Haigui's life is just like this." This is something unacceptable among Chinese living abroad.

This article indicates that when Chinese abroad consider whether to become Haigui or Haibugui, an important reason that keeps them from returning to China is the fear that they will not live a life better than Tubie. They assume that overseas experience and postgraduate education should be valued more highly than local Chinese equivalents, but they fear that it will not. Their

[45] http://aiyuan.wordpress.com, retrieved September 1, 2010.

sense of achievement relies on the comparison with Tubie to show that Haigui deserve a more rewarding life in China. This also reflects a social reality in China that focuses on pragmatism and material measurements of success. Haibugui are portrayed as Chinese "losers" who lack the stomach to compete with local Chinese and have failed to succeed in Western countries as well.

However, there is another way to view the phenomenon of Haibugui. In a blog post, one author stated that not all the Chinese who choose to be Haibugui lack the fortitude to compete in a dynamic environment. He argued many Haibugui are professors, doctors, engineers, entrepreneurs, and other professionals. Some are artists or government officials. They often came to the US as students without any strong socio-economic backgrounds, and have achieved success through a lifetime of hard work. They remain in their host countries because they prefer pleasant and risk-free lifestyles. Haibugui do not want to be "someone below or above the others." In the US, they live freely in a relatively equal society and have a career that they enjoy. Although many have become upper-middle class, they maintain a low profile lifestyle in the US, and they do not want to face the risks that they would inevitably encounter upon their return to China[46]

In this way, debates over Haigui and Haibugui have generated impassioned discussion among Chinese living abroad. There are different ways to justify whether someone should become a Haigui or Haibugui. These justifications rely on self- fulfillment of as well as the comparison between Haigui and Tubie. It shows that the subject-making of a Chinese person is not only constructed by self-understanding but also by a relational evaluation between the self and the other. Chinese individuals usually understand the worth of self and find the meaning of life through the opinions of the other. In the case of Haigui, other people's opinions play an important role for many Chinese living abroad to make their decision of whether to return or stay. It is the reason why various discourses are important to understand the subject-making of Haigui as a special group of Chinese subjects. The following section explores this dynamic, focusing on the questions and experiences of Haigui and Haibugui as reflected on television, in literature, and online.

[46] http://blog.sina.com.cn/s/blog_4894898b0100glf3.html, retrieved March 2, 2010.

4.2 The Journey (Back) to the East

The Journey to the West is a classic Chinese novel published in the 1590s about the legendary pilgrimage of the Monkey King, his master Xuan Zhuang, and two other disciples to India in search of the essence of Buddhism. In this fictionalized account, the West is imagined as a sacred place. The process of the journey is full of challenges in which the four pilgrims have to fight against monsters, lust, and greed. Through different stories of overcoming difficulties, the image of the West and the journey the characters undertake both create imaginary spaces for Chinese to define righteousness and sin.

In this section, I would like to borrow from the title of this famous novel in order to describe the Haigui journey—a Journey (Back) to the East. Their stories about returning home are pilgrim-like in character as they search for the essence of certain beliefs and meanings in contemporary moments. Through various discourses including TV productions, novels, debates, and personal monographs online, I argue that the East/China is deconstructed and recreated as an imaginary space for Chinese, especially those still living abroad. The stories told in these discourses represent the contradictions, hesitations, tensions, struggles, and uncertainties among transnational Chinese individuals and groups. The making and remaking of these discursive stories are an integral part of the construction of Chinese subjects itself.

4.2.1 Clouds from My Hometown

In 2007, a TV show, Clouds from My Hometown-- *Gu Xiang de Yun* in Chinese--appeared on the main TV channels as the first TV show about the Haigui phenomenon in China. Over the course of 20 episodes, the show presented how a group of Chinese scientists and professionals living in the US made their way to China, experienced various difficulties, and coped with different kinds of challenges as Haigui. The show was produced by Guangdong TV as a "main theme" show—a genre that reflects the views of the Communist Party, and is usually associated with nationalistic representations. The show captured the attention of Chinese both at home and abroad, and generated discussions in the media which reflected on the Haigui phenomenon.

The title "Clouds from My Hometown" was borrowed from a famous Chinese song with the same name, which symbolizes the sentimental and nostalgic feelings between overseas Chinese and their homeland. Since 1987, when Fei Xiang performed the song on television celebrating Chinese New Year's Eve, it has been popular among transnational Chinese communities. The lyrics illustrate the nostalgic feelings that overseas Chinese have while living abroad: "The clouds floating on the sky are from my hometown, and they are calling me; when the wind is gently blowing around me, I hear a voice calling me: 'come home, oh, come home, ya…' " As a Chinese-American born to an American father and a Chinese mother, Fei Xiang also gained recognition among transnational Chinese communities and performed on stage at various events in China and abroad. For more than twenty-three years, this song, as part of the official discourses, has become a classic and is performed at events, particularly those related to overseas Chinese.

In the television series, the song not only informed the title of the show, it was also used as the show's musical theme. In sum, the show traces the journey of the characters, beginning in San Francisco in the late 1990s and culminating in Southern China five years later. The story revolves around Jian Mufeng, a patriotic, rigorous, and hardworking Chinese biologist living in the US. He respected science and valued talent and innovation, but he was too straightforward and was not good at guanxi[47] politics. Jian was internationally well-known and was up for a promotion in a national biotechnology lab. But due to national security concerns, the position was only available to US citizens. Jian had to make a decision about renouncing his Chinese citizenship in order to take the job or to accept an invitation to return to China and take a position at Southern China University (SCU). In attempting to convince Jian to return to China, Dai Changzhi, an old friend and vice-chancellor of the University said:

> China is under reforms, and SCU is under reforms. This is a grand project of rebuilding our nation. It is a special moment that seldom happens in history. We need talents who can help our university and country access the most advanced science, technology, and culture. I cannot lie to you. We do not have many benefits to attract you. I cannot compare the four-bedroom apartment that we provide to your lake-view

[47] Guanxi is a Chinese term, literally translated to social networks in English. But guanxi in Chinese has distinguishing features different from western social networks. Please refer to the first chapter and fifth chapter for more details.

> house, let alone our salary. Dr. Fang (the chancellor of SCU) has devoted his whole life to SCU but earns a tiny portion of your salary. But I can tell you that this is an opportunity, an opportunity given by history to every Chinese to participate in the motherland's reform. It is an opportunity that can change someone's destiny and an opportunity full of miracles. In order to become a world-class university, money is not the key, but top talents are.[48]

Ultimately, Jian decided to return to China, but convincing his wife and son to move with him was not easy. Jan's wife enjoyed the life in the US, having a good career as an anthropologist, a stable family, and a huge house with a beautiful view. Born in the US and still in elementary school, Jan's son resisted being Chinese by identifying himself an American who preferred speaking English. He did not want to leave his friends and school in the US. Unhappily, the wife and son had to compromise themselves and agreed to return to China with Jian. This example presents Jian as a patriotic Chinese who is willing to trade a comfortable life and promising career, along with personal well-being, to demonstrate his social responsibilities to his country.

Nevertheless, once in China, various difficulties appeared in Jian's life. His proposal to build a biotechnology lab at SCU was postponed because the budget was much higher than what the university could afford. Jian had to focus on teaching rather than research. Moreover, although the university agreed to provide housing for Haigui professors, the limited number of apartments available resulted in an apartment being reassigned from a local Chinese professor to Jian and his family. The "Tubie" professor, unjustly cheated out of his place on the waiting list, asked "whether it is true that a foreign degree is more valuable than my Chinese degree." [49] Tensions arose between Tubie and Haigui professors due to the unfair distribution of resources such as this.

In addition, there were heated conflicts between local professors and Jian in terms of the core values believed to be inherent in scientific research. Jian discovered that new and creative research ideas proposed by younger researchers were not supported by the university funding committee. Instead, they preferred to choose topics that were already validated in Western countries, because following those topics was thought to guarantee a return on their investment. Jian disagreed and said,

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[48] Episode 1
[49] Episode 4

we follow the ideas that have been validated and researched in Western countries, but their research have patents. Even though we imitate them so well, it will hardly help us develop our indigenous intellectual property and develop our own industries. Therefore we should encourage innovation and risks, and we should tolerate failures.[50]

When the university funding committee ultimately selected the "safe" project proposed by older researchers, Jian realized his own value of supporting creative but risky ideas was fundamentally in conflict with the values at SCU, and he was unable to change the established system of innovation.

Jian also found out that much current research was in fact plagiarized. In a campus-wide survey among 1,000 students at SCU, 30% of the people did not mind plagiarism, and another 50% said it depended on how one copies the work of others. In fact, the TV reflects upon real situations in Chinese universities where plagiarism is a popular phenomenon. Jian realized that plagiarism was widely accepted among students and even among researchers. He received an anonymous letter reporting plagiarism in a research project conducted by a few professors. As Jian attempted to address this issue, Dai, the vice chancellor, stopped him, because the principal investigator of the project in question was the University Chancellor, Dr. Fang. Although unaware of the plagiarism, Fang decided to deal with the situation not by halting the research, but through conducting more original research privately. Nevertheless, Jian insisted on revealing the case to the public. Fang and Dai blamed Jian for being too naïve and not considering the value of the university saving face. Dai "defended" SCU's reputation and tried to convince Jian to give up the idea to solve the problem in an "extreme" way, because, "today's society in China is maintained by face. Plagiarism in Chinese academia is not popular, but it can be understood. It is like 'the Emperor's New Clothes'." [51] Jian felt disappointed with China's academic standards, and realized that there were various limits to innovation and creativity. In addition, there was little he could do to change this reality. In China, being a straightforward and honest person was not valued on certain

[50] Episode 7
[51] Episode 6

occasions. Even inside an "ivory tower," Chinese guanxi and renqin[52] penetrated and challenged all aspects of Jian's work and research.

Not only did Jan experience many problems at work, but his family life was also under strain. Jian's wife could not find a job in China as an anthropologist, because her expertise was not valued. Compared to science, technology, economics, and management degrees, anthropology does not generate economic returns, and thus her degree was devalued. Jian's son also faced difficulty. Other students discriminated against him due to his poor Chinese, resulting in physical fights, and he resisted the strict Chinese rules, preferring the freedom he experienced in the US. On top of all this, Jian's heavy work responsibilities limited the time that he could spend with his family. Finally, Jian's wife and son returned to the US without him. Jian could only travel occasionally back to the US and could not help his family with the problems they faced upon return. When his son encountered difficulties at school, his house was invaded, and his wife was almost killed, he was not there. After years of living a separate life, Jian's wife filed for divorce with Jian and let another man enter her life. Jian did not want a divorce, but he could not give up his career in China either, and finally he signed the divorce papers.

In the face of these challenges, Jian started to rethink his decision to return to China in light of his failures. After a pilgrimage trip to Tibet, he rebuilt his confidence and started a biotechnology company as a way to fulfill his dream in China. With his colleagues who returned to China with him, they planned to develop a new indigenous technology to cure asthma. The municipal government was willing to support Jian, and the officials hoped that Jian could develop a new medicine and earn a patent. However, the government wanted Jan's company to merge with a state-owned enterprise (SOE). The mayor believed it was a good chance to create an innovative institutional model that would help both Haigui companies and SOEs.

In the actual process of innovative entrepreneurship, Jian realized that the government actively participated in the main aspects of business practices. Jian told the mayor that the function of the government was different in the US. Their government focused on planning and development at the macro level, but was not involved in day-to-day business operations. Too much

[52] Literally meaning emotions among people. It is similar to the English word "favor". In Chinese culture, as an object of reciprocity, renqin is part of living strategies and norms in the interactions with people.

involvement of officials in business was not good for the development of the company or for the officials themselves. In response, the mayor told Jian that in China officials had to be involved. Custom, peer pressure, and government culture all required it. However, the mayor admitted that irregular and non-normative activities existed in China's dynamic economic environment. He said, "we cannot wait until everything is standardized. As long as things are conducted legally, we should keep developing the economy and boosting relevant fields first. The 'rules' of the game will be improved, and the environment will be more regularized eventually." [53]

The collaboration between the local SOE and Jian's company failed, but through the hard work of Jian and his employees, his company succeeded in developing the asthma drug formula. The government adjusted their strategies in innovation development, and they planned to focus more on planning a science park and building infrastructure to support Haigui companies. Standing on the Great Wall, the major held Jian's hand and said: "the government, companies, individuals, and society need to go through such a process of ups and downs in order to fix problems and achieve greater improvements. This would eventually lead to a successful Chinese model of development." In addition, at the end of the show, Jian's son returned to China, reuniting father and son. After years, his son grew up into a young adult. It was implied that more stories of Haigui building China's fast-growing economy would be forthcoming.

This series exemplifies the official discourse on how Haigui scientists redefine their social roles in China. Many Haigui who have watched the show can identify certain connections between the show and their own lives. There are various conflicts and contradictions between local Chinese individuals and Haigui. For example, because of their previous overseas experience, some Haigui encounter discriminations from local Chinese. Local Chinese are threatened by Haigui and are afraid that Haigui would take over the positions of local Chiniese, because Haigui's experience is more valued by their employers. In some other cases, local Chinese are envious of Haigui and develop hostile alliances to exclude Haigui in daily work. One of my informants had to quit her job because of the hostility of her colleagues who did not have overseas experience. At the same time, Haigui disagree with many ideas and strategies of local institutions and government officials. Haigui not only experience difficulties at work, but

[53] Episode 16

their family lives also undergo tremendous challenges. Many of my informants maintained a long distance relationship with their spouses and children. In some cases, this long-distance challenge resulted in divorce or affairs outside of marriages. While the show articulates certain real problems Haigui would encounter when they return to China, the "main theme" of the show indicates that no matter how hard and challenging the work of research and entrepreneurship can be under economic reforms, the government would support Haigui and believe that Haigui will eventually play a significant role in helping develop China's economy and build a better society. The government is portrayed as a "parent" or "mentor" who can take care of Haigui and their problems. In this way, driven by nationalistic entrepreneurialism, the show serves as a political tool to encourage students still studying abroad to return to China, and to promote nationalism among local Chinese.

4.2.2 Taming the Chinese Fire

Beyond official representations of the Haigui phenomenon, there have been grass-roots discursive productions circulated among transnational Chinese communities, especially through the Internet. *Taming the Chinese Fire*, *Hui Guo Xun Huo Ji* in Chinese, is one of the most popular novels about the experiences of Haigui, written by a Haigui investor, based on his own experiences in China. This novel shows a version of Haigui experience that is very different from official discourses. The author named himself "Emperor," An Pu La in Chinese. The first chapter of the novel was published online in 2003, with subsequent chapters coming out regularly through 2009. The complete novel remains unfinished, but to date, the story presents a comprehensive picture of how a Haigui investor interacts with government officials and works with local Chinese companies. With a humorous language and interesting stories based on true events, the novel reveals many under-the-table Chinese business practices and shows the brutal realities of pragmatism, greed, and guanxi politics. This novel is not only popular among Chinese living abroad to understand a life journey of Haigui, but has also become a classic among local Chinese to understand the dynamics of doing business in China. Some MBA programs in China even use this novel as a case study.[54]

[54] http://an.haiguinet.com/Fire/bookindex.htm. Retrieved January 4, 2010.

The story began in 2003 with Bob Sunzi, an upper-middle class Chinese-American who left China to study in the US in his twenties. After graduation, he stayed in the US and held a good job in the investment industry. With solid knowledge about finance, a flexible and humorous personality, and a talent for guanxi politics, he easily adapted to new environments. After hearing many stories about Haigui who rushed to "dig gold" back in China, Bob decided to have a go at it himself. He sold his boat and other investments, left his wife and daughter in his American home, and returned to China alone, intending to open an investment firm there. Believing that the investment industry offered high rewards, he expected to use his overseas experience to generate high revenue as a Haigui in China. Bob understood that China was full of opportunities because of the fast-growing economy. However, as Bob finds, "the cheap and simple deals are beautiful outside, yet full of risks and traps. Beijing is the world biggest 'junkyard', gold and rubbish are mixed together, and you need to learn how to dig the gold out of the rubbish with strategies."[55] Therefore, he had to protect himself while digging gold in a junk yard. He had three strategies about protecting his identity in China: first, he would keep a low profile and avoid any publicity; then, he would not say too much, because silence is gold; last, he would not contact any old friends in China. There is a Chinese saying: the first bird who flies will get shot. He wanted to maintain a secret identity, because he believed this was a good self-protection strategy.[56]

Although living in the US for years, Bob still retained many core Chinese values, thus effectively promoting himself in the Chinese business world. He called this the "branding strategy." One of the core values in China was "face," or one's public reputation. It was important for Bob to build a "face," a powerful image in the Chinese business world based on his overseas experience. However, creating a powerful image did not necessarily involve a solid work foundation. In a pragmatic culture, "huyou," or mild fraud and deception (i.e. "hoodwinking"), was a more effective way to achieve certain goals in China. Although Bob did not have large investment reserves, he had to "huyou" others to make people believe he had a powerful background. He rented an office suite in a high-end building that housed many foreign companies in the central business district (CBD), bought expensive foreign office furniture, watches, suits, and pens, and he even obtained a military plate for his American Cadillac. In China, a prestigious social title was

[55] Chapter 1
[56] Chapter 1

essential. The military plate on a luxurious car indicated a powerful association with the government. This branding strategy gave Bob potential political and social capital, which, he believed, would eventually turn into economic capital.

Throughout the novel, the Chinese government was actively involved in business practices. Bob's first investment project was with a port management company in Shandong Province. The company was under the authority of the local government, but seeking foreign investment in order to expand the scale of the company, upgrade current technologies, and restructure as Chinese-foreign equity joint venture. Bob's investment company was registered on a Pacific island, and Bob had an American passport; therefore, his company was considered to be foreign investment. However, during interactions with the executives and personal research, Bob discovered that the company's business plan was not clearly defined and the accounts were not properly recorded. In addition, he realized that the company was not in need of money; their agenda was to use the collaboration with a foreign equity to diversify the mechanism of the management in order to get potential benefits. Moreover, since the joint venture model was popular at that time, the local company would "follow the trend," Sui Da Liu in Chinese, representing another core Chinese value. Without much investigation, as long as the majority of other people and institutions were doing something, the rest would want to follow the trend. Bob also realized that local government officials were all similar to businessmen. They were highly entrepreneurial and motivated to gain profits through different channels both for the company and for themselves.

The local region had certain norms when it came to doing businesses. The company used the government's resources to find potential partners; for example, local police cars were used to guide and welcome Bob in order to show that the government accords Bob "face" and prestige. During business meetings, company leaders were introduced to Bob in an official language, the purpose of which was to praise local government officials. This is known in Chinese as "Dai Gao Mao," or "giving someone a tall hat." Further, the company treated Bob to expensive dishes at the banquet to show he was valued as an important guest. In return, Bob had to drink a lot of alcohol with company leaders to show his friendship, respect, and desire to return "face" to the officials. Finally, in the evening Bob was treated to various entertainment venues including karaoke, massage, and the services of a

prostitute. This last activity was essentially important, because it was a key factor to make sure that a trustworthy partnership would be built together.

In order to build relationships and demonstrate reciprocal trust with a potential business partner, they had to share similar experiences together. This would make them "Tie Gemen," or "Tie" means iron. "Gemen" means brothers or buddies. If a relationship is "Tie", it means it was a very close and trustworthy relationship, an iron relationship. According to the company's executive, "iron brothers" could be formed in five ways: attending school together, being sent to the countryside together during the Cultural Revolution, fighting together in the army, splitting spoils together, and—finally—patronizing a brothel together.[57] The essence of building a relationship was that they knew each other's secrets; therefore, mutual trust would be built based on keeping secrets for each other. The cultural practices of drinking at banquets, frequenting massage salons, and visiting brothels were three key practices to build trust in the world of Chinese business. Later, Bob also found out that major entertainment businesses were backed by local government officials. These exclusive clubs, offering sumptuous decorations, food, alcohol, and high-quality prostitutes, were safe for government officials and businessmen to enjoy themselves, build trust and "face," reinforce guanxi networks, and get business done.

After living for a period of time in China, Bob came to understand three major issues in doing business in China.[58] First, decision-making was not often based on rationality, and in many cases decisions would be taken without responsibility. Moreover, individual judgment took precedence over scientific evaluations, such as a feasibility study or a business plan. Instead of strategic planning, decisions were "dependent on what the leader likes." Without good preparation of intellectual resources, human capital, and policy analyses, projects tended to fail, in which case local companies could withdraw from the project without responsibilities—thus negatively affecting their foreign partners. This lack of credibility and accountability increased the cost doing business in China. It also provided local companies with disincentives for investing over the long-term. Importantly, this was not only a personal problem, but an institutional one. Local entrepreneurs did not have faith in the future; therefore they would prefer making smaller profits in the short term rather than earn greater revenues over the long term. Finally, Bob learned that the legal system offered little protection against

[57] Chapter 6
[58] Chapter 7

irregular and illegal business practices such as misappropriation of funds, fake trading, and illegal loan. Foreign business partners would not be able to investigate those risks through a due diligence process similar to that in the US. Therefore, for foreign companies and Haigui, it was extremely challenging to do business in China. Often their business knowledge and expertise learned from MBA programs or from standardized and legalized business environments in Western countries would not fit in the business settings in China.

To cope with his various problems in China, Bob needed to develop certain strategies. First, he relied on social capital accumulated among a group of successful Haigui. These Haigui formed a social circle of elites who shared their intellectual, business, economic, cultural, and social resources. In Bob's social circle, Haigui executives working in multinational companies in Beijing helped Bob understand business norms and tricks to negotiate with local companies. Haigui entrepreneurs who ran exclusive entertainment clubs helped Bob build close relationships with government officials, and cosmopolitan Haigui artists assisted Bob in obtaining artwork to accumulate cultural capital that would eventually turn into economic capital. Finally, business professors working in Western universities helped Bob analyze business evidence and strategies.

The novel also reveals that Bob's personal charisma and sense of humor helped him to optimize social relations for career development, especially across gender lines. His wife stabilized the family relationship for him in the US by maintaining the house and taking care of his child. However, as an "MBA man" (married but available), he had flexibility to build connections with women who could help him access certain resources. Although not always sexually involved with these women, he kept their relationship ambivalent through strategic flirtation and reciprocity. For example, his personal assistant Miss Zhang assisted Bob in understanding business procedures as well as negotiation norms and strategies with Chinese men. As a young, educated, and good-looking professional, Zhang capitalized her personal gender advantages in interacting with men. For example, she knew that Bob could not hold excessive amounts of liquor, so she helped him by drinking for him, thus preventing government officials and businessmen from pressuring them both to drink too much. Through her repertoire of tricks such as these to entertain officials and clients, Zhang cultivated personal yet professional relationships with their business partners, thus enabling Bob to achieve greater success.

Another key female figure was Miss Yin. Once a singer and actress, Yin maintained a fashionable and elegant look and demeanor. Moreover, her accouterments conveyed a powerful image: a luxury BMW sports car, foreign designer clothes, shoes, handbags, and jewelries, as well as exclusive memberships in high-class apartment buildings and clubs. After studying art in Europe, Yin returned to China and started a cultural production company. Yin not only had cultural capital and sway over men by relying on her gender, she also had political connections with the government. Before she left for Europe, she had been a mistress to a man who became one of the most powerful officials in the region. Although she was no longer in that relationship, she was able to mobilize government resources easily due to her personal history. Her gendered characteristics enabled her to wield power over men, giving Yin the political influence that other officials and entrepreneurs value. In many cases, men appreciated her feminine beauty and high-class style, and at the same time, feared the power she employed due to her special relationships with top officials. At the same time, these same men would take advantage of her power, looking down upon her by calling her "Li Shishi" (a famous prostitute in the Chinese history who had a relationship with Emperor Zhao Ji during the Song Dynasty). With respect to Yin's relationship with Bob, there was a double gender power effect. Yin could manipulate other men, yet she in turn was manipulated by Bob. Yin was deeply attracted to Bob's cosmopolitan values, cultural knowledge, business expertise, and a sense of humor. She was willing to help Bob with anything he wanted, and in practice, she connected him to many important individuals and resources. In this way, Yin had a type of power which men--including Bob—could not gain for themselves. Paradoxically, however, her feminine body and stylish looks that afforded her this power were transformed into different forms of capital, which were circulated and consumed among men.

Since the novel has not yet been completed, the end of the story remains uncertain. But according to the author's tentative titles of those unfinished chapters, readers assume Bob does not find a happy ending, and he returns to the US disappointed and unfulfilled. As a counter example of the official discourses which present a nationalistic picture designed to attract Chinese abroad to return, this grass-roots novel written by a Haigui investor reveals many dark sides to the story of return. In the novel, local government officials welcome Haigui because their overseas experience, capital, and expertise can help expand the local economy, which in turn will enable

officials to build *Zhengji*, or political achievements. This political capital will help officials gain other forms of capital. Developing the economy and building one's personal profile are thus mutually beneficial. Haigui are less concerned about their social responsibilities as portrayed in official discourses, positioning them as the motherland's pioneers or heroes. Instead, they return to China in search of both economic benefits and a sense of achievements by becoming successful entrepreneurs. In addition, Haigui are driven by pragmatic reasons rather than nationalistic sentiments. In this alternative discourse, China today is not only full of economic opportunities but also traps, conspiracies, and struggles. Being entrepreneurs in the business world in China, Haigui need to strategically utilize their overseas resources and connections to interact with local Chinese government officials and businessmen. In this process, their foreign business expertise does not necessarily help them cope with local problems, and it hinders their adaptation to the Chinese business environment. Therefore, in this discourse, Haigui need to redefine their strategies in China and rely on various kinds of local resources to fulfill their agendas.

4.2.3 Imagined Haigui Communities on the Internet

In addition to artistic or fictionalized discourses about Haigui, various forms of individual and interpersonal experiences about Haigui or Haibugui were shared, discussed, debated, and imagined on the Internet among those who have returned to China and Chinese still living abroad. For those who remain overseas, a major topic of discussion is whether they should return or stay. Through interactions with other Chinese online, they try to validate and rationalize their decision by reading others' experiences and searching for advice from their Chinese fellows. For those have returned or traveled back to China, they present their own experiences in China and share them with other overseas Chinese. For those who have not been back to China for a long time, reading Haigui stories posted on the Internet are like reading monographs of the journey to the East. These stories and experiences have created various forms of imagination about China. To them, China is their motherland where they grew up, but also an unfamiliar society that is undergoing tremendous changes.

Two of the main online forums among transnational Chinese communities are Wenxuecity.com and Mitbbs.com. They are both based in the US and serve as information portals as well as online forums for overseas Chinese, the majority of whom are mainland Chinese professionals and students working or studying in western countries, especially the US (where over 70% reside). Many of them hold or are in the process of completing post-graduate degrees. Over 97% of online forum users have received undergraduate degrees, and 72% have obtained a Master's degree or higher.[59] Most of the professionals work in the technology, finance, and international trade industries, while some are professors, researchers, doctors, or lawyers. There are also various artists, self-employed individuals, or housewives. The monthly user visits of wenxuecity and mitbbs are 2.7 million and 1.1 million on average, respectively[60]. As expected, the experiences shared on the online forum are more realistic than the nationalistic stories of Haigui scientists produced by official discourses, or fictionalized stories of Haigui entrepreneurs. On the forums, these Chinese write about what factors influence their decisions to return or remain, what changes shock them when they travel to China, how they feel about interactions with old friends, family, relatives, and other local Chinese, and what difficulties they experience while in China.

To be a Haigui or to be a Haibugui has been one of the hottest and longest-running topics on these. An analysis of their writings reveals some major factors that Haigui and Haibugui consider in their decision-making. For those who decide to return, maintaining family relations in China is an important reason. Many Chinese living abroad have close ties to their parents in China. Some of them have spouses or boyfriends/girlfriends working in China. Although many of them can find a decent job and live a stable life in the West, they find it hard to maintain a long distance relationship with their family. This distance poses great challenges for these Chinese abroad who value traditional ethics such as fidelity and loyalty. For example, a user named "laurence1832" wrote on the forum: "sometimes I ask myself, even I have a good fortune in the US and can invite my parents to live in the US with me, will they get used to the life here? They are too old to learn a new language…"[61] Another user "FasionIce" wrote that her personal reason to return to China was that she did not want to be apart from her parents. This was a more important reason than romance, income, social

[59] wenxuecity.com, mitbbs.com, retrieved Feb 1, 2011
[60] http://siteanalytics.compete.com, retrieved March 2, 2011
[61] http://www.mitbbs.com/article_t/Returnee/13175177.html, retrieved March 18, 2011

status, and food. "On the one hand, I have a good relationship with my parents, and my biggest fortune is to be their daughter; on the other, I realize that my parents are older and older. They cannot live without me, because I am the only child in the family. My parents are both in their 50s. If I would live in the US for the following 10 years, even if I could visit them in China twice a year, how many times can I visit them? Counting this, I cannot do so nevertheless."[62] Her opinion was supported by many users who showed similar worries. More and more Chinese who came to study abroad are only children. Taking care of their parents and staying with them when they are old is a Chinese norm, but living thousands of miles away from China creates a gap for filial Chinese who want to fulfill their Chinese core values.

However, not all online users agree with this view. Some Haibugui responded to the post by saying that they wanted to stay in the US, and ask their parents to live in the US with them, because they trusted the health care system more than the one in China. Some responded because their wives preferred the environment, their children enjoyed the educational culture more, and they feared the severe school competitions in China. Therefore these overseas Chinese prefer to stay. However, regardless of whether they return to China or not, family is one of the primary concerns in their decision-making process.

The second common reason to return is that many Chinese living abroad cannot gain a sense of belonging in foreign cultures. They prefer Chinese lifestyles: food, entertainment, and social interactions. Many do not agree with cultural values in the West and fear that children growing up in the West will lose Chinese "roots" and values. "Songbingjia" wrote, "if I would stay in the US, my children and grandchildren or I would become American citizens. How can I bear with values of Americans and the American government who are antagonistic against my motherland? …I am a Chinese!"[63] "Allisp" agreed with him and said, "the main reason that I want to go back to China is that I do not want my children and I to be incompatible in terms of cultural backgrounds." "Xbzht" expressed that he understood "Songbingjia" 's feelings and called him "a sentimental and patriotic Chinese." In addition, for many female Haigui who are still single, returning to China would possibly help them find a husband in China, because they fear there are too few Chinese men who are available overseas and they do not want to enter into an interracial marriage.

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[62] http://www.mitbbs.com/bbsdoc/Returnee.html, retrieved April 2, 2008
[63] http://www.mitbbs.com/bbsdoc/Returnee.html, retrieved April 2, 2008

In another post, "karks" summarized two major disadvantages of living in the US. First, he believed that Chinese would not be accepted into the mainstream of American society. "Instead of financial well-being, being in the mainstream depends on your friends, your life activities, and your ability to understand American society. More importantly, it depends on how society can understand and perceive you."[64] For example, he would choose watching Chinese ping-pong instead of American football. The second disadvantage was that Chinese lack social capital in the US. In China, there are norms to gain certain resources through guanxi, whereas in the US, Chinese find it hard to utilize their social networks and they often have very few "white American friends" who ""karks" considers as holders of mainstream social capital.

While some readers supported his arguments, many disagreed. "Bzmg" teased "karks" by asking him whether he grew up in Chinatown so that he did not have "white social networks." "Lsqg" argued that the US is an immigrant country and people who share similar cultural and ethnic backgrounds would likely be in the same social circle, and it would not fundamentally mean they were marginalized and could only stay in their own ethnic groups. "Teller" argued that it was not necessary to return to China, because even though he was not accepted into the "so-called" mainstream society, his children could develop their own social capital in the US and participate more in politics. He teased, "African Americans do not think about returning to Africa. So what? Obama became the president."[65] The debate about whether to become Haigui or Haibugui shows that there are contradictions among Chinese living abroad about how Chinese prioritize their cultural values, their understanding of the mainstream society, and their sense of belonging. There is hardly a uniform rational way to evaluate the decision of return. However, Chinese have to reflect upon what their cultural identity means to them, make sense of what it means to be Chinese, and choose a way of living that they and their family prefer. This may be either as Chinese living in China or in a non-Chinese society, but the desire to retain one's "Chinese identity" is paramount.

Another important reason that motivates Chinese abroad to return is the potential opportunity engendered by the fast-growing economy in China. In many posts asking about Haigui vs. Haibugui, online Chinese seek for

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[64] http://www.mitbbs.com/article_t/Returnee/13177389.html, retrieved March 20, 2011.
[65] http://www.mitbbs.com/article_t/Returnee/13177389.html, retrieved March 20, 2011.

advice among their Chinese fellows about various options for self-development in China. Beyond benefits that the government tries to promote, these Chinese are more concerned about career paths based on actual job opportunities and potential personal development with employers. Moreover, according to the discussions, their rationale for decision-making is less associated with nationalism and more oriented toward practical concerns. They rely on online forums and their Internet fellows for practical advice regarding self-development. A typical post to ask for advice is titled as: "an offer at a Nanjing company, shall I return?"[66] The post said,

> I have been a postdoc in the US for more than two years. I do not see any hope here and I do not have much savings. There is a company in Nanjing with a pretty good reputation and about 500 employees. I will be probably offered a department director position, but the salary is no more than RMB200,000[67] before tax. However, the company will possibly go public next year and they promise me to give me stock shares that will be worth a few millions…I feel returning or not returning is like gambling, and to win or to lose will be determined based on one decision. Please help me analyze this situation. It might be a turning point in my life.[68]

In one day, twelve people responded to his post and offered their opinions, some of which are serious suggestions to help him evaluate the decision practically. For example, one advice posted was that companies in China would make a lot of promises to Haigui. But some would never be realized. In his case, forget about the stock shares, because nobody would know whether the company could go public or not. Things keep changing in every minute in China, so a suggestion for him is not to take the promises local companies make seriously unless it is formally written in a contract. Even if there is a written contract, Haigui should be prepared for unexpected problems happening to the contract.

It is commonly accepted among these Chinese that the life in the US for many is peaceful, stable, but boring. For those who enjoy a stable family life, staying in the US is an option. However, for those who prefer an adventurous life or are not willing to settle down too early, going back to China is a better option. For example, in a post, "Jadebell" wrote, "for self

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[66] http://www.mitbbs.com/article_t/Returnee/13177093.html, retrieved March 20, 2011
[67] 1 dollar equals 6.5 Chinese RMB. His salary is about 30,000 dollars.
[68] http://www.mitbbs.com/article_t/Returnee/13177093.html, retrieved March 20, 2011

development, return; for a stable life, stay."[69] Haigui is supported if you want to have a career because "if you are a man and have some ambition, living in the US can give you a life but not a career."[70] Another user "goahead2008" expressed similar ideas: "no matter with money or none; no matter being successful or not, we are all thinking about a higher goal, a dream in our heart, that is, to make a big difference. In the US, I dare to ask: how many Chinese have such a dream? Most people's dream is more or less to have a safe and stable life. To make a big difference is not merely for money, but for our own ambition and aspiration, for the fact to approve that, born to this world, we can do something that we can be proud of."[71] Haigui or Haibugui is a personal choice about defining the meaning of one's life. For some Chinese, pursuing a big dream, adventuring in uncertainties, and participating in dynamic changes in China are more meaningful to fulfill their life goals. For others, having a quotidian lifestyle, working in a stable job, and living a life free of uncertainty and change would be achieved more easily by staying in the West. In this way, China and the West are categorized into a dichotomy of different worlds and different life trajectories by these Chinese living abroad.

The decision of Haigui or Haibugui will lead to a different future with different meanings of life attached to each of them. Additionally, today's China is no longer a familiar land to many Chinese living abroad who have not been back for years. When traveling back from China, they share with their Internet fellows that "it is a different place in one year, and it is a different world in three years." After hearing other's stories traveling in China, they can incorporate their previous imaginations about China through their experiences. The Internet virtual space becomes an imaginary site for them to create and recreate various kinds of imaginations about China and their Chinese experiences. The first experience they usually share is about the material changes happening in China. "Beijing is too big and changing too fast. It is easy to get lost in many places."[72] "These years, the infrastructure in my hometown is developing very fast. There are more and more personal vehicles. But drivers' skills are worse and worse while the economy is growing."[73] "Take Beijing and the nearby area as an example. Spring is very bad. Within two weeks, there were three dust storms. Every

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[69] http://www.mitbbs.com/bbsdoc/Returnee.html, retrieved April 2, 2008
[70] http://www.mitbbs.com/bbsdoc/Returnee.html, retrieved April 2, 2008
[71] http://www.mitbbs.com/bbsdoc/Returnee.html, retrieved April 2, 2008
[72] http://www.mitbbs.com/article_t/Chemistry/31324495.html, retrieved February 2, 2011
[73] http://www.kanzhongguo.com/node/385671, retrieved Jan 20, 2011

time, the whole world was dark…Moreover, summer is hot to death."[74] "The development in China is extremely uneven. Northern cities except Beijing are highly polluted. No one cares and no money is invested to solve these environmental problems. In the Yangtze Delta area, there is a lot of garbage floating in the river."[75] The experiences are focused on the dramatic changes in the society and environmental problems that they observe when they travel in China.

Online participants also share experiences related to the living conditions of relatives, friends, and people more generally. Chinese who return comments that they are surprised at how expensive housing is in major cities; the housing in Beijing and Shanghai is four times more than it was five years ago. In addition, it is not rare to see a strange consumption pattern: "buying a good quality product is not as valued as buying an expensive product." "My mom isn't an exception. She believes that the more expensive it is, the better it is. She showed me her 'shopping trophies' (actually most of them are gifts from others): two boxes of tea cost RMB 1,600 (nearly $250), fish maw costs RMB 700 (more than $100) per kg…Maotai[76] is RMB 1200 (nearly $200) "[77] "My life has not progressed during my postdoc years in the US. My living conditions are the same as six years ago, while my cousins in China own two or three expensive apartments and drive nice cars. For them, earning RMB 300,000 ($ 46,000) per year is not much, and there are other income sources such as stock trading."[78] In the eyes of these Chinese traveling back to China, the dramatic improvement of living conditions and the changed consumption habits are shocking and hard to understand. It seems to them that there are many ways to generate profits and make money in today's Chinese society and there are unstoppable changes compared to their own stable and unchanged lives in the West.

However, in addition to their surprise about the material changes in China, they also share concerns about the moral crisis and social problems that are emerging. Many of them argue that because the economy in China is developing too fast, many institutional frameworks and legal systems cannot be established and standardized to match the speed of economic development. Economic and social conducts are not regulated with specific rules. Therefore, problems arise such as illegal economic activities, immoral

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[74] http://www.mitbbs.com/mitbbs_bbsdoc.php?board=America, retrieved May 1, 2006
[75] http://www.wenxuecity.com, retrieved December 24, 2007
[76] The most well-known liquor brand produced in Guizhou Province. It is called the "national liquor" in China.
[77] http://www.kanzhongguo.com/node/385671, retrieved Jan 20, 2011
[78] http://www.mitbbs.com/article_t/Chemistry/31324495.html, retrieved February 2, 2011

behaviors, and impetuous minds. A Haigui called "loriy" wrote, "today's society in China is on the initial stage of capital accumulation. Everyone is thinking about making money. Money is highly valued in many Chinese minds. No matter you are a Haigui or Tubie, and no matter you have a Ph.D. or Masters, you are nothing if you do not have money."[79] Compared to Western societies, Haigui cannot find a similar system of credibility in China. "People do not trust each other! It is a society of huyou."[80]As a way of mild deceit, "huyou" is considered a skill to extract resources, create value, and protect oneself from being "huyoued" in China. "If you do not huyou others, others will huyou you."

Guanxi is also important in the business world. "If the father is the president of a central bank, he would help his child to be a president of a local bank. People without guanxi hardly survive in the field. Social capital is accumulated through generations. To start from scratch is extremely hard in the industries of power, petroleum, banking, telecommunications, etc."[81] Without guanxi, it is hard to build a successful business in China. "I was planning to build an anti-fire project for forests in a county. The local government agreed and was happy about our proposal. I thought I would make this deal for sure. However, when we went to bid for the deal, another company won. Later I learned that their proposal was almost the exactly same as ours (they copied our proposal). I finally learned that this company was run by a relative of the official in that county." Haigui feel frustrated by various kinds of misuses of guanxi in the Chinese society. They have to learn how to build and maintain good relations with government officials and clients. They cannot bribe openly, so they need to find other ways to make them happy by "thinking hard to change ways to entertaining them."

> One way is to treat them to expensive meals and "karaoke" activities with girls. The dishes have to be something exotic and rare. The more expensive the dishes are, the more "face" those client guests would gain from the hosts. Similarly, at a karaoke bar, the "madam" would bring more than ten or twenty young girls around 20 years old and line them up in front of clients for them to choose. Some girls are from the countryside and have to work in karaoke bars to support their poor families back in their hometown. Some are college students who use the opportunity to

[79] http://forum.chem8.org/archiver/tid-13861.html, retrieved March 20, 2008
[80] http://www.mitbbs.com/bbsdoc/Returnee.html, retrieved April 2, 2008
[81] http://forum.chem8.org/archiver/tid-13861.html, retrieved March 20, 2008

meet with important and rich men. Haigui are shocked by some of the young girls' moral standards.

> After chatting with some of these girls I found that their way of thinking is very different from us when we were in college. They are curious and would like to have fun in these kinds of entertainment areas, but their parents or economic conditions do not allow them to do so. As a result, they have to work here. Some want to find a rich boyfriend here. When I asked them what if that guy is married, they gave me a look to show they would not care. They told me, "I do not want to destroy their families. If I have a feeling for him, we can be together. If not, we will break up. We like married men and those who have economic power"…I am really surprised at today's girls' open opinion about love.[82]

Living a simple lifestyle in the West, Chinese who travel to China would find it hard to compromise their own values about what is right and wrong for the sake of profits and success measured by material and monetary conditions. At the same time, they sense an impetuous uneasiness in Chinese society today that is caused by moral crisis and deregulated activities in people's daily lives.

The experiences written and shared by Chinese traveling back to China have created various kinds of debates and imaginations within the online communities among Chinese living abroad. In an imaginary space of overseas Chinese themselves, through discussions and recreations of experiences and imaginations of Haigui and China, transnational Chinese subjects constantly deconstruct and redefine a dynamic symbol of Chinese-ness. It is a sentimental and nostalgic memory of their past, it is a pragmatic and even brutal reality of their present, and it is also an imaginary and uncertain vision of their future. Transnational Chinese who form an imagined virtual community reflect upon their own experiences and values, compare the two different worlds in China and in the West, rationalize their life choices, and reconstruct a way of living which they define as meaningful.

[82] http://forum.chem8.org/archiver/tid-13861.html, retrieved March 20, 2008

4.3 Neo-Regionalism and Imagined Public Sphere

In this chapter, I have presented a discourse analysis and an ethnography of online Chinese communities about Haigui subjects. Foucault (1972) argues that discourses construct certain realities and knowledge. The production of discourses is a social practice of exercising power. Subjects are formed in discourses through strategies of domination as well as those of resistance. By analyzing various kinds of discursive productions including news, official publications, TV shows, novels, discussions and monographs on the online forums, I have argued that as modern Chinese subjects, "Haigui", is not a unitary category in discourses. The construction of Haigui represents a complex process of subject making in contemporary China. First, these various ways of constructing Haigui show the different rationalities and strategies of different groups of Chinese. Second, the discursive differences about Haigui reinforce the contradictions and tensions between different groups of Chinese subjects. In addition, discourses about Haigui are not simply produced to exercise hegemonic power of certain institution and groups, but rather are deconstructed and recreated through linguistic and communicative rationality shaped and circulated in the emerging modes of public spheres.

Throughout the past decade, Chinese subjects who have returned to China after studying and/or working in foreign countries were given different labels and openly discussed in public discourses. Their overseas educational or working background has become the most obvious criterion to distinguish them from other Chinese who have not studied or worked in another country. Although they share many similarities with local Chinese, their overseas experience has increased the disparity with local Chinese. Haigui is a label that public discourses use to describe these Chinese returnee subjects, and it has become a collective identity that indicates and emphasizes the distinguishability of these returnee subjects. However, Haigui is not a stable category to define Chinese returnees. It has undergone various deconstructions and reconstructions, and it has embodied various meanings to justify what it means to be Chinese in a globalizing world.

In earlier years, official discourses tried to promote the image of Haigui as pioneers in the modernity movement of China. With their advanced technologies, expertise, and rich experience and social responsibilities, Haigui were portrayed as patriotic and desirable modern Chinese who could contribute to China's economic development through innovation. The

romanticization of Haigui created a market among Chinese employers who would invest in Haigui with higher compensation and attention. Driven by state nationalistic entrepreneurialism, these nationalistic and economic incentives discussed in public discourses motivated Chinese living abroad to return. The public discourses also captured an emerging form of Haigui who frequently traveled across national borders as Haiou. Haiou were considered and promoted as a more flexible form of life among modern Chinese subjects. However, a large amount of discussions about the problems of Haigui caused by the differences in values and work ethics between China and the West were generated through public discourses in newspapers and online. Haidai was used as a discriminatory label to challenge the legitimacy of Haigui as more desirable Chinese subjects. Accordingly, Chinese living abroad created discourses about rethinking the decision of return. In the late 2000s, Haibugui became popular as a label to describe Chinese living abroad who would not return to China. Haigui vs. Haibugui is a continuous debate in the public discourse and among Chinese living abroad to rationalize their life and work strategies and negotiate for the meanings of being Chinese in the contemporary world.

Regionalism is a term to describe the ideas that favor a specific place and population based on geographical locations defined as a region. I use "neo-regionalism" in a sense that a specific group of people are favored or discriminated against based on their certain backgrounds associated with a particular location. I have argued in this chapter that neo-regionalism has been created and sustained through various forms of discourses about Haigui and Tubie. The discourses of Haigui and Tubie have produced stereotypes and generalization about Chinese who either have overseas experience or not. Although Haigui and Tubie are all Chinese who speak Chinese and share similar Chinese backgrounds, they are considered different—as different as people from different regions—due to their certain personal history of living either in foreign countries or solely in China.

Tubie is used to describe local Chinese who have no experience in another country. The meanings associated with Tubie are usually negative, such as having limited knowledge, not being cosmopolitan, and having no aestheticism. These stereotypes are created through comparisons with Haigui, which are considered knowledgeable, worldly, and cultured. While Haigui and Tubie are separated into two opposite groups of Chinese in public discourses, the emphasis on the conflicts and differences has reinforced the tensions between the two groups. Based on these discourses, Haigui and

Tubie are favored or discriminated against on certain occasions by different groups of Chinese individuals and intuitions. This neo-regionalism has created further tensions between those Chinese subjects with international experience and those without.

In China, the Western definition of "the public sphere" is not very relevant. Under the restrictive government policy towards publicity by the Chinese Communist Party, the majority of Chinese people are repressed with limited channels to express their opinions and emotions in the public. However, transnational Chinese communities on the Internet are a possible mode of public sphere in the Habermasian sense that is relatively free from the hegemony of the state power and consumerism of the commercial economy. As a mode of coordination of human life and social integration, public discourses produced in the online public sphere offer "intrinsic openings to the identification of reason and will" (Calhoun 1992). Instead of challenging the state power, the transnational Chinese public online mainly functions as a space for transnational Chinese to form a kind of communicative rationality for self-governing as well as a liberal consciousness about society and themselves through debates and monograph sharing.

This transnational Chinese public forms an imagined community in a sense of what Benedict Anderson defines as a socially constructed space to imagine the nation and to perceive themselves as part of the nation. I have argued that Chinese living abroad have formed an "imagined public sphere" among themselves on the Internet to define what Chinese-ness means to them. Through online discussions and writings about others and their own Haigui experiences, Chinese living abroad have created various forms of imagination about what China is today, although many of them have not been in China for years. Those who have become Haigui or travel to China write about their experiences with local Chinese and what changes they have observed in China. These writings on the Internet constantly generate debates and discussions among Chinese living abroad, which in turn produce discourses about what China is in an imaginary space and as imagination in the minds of these Chinese individuals. Such discursive imagination serves as a source for overseas Chinese to define and redefine what it means to be Chinese living in the contemporary world. It also cultivates certain kinds of professional entrepreneurialism through communicative rationality among transnational Chinese. In the following chapter, I will look at how the actual experiences of Haigui in China present certain social realities and shape

Haigui subjects through cultural practices in producing innovative entrepreneurship.

V Cultural Practices in Innovative Entrepreneurship

5.1 Sites of Innovative Entrepreneurship

In Beijing, Zhongguancun High-tech Zone (ZGC) and the Central Business District (CBD) are two main clusters of high-tech companies, universities/research institutes, and transnational professionals. I spent about five months in each site, doing participant observations in two companies headed by transnational professionals and interviewing other transnational and local professionals working in high-tech industries. The first company where I conducted participant observation was located in a high-rise building within a university science park. The area is in the heart of ZGC, along with a dozen or so additional top national universities and thousands of technology companies (see Figures 27 and 28). Each year, thousands of the best high school students in the country compete in national college entrance exams, dreaming about attending college in Beijing. China Polytechnic University[83] (CPU) is one of the most desirable choices for the most competent students who excel in the exams. CPU's reputation not only attracts the most talented students in the country, but its university science park also attracts a variety of start-up companies.

Adjacent to the university, several skyscrapers with dazzling windows showcase CPU's properties. The university science park is planned and designed as an incubator mainly for high-tech start-ups. Moreover, the building where CPU resides is fully occupied with over sixty companies. Each company has private offices on each floor, along with one or two meeting rooms for companies to share. There are three elevators, between which there are two TV screens, so that people can watch television while they wait. The company's office was located on the 12th floor of the building. The 1,000 square foot office was comprised of open cubicles, where the majority of the employees worked. However, a glass wall separated two private rooms from the open cubicles. One of the private offices belonged to the founder of the company, the other was used as a conference room. When I arrived, I was also assigned a cubicle—the first one next to the front door.

[83] For confidential reasons, I coded all identical facts about the company and employees.

Figure 27 ZGC

Figure 28 University science park buildings

I met the founder, Dr. Ru[84], at an entrepreneurship forum in Silicon Valley. He earned a Ph.D., MBA, and MS degrees from three top universities in the US and China. It was rare to find a frown on his face, as he always appeared optimistic, modest, and energetic. Before he started his own business, he worked for a multinational company and a research institute in the US and Asia, respectively. Established in 2008, Dr. Ru's company was a small information technology start-up, called "Sunny

[84] For confidential reasons, I have coded all identifiable information, including the names of the informants and companies.

Networks." "Sunny" was Dr. Ru's daughter's name. The company's Internet domain "MeetHere.com" was named by Dr. Ru's son. These naming conventions illustrated how much Dr. Ru valued his family although they lived on the other side of the earth in Silicon Valley. In fact, he always liked to talk about his children when making casual conversation. He was very proud of his 18-year-old daughter who was on the American youth national swimming team and received a full scholarship to one of the top universities in California. On the wall of the office, the business license showed that the company was registered as a "high-technology enterprise" by the Science and Technology Committee of Beijing. Based on information technologies, the current company was trying to develop an online social networking platform for young professionals interested in entrepreneurship. Since Western companies such as Facebook and LinkedIn became popular, Dr. Ru wanted to develop a product that could combine the features of the two companies. Dr. Ru had some experience in this area; before creating Sunny Networks, he ran another Internet company developing a product similar to Paypal in ZGC. However, he changed his business strategy three years later, believing the current business model would be a better fit in China.

Besides Dr. Ru, the company had seven full-time and three or four part-time employees. In the mid 20s and early 30s, most of the employees had Masters degrees, either from a Chinese or a foreign university. Most of them used their English names at work, but they still called their boss "Dr. Ru." Gina was Dr. Ru's assistant, and she, along with another employee, was responsible for business development. Jack, John, and Tom were in charge of developing the technology of the online product "MeetHere;" Ming was the web designer; Feng did administrative work and accounting. In addition, during my time at the company, I met a dozen students who were studying in nearby universities, but trying to gain some work experience through internships at CPU. Working as a regular employee in a small start-up company, everyone had his own assigned and undefined miscellaneous responsibilities. Although I had an administrative role in the company, all of the employees knew that I was an anthropology student conducting fieldwork at their company. While observing everyone's work, I interacted with my colleagues on a professional level as I assisted the CEO at different meetings and events and helped the company develop and promote its product.

Since it was a small office, employees could openly and easily talk to each other during work. With a similar age and background in a small

community, employees were very relaxed and friendly with each other. At lunchtime, almost all the employees went to the dining hall in the basement of the building together. This was a place where employees at different companies throughout the building could meet each other. Every afternoon, I could hear engineers and managers talking about their work and personal lives. Also, as Dr. Ru seldom joined us during lunch, it presented a casual opportunity for employees to gossip freely. In ZGC, there were many high-tech start-ups like Sunny Networks, which were founded by Haigui. I lived in ZGC for five months, working at Sunny Networks and interviewing other similar companies, before I moved to the central business district to observe companies that were established by foreign bosses.

Similar to Sunny Networks, Atlantis Net is also a start-up company that relies on the Internet platform as its business model. It is mainly an e-commerce business that targets religious individuals and institutions in China. In China, e-commerce businesses are considered within the category of information technology, one of the fields of high technology. Atlantis Net is located in central Beijing's main business district, near the 2nd ring[85] in the downtown area. However, unlike the university science park area in ZGC, this area does not have a "university/academic atmosphere" populated mainly with students and technical professionals. Walking in the surrounding areas, I could see many skyscrapers housing large high-tech companies (see figure 29). In addition, banks, shopping malls, restaurants, bars, and nightclubs were easily accessible. Because of its international and cosmopolitan image, the central business district also attracts many multinational companies. Instead of students, there are business professionals, wearing suits and ties. Many female professionals dressed in a sophisticated manner, holding designer bags and wearing nice jewelries.

Atlantis Net has two offices on the fourth floor of a former hotel that had been converted to business offices. In this building, there are dozens of small high-tech companies as well as travel agencies and educational services. The office is not populated with cubicles; instead, each employee is assigned a desk. In the office, some decorations were readily visible: six crosses with some words from the Bible such as eternal life, faith, trust, and love; a Christian calendar; some Christian postcards; an American flag and a

[85] The city of Beijing is spatially mapped by the rings of roads. The center is Tian'an Men Square; the 2nd ring road forms a rectangular loop around central Beijing. The 3rd ring road forms a larger rectangular loop further from the center. Then the fourth, fifth, sixth, and seventh ring roads are even further from the center.

Chinese flag. There were also some books on the desks, reflecting business and Christian themes.

Figure 29 Offices of the high-tech companies in CBD

I met Jerry, the founder of Atlantis, at a business event in Beijing. He accepted my interview request and invited me to visit his company, after which he agreed to let me conduct participant observation in his company. Jerry was an American man in his 50s, with a calm, independent demeanor that conveyed his seriousness about his work. He had a great deal of international experience due to his previous position; Jerry was a technical manager for a large multinational company, and as such, he lived on many different continents for eighteen years. However, a few years ago, he and his wife, Susan, visited one of their sons in China and fell in love with the country, so they decided to move to China and begin a new career. Both of them were Christian, and they wanted to establish a company that produced religion-based services in China. Both Jerry and Susan had Chinese names and could speak some Chinese. As a housewife, Susan worked part-time at

the company to help out. She was a gentle, kind person with a sense of humor. Susan learned to speak Mandarin fluently, and Jerry liked to joke about how often Susan teased him about his limited Mandarin. When they lived in France in earlier years, Susan also learned French more quickly than Jerry. They were happily married, and Susan told me even today she could not be separated from Jerry for more than one week, because she would miss him very much. For this reason, they were never separated while Jerry was relocated to different countries for his job. When Jerry moved to China, Susan accompanied him and helped him established Atlantis and worked three days a week at the company.

Atlantis Net was similar to Sunny Networks in size. Besides Jerry and Susan, there were eight Chinese employees who were all Christians. Most of them were in their 20s and had college degrees. Lucy had studied in Australia and was in charge of accounting and human resources upon her return to China. Windy had previously visited the US and was responsible for product design as well as interpreting for Jerry. These were the only two employees who used their English names at work. Junpei graduated from the Business School of one of the best universities in China and was in charge of business development, as well as some technical aspects. Xiaofang was the key engineer. Ping was the sales representative and worked with Ling in customer service. Two additional employees, Dayong and Yuhua, were in charge of the warehouse that stores products to be sold on the company's e-commerce platform. Although there was no common dining hall in the office building, there were many nearby restaurants. Employees sometimes went to lunch together, and sometimes brought their own lunch, since there was a microwave at the office.

Knowing that I was at the company to do participant observation, the employees were very open with me. I found that there was a strong sense of community within this company, and the relationships among employees were very close. They collaborated with each other at work, but also were concerned about each other's personal and family problems and provided emotional support to each other. As a newcomer, I was welcomed immediately to the community. Similar to my tasks at Sunny Networks, I had various responsibilities at Atlantis Net, such as translating between Chinese and English, participating in business meetings, and conducting market analyses. I also accompanied the employees to different church events. I lived in the central business district for another five months,

conducted participant observation at Atlantis Net, and supplemented these data with interviews at nearby foreign companies that employed Haigui.

How did these two different kinds of start-up companies produce information technology products similarly and differently? What kinds of problems do they face in their daily business practices and how do they cope with these challenges? In the following sections, I discuss a few major findings that my fieldwork has revealed about producing innovative entrepreneurship in China. By comparing and contrasting the two types of companies, I focus on five major areas. First, I discuss how innovation was understood differently by Haigui, foreign businessmen, local Chinese, and officials. Then, I present how innovation was redefined and produced in the daily process of producing innovative entrepreneurship. In the next two sections, I investigate the social organization in the companies with respect to leadership and teamwork ethics, as well as analyze the gender issues in innovation production. The last section deals with problems in relation to guanxi politics between companies and the government.

I argue that in response to nationalistic entrepreneurialism, transnational professionals have developed professional entrepreneurialism in their daily practices: using their transnational experience and expertise flexibly and reflexively to deal with cross-cultural conflicts and relying on local Chinese to identify innovative markets in China. The production and development of technological innovation in China are not solely based on economic rationality and standardized productivity. Moreover, technological originality is not prioritized as a way to measure the quality and value of a technological product. Instead, innovation has its own cultural specificities. The idea of innovation is seen as a strategy to mobilize resources for the government and for the companies themselves. Various cultural elements are identified as important factors that shape the outcome of innovation production. The entrepreneurial practices are configured through mixed strategies of calculative rationality and cultural practices. Haigui have to adjust their strategies and expertise to compromise due to the limitations within Chinese business settings. Meanwhile, they still want to prioritize their access to transnational networks and resources, and they believe that their Western knowledge and experience would eventually fulfill their career goals and philosophies in China. However, for foreign companies—while they truly believe in their Western experience, values, and business philosophies—they try to associate themselves more closely with Chinese employees and Chinese ethics so that they can become more “Chinese” in

order to develop markets in China. Nevertheless, they realize that it can be difficult to transgress the boundary between the "West" and the "East." Despite these challenges and cultural limitations, both Haigui and foreign companies try to develop innovative strategies and identify innovative markets by utilizing available resources. In sum, innovation in China goes beyond the materiality of technological creativity but relies on socially creative practices through daily business operations. The production of innovation is a contingent process in which Western and Chinese values, economic and cultural elements, as well as policies and subjects, are being reconstructed through contentions, ambiguities, and conformities. The following section first offers an example about how innovation is understood among different players in the high-tech industry in China.

5.2 Daily Practices of Innovative Entrepreneurship

5.2.1 Meanings of Innovation

Innovation has different meanings to different groups of people in the high-tech industry in China. At Sunny Networks, Dr. Ru liked to quote others, both in front of his clients and when being interviewed by journalists. It seemed to be an old habit he developed while growing up in China. From the earliest years of their education, Chinese students were trained to cite famous quotes to validate their own ideas and comments. Dr. Ru continued this practice in his daily life. Some of his favorite quotes included a Chinese saying, "a single conversation across a table with a wise man is worth ten years' study of books." One quote was from Confucius, "if three of us are walking together, at least one of the other two is good enough to be my teacher." Another was a quote from Newton, "If I have been able to see further, it was only because I stood on the shoulders of giants." Dr. Ru used these quotes to show that learning from others was very important, and there was always a more efficient way to create our own ideas; namely, by adopting other's ideas effectively. While in private meetings with his own employees, he also liked to quote "good artists copy, and great artists steal." Chinese commonly believe that this quote comes from Picasso. Although in what context Picasso said it was not clear, one way to understand it was:[86]

[86] http://articles.sitepoint.com/article/copy-great-designers-steal/2, retrieved on Mar 1, 2011

> great artists rummage through the great junk heap of lost, bypassed, and forgotten ideas to find the rare jewels, and then incorporate such languishing gems into their own personal artistic legacy… Picasso implied that great artists don't get caught stealing because what they appropriate they transform so thoroughly into their own persona, that everyone ends up thinking the great idea was theirs in the first place.

Similarly, Dr. Ru used this quote to instruct his employees and pushed them to search for the strengths of established products, especially those successful ones in the Western markets. He believed that if a product was well accepted in the West, it meant that the product had some core values already validated in a mature market.

With the most current information about products in Western markets and access to the Chinese market, Dr. Ru believed that he had advantages to adopt Western technologies quickly in China. In his view, a more efficient way to produce innovation to translate and modify Western innovations to the Chinese setting. Dr. Ru had confidence in the potential of social networking (SN) companies in the West such as LinkedIn, a SN company for professionals, and Facebook, a SN company originated based within universities. He believed this business model would become popular in China and decided to develop a product combining aspects of LinkedIn and Facebook. Therefore, Dr. Ru asked his employees to conduct product analyses, and actually used competitors' products to discover the attributes that attract users. He told me that it was important to learn about other products' strengths in order to develop their own products. Imitation was a primary way, but learning about users was crucial. "If users like something about the products, we should develop the features according to what they like. It is oriented by the market."

Based on the product analysis of LinkedIn and Facebook, Dr. Ru decided to produce the social networking platform "MeetHere" to help university students exchange ideas about innovative entrepreneurship and potentially form communities and networks with companies, venture capitalists, and entrepreneurs. To Dr. Ru, MeetHere was not only a product with potential profits, but it also embodied Dr. Ru's passion for encouraging leadership, collaboration, and entrepreneurship among young Chinese students and professionals. Having lived in Silicon Valley for years, he was aware of the importance of communication among different groups of professionals, such

as venture capitalists, intellectual property lawyers, executives, and engineers. More important, he believed that the spirit of entrepreneurship to build high-tech innovation came from young students. “They are open-minded, curious, and not afraid of failure,” Dr. Ru said, “Innovation is generated from hundreds of times of failures. In China, only young and fresh students are willing to take the risk to experiment with new ideas. I hope I can provide an innovative platform for them to form a community and learn from each other.” With a genuine desire to help Chinese college students, Dr. Ru wanted to implement the spirit of innovative entrepreneurship through his product “MeetHere.” To him, it was a meaningful project beyond its potential for profit.

Dr. Ru did not invest in developing creative products from scratch. He reasoned that it would be too expensive and did not guarantee the success of the research and development. For example, even if the company succeeded, it took too much trouble to apply and get the patent protected by intellectual property laws. Even if one took the time to obtain a patent, it was not surprising to see the violation of intellectual property in China. Therefore, companies ran risks when they invested in their R&D. For example, one day during a company business meeting, a man suddenly appeared at the front door. Looking worried and sweating anxiously, he asked us if this was Sunny Networks. Gina, the assistant to Dr. Ru, greeted him and asked what had happened. He said someone from Sunny Networks sold him thousands of low-cost electromagnetic cards which did not work, so he followed the contact information to find us. Obviously, someone had stolen our company information and identity and cheated their customers for profit. We reported the case to the police in the hopes that it would be investigated. However, the officials told us the case could not be opened, as there was no economic damage made to the company yet, although there was a potential risk. The damage to Sunny Network’s reputation, as well as the infringement of their intellectual property, wasn’t sufficient to bring police action. Then, we examined the contract the man had signed with the “fake” Sunny Networks. The worried man finally realized that he had been fooled by someone. Without any other choice remaining, he left the company. Similar cases happen all over China, and companies always run risks, since the legal system does not effectively protect intellectual properties and identities of companies. While bigger companies may have more power to spending money on investigating intellectual property cases, often small start-up companies like Sunny Networks must be aware of the potential damage of

unprotected intellectual properties. Therefore, they have less incentive to invest money in developing their own indigenous innovation.

Additionally, innovation was not a clearly defined concept among local Chinese. One day, a graduate student named Huajun from CPU came to visit Sunny Networks to explore a potential collaboration between our company and their graduate program. Huajun was a student leader of an organization on campus and was in charge of mentoring undergraduate students. During the meeting, he told us that CPU always trained students to be innovative. "Innovation is one of the most important qualities, or "suzhi" of our students." However, Dr. Ru asked him to define what innovation meant. He could not give a clear definition but mainly discussed innovation as an ability of intelligence, and to him, this was easily assessed by exam. But he did not mention how innovation as a suzhi could be evaluated among students. He used "innovation" simply because it was a popular term in public discourses in school. Dr. Ru asked Huajun to promote his product among students, because it was important for students to exchange entrepreneurial ideas using the Internet platform. However, Huajun said it was not going to work since college teachers at CPU would not be willing to support the idea. "The teachers did not want to 'Zhao Ma Fan,' meaning looking for troubles." Huajun shook his head and explained that if Dr. Ru's product would not generate any incentives for teachers, no one would want to share responsibilities to promote the idea of "innovative entrepreneurship." Innovation not only has an unclear definition among Chinese, from contexts such as these, it is evident that part of the concept involves making a profit or generating other incentives. The production of innovation highly replies on how much benefits people who are involved can get as the motivation of their participation.

This was not the first time that I realized that in China, the incentive to cultivate a new idea or an innovative program was contingent among certain groups of people. The university science park was a place that was supposed to support innovation and incubate new ideas. However, whether such ideas could be implemented depended upon many factors, one of which was whether you had a strong relationship with the person in charge. One day, I accompanied Dr. Ru to a meeting with a local manager, Mr. Wang, of the university science park management committee. Dr. Ru tried to convince Mr. Wang to utilize the resources of the committee to mobilize companies and professionals within the science park to use the product. Dr. Ru explained to him that high-tech professionals needed an open platform to

exchange information and help each other generate creative ideas. However, Wang seemed uninterested, and Dr. Ru felt disappointed. As a Haigui, he felt it was challenging to build guanxi with a local Chinese person. He had to rely on guanxi to do his business, but on a personal level, he felt frustrated because spending time cultivating guanxi increased operational costs for his business. On the one hand, he did not have a strong relationship with Wang, so Wang did not trust or was not willing to risk his own reputation to help him promote the idea, and Wang had no incentives to do such a favor for Dr. Ru. If something went wrong with the project, Wang had to take the responsibility, so he did not want to Zhao Ma Fang (get into troubles). In this way, implementing an innovative product depends upon contingent factors like these.

Atlantis Net encountered similar technical problems when they tried to develop their own product. Jerry and Susan discovered that e-commerce would only increase in popularity, so they decided to design a platform for religious products. They believed the business would not only fulfill their Christian values but also create a niche market in China. To build the platform, the company needed to rely on a technical system to sustain the e-commerce networks. Susan told me it was too expensive to build this system by themselves, but that they could not afford the one developed by Microsoft in China. The Microsoft system sold in China was three times more expensive than that sold in the U.S. As a result, only certain largest companies in China could afford it, and the rest used the pirated version of the software in order to save money. However, Jerry and Susan did not want to do so, as Susan explained, "because we are Christians. Using pirated systems violates our principals of being a human being. This is a cultural difference and it is fundamentally rooted in different cultural settings."

Ultimately, Atlantis bought a system developed by local Chinese companies. However, Susan also displayed frustration and disappointment while using the Chinese system. She said, "the system is very unstable and immature. Jerry used to work in a multinational company with high integrity. The system was highly stable and competent. To support that system, Americans try everything to do it for you. However, when we encounter problems using the system in China, the Chinese company could not offer support, and they did not even give a reason or effort for that." Susan explained that she did not mean that the West was superior, but rather it was a different mode of thinking and doing business. Living in China for years, she started to understand the differences between two cultures. She said

other foreigners doing business in China would find it harder to understand the difference, and might judge to the situation as a simple dichotomy of being right or wrong. Susan believed that these problems were caused by structures instead of individuals. “In China, there is a different understanding of professionalism. Westerners would find a lot of unprofessional ethics in China. But it is not a problem of people. It has a deep reason rooted in the institutional structure. It is hard to change it immediately. But eventually such a situation will be fixed and become better.” As an American who tried to understand Chinese culture, Susan felt frustrated by coping with the technical problems their company faced in China. However, she did not simply discriminate against Chinese conditions, but tried to contextualize the problems and show optimism in the Chinese system.

In developing the technological structure of the product, Xiaofang, the major engineer at Atlantis Net, told me his religious values helped him in dealing with “rational” technologies. He described a time during which the company system needed to be upgraded, and he implemented the best software developed in China. However, he encountered an unexpected problem. The computer itself was dependent on a foreign system, but the Chinese system to be implemented contained some Chinese characters. Therefore, problems arose. “There are a lot of unexpected problems when I am developing the technologies. However, often times, my mind has Ling Guang.” Xiaofang truly believed this Ling Guang, literally meaning spiritual light, was a gift from God. “The wills of God can tell me when and where there is a problem and how the problem can be solved.” He told me he converted to Christianity in college by his girlfriend. Since then, religion changed his life and helped him in many aspects of his life and career.

Similarly, faith and meaning were paramount to Jerry. By developing this technological product, Jerry believed his company fulfilled his personal goals and values. “The market is very important. The website is simply a platform to access the market.” But there were various meanings behind the innovation of a product. The advancement of a technology was not the ultimate goal for a product; rather, making a difference among customers, employees, shareholders, and communities took priority. He considered his career in China not simply work, but as something more meaningful. Jerry said that there were many ways to make money, but generating economic profits should not be one’s only goal. Some core values, especially Christian values, motivated him to do what he wanted to achieve. “I want to do

something good for my customers, employees, shareholders, and communities. One day, when I face God and respond to his question 'what did you do with what I gave you,' I should have a good answer for him." I told Jerry that I had observed he had done many meaningful things for his employees and the company. He laughed and joked that when he was gone, his employees felt less pressure; when he was in the office, everyone was stressed. Jerry sometimes liked to convey some American humor in his work.

These two companies, Sunny Networks and Atlantis Net, are both Internet companies defined as high-tech companies according to Chinese S&T regulations. Both of them rely on information technologies to develop their products. Although the founder of each company has earned a postgraduate degree in engineering and worked in technological fields before, neither is confident in investing money to create their own technologies. Rather, they believe it is more efficient to adopt Western technologies and integrate them into their own products. Limited protection of intellectual property, combined with increased production costs of R&D, effectively dissuade small start-ups like Atlantis and Sunny from creating their own technological products. In addition, beyond generating profits, both company leaders want to fulfill alternative goals, and embody different meanings in developing their technological products. In the case of Sunny Networks, helping students to cultivate the spirit of innovative entrepreneurship is Dr. Ru's hope. For Jerry, his motivation is for the company to help Chinese people have a better understanding of Christianity and Christian values.

However, building innovation has different meanings to officials or certain groups of people working in science parks. Government officials see developing innovation as an important strategy to help China gain more resources and generate economic growth. While building a legal system to protect intellectual property is important, it is also a challenging task that cannot be achieved in a short period of time. Some people even argue that a strict intellectual property system would hinder the development of innovation, because ideas could not be freely and easily experimented with, adopted, and commercialized. The Chinese government basically wants to keep the system "loose" in order to encourage innovation by learning and adopting Western technologies at a lower cost. For some people who are not directly affected by the potential value to be generated from developing innovation, they are not motivated to collaborate with others. They are afraid that the more they are involved in helping develop innovation, the more

trouble is likely to ensue. In this way, government officials often do not share the same spirit of innovation with people who are truly risk-taking in developing innovative products.

This mindset is rooted in the Chinese institutional and societal structure. Andy, an executive working in a large Silicon Valley-based multinational high-tech company, believed it was the fundamental reason why innovation in a Western sense was underdeveloped in China. As a Chinese-Canadian, he studied engineering in Canada and England and worked in the high-tech industry for years. When he moved to China, he felt frustrated by China's innovation system. He told me there were many limits to innovation in China:

> Chinese social structure is hierarchical from the above to the bottom. The 'above' does not want changes but stability, so the 'bottom' cannot generate innovation. In the West, an innovation system is generated from 'below'. There is a mature foundation among people.

To produce innovation, it is important to have a powerful 'people' foundation from below, which relies on teamwork. He gave me the following example: while working in a research institute in England, an innovative project was produced by people collaborating together. Some do the cutting-edge work, while others do supplementary work. However, in China, he found it was very difficult for collaboration and communication to occur. There is limited communication among different universities or within one university. People want to do the most popular work, but are not willing to take the responsibility for supplementary work. However, a successful product is produced based on a complete system. If some work is not undertaken, the innovation cannot be completed. "Chinese know how to make a cup at the lowest cost but do not know how to design an innovative version of a cup." To him, Chinese can manufacture efficiently, but lack the spirit of innovation. To different groups of people, innovation has become a contingent category that engenders different meanings. Transnational Chinese have different agendas when they develop their innovative entrepreneurship in China, and these agendas may or may not overlap with the political agenda of the Chinese government.

5.2.2 Innovation as a Socially Creative Practice

Although technological innovation encounters various limitations in China, transnational high-tech professionals develop certain innovative practices during their work in high-tech industry. Sunny Networks did not invest a large amount of money to create indigenous technologies, but Dr. Ru tried to come up with some innovative strategies to develop the product. For example, in order to find out the most popular features of social networking products, Dr. Ru encouraged every employee to play online games at work. For a few weeks, employees were very excited to come to the office early so that they could play online games. While playing the games, they also exchanged information with each other about their strategies. For instance, in one game, players could exchange online commodities, including virtual avatars of each other, for a price. Every employee had an identity on the platform and could earn virtual monetary credits by buying and selling wisely. One day, Tom came to the office and found out that he had been bought by Gina as a "slave." Gina joked, "Tom, now you are my slave and you need to listen to my orders!" Tom answered, "Yes, master!" Everyone in the office began to laugh. Tom also asked help from Leo about how he could earn more "money" in order to buy his own slaves. Through playing online games, the employees tried to discover what would be interesting to integrate into their own product. At the same time, employees seemed to strengthen their relationships with each other through play as part of their work.

Dr. Ru realized that it was not easy to develop his product through the networks of teachers and management teams on the science parks, so he tried other innovative channels to promote the product. One significant way was to connect his social networks platform with a class he taught at CPU. As a CPU alumnus, Dr. Ru kept some connections on campus. Once a business professor himself in another part of Asia, he had an opportunity to teach a class in the CPU Business School. Using the reputation and facilities of CPU as well as his personal connections in the business world, he could invite important entrepreneurs to share their business experience with students face to face. In the class, Dr. Ru conversed with the guests, and students could also interact by asking them questions at the end. Due to the popular topics discussed in the class as well as the strong backgrounds of guests who were nationally well-known entrepreneurs, this class became increasingly popular after only one semester. It attracted more than 500 students not only in the Business School, but also in science, engineering,

social science and humanity (see Figure 30). Dr. Ru decided to open the class to all students on campus, and he offered free tickets to students in other universities and professionals working on the science parks. Importantly, in order to promote and facilitate the class, he designed a course webpage using his own product, "MeetHere." Students were encouraged to use MeetHere, to form social networks both online and offline with each other, where they could discuss topics about the class, business ideas, and form potential business partnerships (see Figure 31). Cai, a computer science graduate student at CPU, was one of the students who took the class. He told me that through using MeetHere, he found his current business partner, and they were applying to patent the audio software they had developed, and were hoping to find venture capital to invest in his new company. One day, Dr. Ru came into the office excitedly with a piece of paper in his hand. He proudly showed us that his class had earned the highest "Teaching Award" prize at CPU. Everyone in the office was very happy. Jokingly, one of the engineers, John, said, "there should be a crystal trophy or some monetary award besides this certificate!" Everyone laughed, and Dr. Ru asked Gina to buy a frame so that he could hang the certificate on the wall. He felt a sense of achievement about teaching the class. In this way, integrating MeetHere with the class became a successful method for Dr. Ru to develop his product, and it became an effective way to connect students and professionals to learn about innovative entrepreneurship and help their career development.

Figure 30 Students and professionals in ZGC attending the class

Figure 31 Students socializing with each other after class

In addition to using his own product in the class he taught, Dr. Ru understood the importance of expanding the product based on university social networks. He knew that Facebook became popular through the social networks among college students, and he believed such a model could be applied to Chinese universities. Due to the advantages of his company's location, he could easily reach students at CPU and other nearby universities. After we posted an online advertisement about his company for the first time, fifteen college students actively participated in a business meeting at Sunny Networks. Among these attendees, some students were looking for business internships, some were curious about the product, some wanted to learn from Dr. Ru since he was a Haigui with degrees from top universities, and others were genuinely interested in entrepreneurship. In attendance were both undergraduate and graduate students, as well as a few young professionals working in the science park, and they inspired us in terms of how to promote the product among users. For instance, some students suggested that Dr. Ru could invite professional alumni to his class to share their experience about looking for jobs and working in companies (see Figure 32). By doing so, students would have a better idea about the business world and a way to connect their theoretical knowledge to industry practices. Dr. Ru held such a meeting every week to invite students to discuss their ideas. As a result, these students became informal product representatives in their own universities and helped Dr. Ru promote the product among their friends. These young Chinese did not get paid to do the work, but they genuinely wanted to contribute to the development of the product. They shared the same dream as Dr. Ru: to cultivate a spirit of innovation and entrepreneurship. Dr. Ru not only opened up opportunities to connect with students and professionals to grow social networks, but he also

built mutually beneficial partnerships which would help the students as well as his own professional success.

Figure 32 Students interacting with an invited transnational Chinese executive

Besides promoting his product through the networks of young college students and professionals in the science park, Dr. Ru reached out to high school students in ZGC. Famous for its rich educational resource and quality, ZGC not only has top universities nationally, but also top high schools. Dr. Ru believed that developing the spirit of creativity and entrepreneurship should be instilled in Chinese from a young age. After comparing the educational system in China and the U.S., he argued that the Chinese system could learn some positive lessons from the American system. Therefore, Gina helped Dr. Ru build connections with some high schools in ZGC. On one occasion, I accompanied Gina and Dr. Ru to one of the best high schools in Beijing. Students had just finished class for the day, but remained in the classroom to meet with Dr. Ru. At the beginning of the meeting, Dr. Ru told the students that he could learn from the students, and they could be his teacher. In traditional Chinese educational culture, teachers usually would not say such a thing in front of students, because there is a clear hierarchical structure in the educational system. Teachers are considered authorities that cannot be challenged. However, having lived in Western culture, Dr. Ru supported a more open structure for easier communication between teachers and students. In the meeting, Dr. Ru asked the students what they wanted to do after high school. The students were very active in the discussion, and their answers were very similar to each other. Some said they wanted to study abroad as Dr. Ru had done, while others declared that they wanted to go to CPU. However, they all agreed that

college education was essential for their future. Dr. Ru told them that they should not Sui Da Liu, following the trend of most people, but rather they should listen to their heart and "discover themselves" by thinking about what their interests were and what they were good at doing. He told the students that each one of them was a unique individual with distinct characteristics. Obviously, Dr. Ru was influenced by Western individualism, and he hoped to promote this value among Chinese students. In China, the national college entrance exam is the main channel to access higher education. A famous Chinese saying describes the college entrance exam as "a single narrow bridge through which thousands of soldiers and ten thousands of horses have to cross" to show its difficulty. However, Dr. Ru believed that this single narrow bridge hindered the development of creativity and individuality among Chinese. It could have consequences for innovation, because Chinese individuals are not intellectually trained to challenge authorities and develop critical thinking skills, which, to Dr. Ru, is fundamental to the spirit of innovation.

Just as Sunny Networks utilized innovative practices to secure Chinese resources, Atlantis Net also tried to create innovative markets in China. Jerry understood that e-commerce businesses were starting to play an increasingly important role in Chinese markets, so he needed to identify a niche market for his business. Christians in China are a marginalized group due to strict regulations by the Chinese government, and as such, there are relatively limited resources and information available to Chinese Christians. As a Christian, Jerry wanted to help Chinese Christians access information and resources more easily; therefore, he decided to open an e-commerce company to distribute religious products including Christian books, paraphernalia, and other materials. Since religious information and products available were limited to official channels such as TV and newspapers, the Internet became a major venue for connecting people with religious information and products in different parts of the country. In this way, Atlantis became popular among Christian churches and Christians in China. The design of the platform as well as its content and services represented the needs of Christian institutions and individuals in China. Along with the technical development of the online platform, Atlantis Net was able to create an innovative space to address relevant interests among Chinese Christians.

To sustain the spirit and values of Christianity, Jerry also tried to build a Christian community among his employees, who were all Chinese Christians. Some of them converted to Christianity when they were in

college, while others discovered the religion during their time abroad. Sharing similar Christian values, they considered their career not just as work to generate profits, but also as a meaningful way to build a stronger Christian community via the Internet. Jerry also applied their common Christian worldview to the way he managed his company and employees. When their company encountered problems, they would pray to God and give each other spiritual support. Before each Monday business meeting, employees would discuss Bible passages, and connect these principals to practical problems that the company faced. Employees also felt free to share their happy experiences as well as their personal problems in these meetings in order to receive advice and encouragement.

One Monday, Junpei shared with us his thoughts about his work. He said today was his first anniversary of working at Atlantis Net. Over the past year, God helped him go through many difficulties due to work pressure as well as difficulties with his marriage and child. Windy also shared her problems with her dad, and she thanked God for guiding her through her difficulties. She felt that she was like a little seed previously in the earth, afraid of the darkness, but after a while, she emerged from the earth and finally saw sunshine. Junpei teased Windy and said, "last time, you thought you were like an angel from above. This time, you came from below." Everyone laughed. After the meeting, everyone prayed quietly for twenty minutes.

Through personalized Christian-based ethics at work such as these, Atlantis Net employees built strong ties and supportive networks within the company. These connections helped them cope with challenges and find a place of belonging, in which they could express their stress and disclose even depressing moments in their lives. Windy told me that Jerry was more like a father to her than a boss. Some employees also went to the same church during the weekend, which helped them expand their business connections. Additionally, Jerry utilized his transnational connections with religious organizations in the US. The company got funding from the US, and they used the money to establish ten Christian libraries in Guangdong Province. By assisting local churches, this program also helped his company to expand his e-commerce business for selling Christian books. At Atlantis Net, Christian values penetrated all aspects of the employee's professional and personal lives. Using Christian ethics and principals in management is rarely found in China. However, Atlantis Net illustrates the innovative

possibility of building a Christian community within a business setting and finding a niche market for their product.

Building an innovative market usually replies on culturally specific conditions in the market. In China, market success cannot necessarily be transferred to Western markets. I interviewed a venture capital manager, Kevin, in Beijing. He had earned a Ph.D. in engineering from a top American university in the early 2000s and returned to China to join the Beijing office of one of the top venture capital firms in Silicon Valley. Kevin told me, "we invested in a company that produces multi-media platforms that are installed in non-traditional public spaces, such as elevators and hallways. This product would not succeed in the US because it requires extensive labor to maintain it. However, in China, labor is not culturally valued as the same in the US, and labor costs are much lower in China. So product became a huge success in the Chinese market." He also mentioned that China's largest e-commerce company has an innovative system to guarantee credibility between sellers and buyers, because China lacks a system of personal credibility. As a result, the e-commerce company designed a payment medium between sellers and buyers, a ranking system, and a feedback platform. Similar to Western e-commerce sites, Chinese buyers can search for an item they want to buy based on the ranking and feedback of the seller to make sure the product is of good quality. In addition, sellers can earn credits based on their customers' reviews. Unlike Western models, the Chinese system heavily relies on the number of customers: a popular commodity is chosen by thousands of reviewers, and the ranking system is extremely accurate based on large numbers of contributions from customers. Therefore, sellers have to create innovative services including surprising gifts and real-time online customer service to "win" in the fierce competition for reviews by gaining credits measured by "hearts" and "diamonds." Moreover, buyers can choose among different methods of payment. One way to pay is to put money into a virtual medium, only authorizing payment after the item arrives. Another method is to pay the delivery person directly at the moment the buyer receives the order. In this way, the e-commerce system and the delivery service are extremely efficient, and commodities are very diverse and affordable, therefore more and more Chinese are buying products online, even though credit cards are not as prevalent as in the West. Therefore, while this product has been a very successful innovation in China, it is not necessarily relevant in Western countries.

Companies like Sunny Networks and Atlantis Net adopt Western technologies in order to develop their own information technological products. However, in order to produce a successful product, utilizing innovative resources and addressing end users' needs seem more important, at least within the companies in which my informants work. At Sunny Networks, Dr. Ru tried to use innovative practices to identify the market culture among users, create innovative markets among university and high school students, and creatively incorporated market profits and personal career satisfaction to promote innovative entrepreneurship among the younger generations of Chinese. In the case of Atlantis Net, Jerry and his employees implemented Christian values into the design of their products and management of the company. Using transnational resources, the company created a niche market to fulfill their religious and economic agendas. With limited resources available to small start-up companies, Haigui companies tended to rely on connections built before they left China to study abroad, while foreign CEOs searched for opportunities in their home countries and mobilized transnational resources. Implementing a truly innovative product in China is not simply dependent on technological advancement, but also on its creative implementation into a specific cultural context through socially innovative practices. My informants told me that this is why many Western technology companies find it difficult to succeed in China; their limited cultural knowledge about the Chinese market and their Chinese employees hinders their efforts. At the same time, since most Chinese technology companies focus on their own domestic market or non-Western markets, the cultural specificity of innovation hinders the popularity of technological products in overseas markets in Western societies.

5.2.3 Cross-Cultural Values in Innovative Entrepreneurship

Sunny Networks and Atlantis Net are two cross-cultural settings where Western and Chinese cultural elements were deconstructed and remade through daily practices of innovative entrepreneurship. Although Dr. Ru himself sought to cultivate an open and loose work atmosphere, I felt there was nevertheless an invisible hierarchical structure in the company. For example, when I first joined the company, Dr. Ru wanted to clean the table for me, but I immediately stopped him. As a Chinese, I felt it was considered "rude" to watch a senior person "serve" me. In the company, he always cleaned his own table, made coffee for his guests, and carried chairs for

other people when they came to his office. He had adopted some English usages such as “thank you” and “I am sorry” when he interacted with his employees. However, in China, authorities would not commonly use those phrases with their subordinates. At the same time, although Dr. Ru was a down-to-earth person, in the company, the employees still called him “Dr. Ru” to show respect. He had an English name that he used in the US, but no one in the company would address him by his English first name. Ironically, most of the Chinese employees without any overseas experience called each other by their English names instead of Chinese names. Addressing someone by his title not only shows a sense of respect but also embodies a power relation. In Chinese society, people refer to each other’s social position when they address others by name. For instance, if Mr. Wang is a president of a company, then he is called “Wang Zong,” as Zong means “the head. Similarly, if Ms. Zhang is an engineer, then she is referred to as “Zhang Gong,” Gong designating her status as an “engineer”. In his early 50s, Dr. Ru was a typical middle-aged man. His employees were all younger than he, and naturally considered Dr. Ru someone senior they should respect. As one employee, Jack, told me, “He is our boss. A boss is always a boss no matter how personal and down to earth he can be.” While Dr. Ru wanted to create an atmosphere of equality within the company, his Chinese employees maintained a clearly defined hierarchical structure between the boss and employees, as this was considered normative in Chinese culture.

However, this hierarchical structure disappeared once Dr. Ru was not present in the company. Whenever Dr. Ru went out for a meeting, the employees started to gossip, sing, or joke around in the office. There was no one who could claim leadership among the employees, and everyone seemed to have equal but loose ties to each other. Since the office was an open space, everyone could hear each other’s voice clearly, and employees often spoke casually during work if Dr. Ru was gone. At the time, a TV show about Bruce Lee was very popular in China, and the employees liked to discuss the stories and characters in the show. At other times, they talked about family issues. One day during work with the absence of Dr. Ru, Ming complained about the service at a local Chinese hospital. One of his twin daughters has been sick for over 20 days. They went to the hospital five times, but they got three different diagnoses, and the hospital forced them to buy expensive medications which did not work. He described how he fought with his wife due to this issue, which was only resolved once they gave up on the hospital and, surprisingly, the daughter recovered. Other employees discussed the issue with him, but they did not show much compassion after the discussion.

Maybe this was because Ming was the only one with children, and others could not understand his worries as a father. Although the employees had loose ties, they got alone very well with each other, and I did not find much office politics. In contrast to Dr. Ru, who considered the company as a place in which he could fulfill various goals, to his employees, the work at Sunny Networks was just a job instead of a career. They were not concerned about how innovation could change China or how important it was to help students to develop the spirit of entrepreneurship.

During work, Dr. Ru found a few problems among his employees. Having worked at Western multinational companies, he had developed certain standards for professionalism, and he tried to incorporate these standards among his Chinese employees. In order to track his employee's performance, he designed an online forum so that all employees could keep a record of what they had done and planned to do. This information was shared with every employee. One day, Gina was supposed to meet Dr. Ru at the front gate of the building so they could attend a meeting together, but she was 10 minutes late. Dr. Ru was not very happy about the delay, asked her politely why she was late, and on the way to the meeting, tried to explain about the importance of being on time. He said, "there is a basic principle at work, that is, I would rather come earlier than let my boss wait for me, and I would rather let my boss wait than let my client wait." To Dr. Ru, being on time showed the sense of professionalism, while to many Chinese including Gina, being a little late was acceptable. In China, time is understood as a flexible concept and a round number, since unexpected things always happen in their lives. However, Gina apologized and nodded her head embarrassedly. After this, Gina was never late for meetings with Dr. Ru.

Another example of conveying professional standards was illustrated at a regular meeting, during which time Dr. Ru talked to his employees about work commitment problems at Sunny Networks. He addressed the issue in a serious but constructive way, stating that, "these days our website is experiencing a lot of technical problems. I hope everyone can work harder. It is more important to get the work done and fix the problem than leaving the office on time at 5:30PM without finishing the work." In fact, Dr. Ru himself was very sick on that day, but he still did not want to take a rest since there were many problems he needed to fix. After Dr. Ru's complaint, everyone was silent. But in the afternoon, no one left at 5:30PM, because they wanted to show they valued Dr. Ru's advice. Clearly, Dr. Ru and his employees had different understanding about what professional work meant.

However, since Dr. Ru used a respectful way to communicate with his employees, and the employees respected Dr. Ru as a leader of the company, misunderstandings and confusion about professionalism were able to be solved little by little. In order to validate healthy work values, Dr. Ru liked to prioritize Western work ethics over Chinese ones. He distinguished himself on purpose from Chinese employees, and frequently emphasized his Western experience in his earlier years. In Dr. Ru's eyes, there were many local Chinese problems which should be fixed by introducing professional Western business ethics.

At Atlantis Net, the corporate culture was different in various. Jerry and Susan did not want to maintain the strict hierarchical structure that usually exists between bosses and employees, nor did they want to exercise paternalistic authority over their employees. Rather, they helped form a close community within the company connected through strong bonds. Although they were both in their 50s, their Chinese employees did not view them as someone with a power distance. Their employees called them by their first names to indicate a more informal relationship. The work atmosphere was fun and somewhat casual. Almost every afternoon around 3 PM, when the people in the office were a little sleepy, Jerry or Susan would propose an afternoon exercise break. The employees would form a circle, stretch out, and massage each other. Another day, Jerry proposed that everyone dance. He turned on his laptop and played the song "go, chicken fat, go…" and asked Susan to lead the "dance." The employees laughed uproariously. After the song and dance had ended, Jerry explained to his Chinese employees that the song was called Chicken Fat. It was a song written in the 1960s, when President J.F. Kennedy proposed a national fitness program to help children become physically healthy. At that time, I thought this song must have some nostalgic memories, and Jerry and Susan must miss their American home.

In addition to having some afternoon fun, sometimes the employees told jokes about Jerry and Susan. One day, Susan was telling Windy and Ping that her Chinese was not good enough. She said, "well, I cannot remember many Mandarin words. I must be too old." In her 30s, Ping responded, "Yes, I am old too." Windy teased Ping and said, "Oh, Ping, please never say that you are old in front of Susan!" It meant that someone--Susan-- was older in the room. Everyone started to laugh. This is just one example of how Windy treated Susan--not as a boss, but as a lovely lady with whom they could tell jokes.

Interestingly, although Jerry and Susan did not cultivate a hierarchical relationship between themselves and their employees, when they were not present, Junpei would take on a leadership role. Although he was only in his 20s, Junpei had solid business training from a top business school in China, and he was Jerry's most competent employee who took charge of business when Jerry was away. He would set some office policies while Jerry and Susan were not present. For example, Windy and Xiaofang went to the same church and were in the same choir, because they both loved to sing, and they sang together in the office at times. When they were very excited, they started to sing loudly, and Junpei would stop them by saying, "you guys are so noisy," in a half serious / half joking tone. Windy and Xiaofang would respond to Junpei by saying, "Yes, Sir!" and ceasing to sing. Xiaofang liked to create fun moments in the office. One time, he saw Windy wearing a new but "weird-looking" hat, he used a UPS envelope to create a similar shape and put it on his head to tease Windy (see Figure 33). On another day, Xiaofang and Ping were preparing an online audio program to promote their company, which required a quiet environment. Before he closed the door, Xiaofang told us, "Do not knock on the door. Otherwise, I will knock on your head!" Junpei teased Xiaofang back, "If the program is not made well, we can knock on your head too!" Finally, one time a few employees were out for the day, and Lucy joked, "there will not be many people here today. It should be a quiet day." Suddenly, Xiaofang's voice came out from the inner office, "I do not think so, because I am here!" We laughed and agreed that whenever Xiaofang was in the office, there was laughter and "noise." Junpei teased Xiaofang and said, "Yes, you are the loudest!" These examples illustrate that Junpei was rather serious and strict about his work and liked to claim certain power and responsibilities in the office. There was a certain kind of hierarchy formed between Junpei and other employees, but he was a very responsible manager and truly cared about the community. One time, he returned from his wife's hometown in Inner Mongolia and brought all of the employees some beef snack souvenirs (which, incidentally, was the most delicious beef I had ever had.) Although it was a long trip, Junpei still remembered to share good food with his colleagues. While Junpei as the company manager would need to exercise certain power to manage the employees, the overall social structure in the company was relatively egalitarian and strongly bonded.

Figure 33 Creating a similar hat

However, there were also internal problems facing Atlantis Net. First, the high mobility of employees challenged the stability of the company. During the four months that I spent there, I observed that three employees left the company for various reasons, and one new employee joined the company. At a Monday meeting, Ping cried as she announced to us that she had to leave the company, because her husband's company was going through difficulties and she had to help her husband. Susan and Windy cried along with her, and Jerry said, "Ping is the earliest employee in this company. I feel sorry that she has to leave the company. But we should pray for her and her husband's company." A few days later, Yuhua informed us that she was going to leave too for another job. Jerry respected her decision, believed this was the will of God, and encouraged us to be optimistic about the company. It was a common problem that small start-ups suffered from losing employees easily. However, Jerry, Susan and other employees tried to use their religious faith to help them weather the crisis of losing employees. A strong religious faith cultivated in their daily business practices allows them to develop culturally innovative strategies to cope with challenges in their business.

Another problem the company faced was an "unprofessional" work ethic among the Chinese employees. One day, Dayong told Lucy, the accounting and human resources manager, that he was not feeling very well and wanted to go home early. Lucy agreed, but Jerry refused his request, saying "If Dayong is sick, he can take sick leave to go to the hospital. But he should not just leave for home. He should work for another one hour and fifteen minutes to the end of the day." While Lucy was trying to have "renqin," personalized rationality, during work, Jerry preferred a more professional work ethic, which had nothing to do with renqin. Moreover, there were

conflicts between Dayong and other employees. Dayong was the warehouse manager and one of the earliest employees in the company. However, when Junpei joined the company and took over the informal role as manager in Jerry's absence, Dayong felt frustrated, as Junpei was younger than he. Similarly, Dayong could not get along with Yuhua who was also working at the warehouse site. After a while, Jerry realized that Dayong's problems were not only about his performance, but his work attitude as well. He told me he knew Dayong for a long time, and he could understand his anger. Jerry attempted to communicate with Dayong, and allowed Junpei and Lucy to speak with him as well about this matter. However, Dayong did not want to change. He told Jerry that if he wasn't happy, he could fire him. Ultimately, Dayong and the other employees could not develop good guanxi. Jerry and a few other employees had meetings about this problem, and they finally decided to fire Dayong. Jerry told me that Chinese people cared too much about guanxi at work, while in the US, companies pay more attention to professional performance, rather than cultivating personal relationships, as the key factors for the success of companies. Although Jerry felt bad that Dayong had to be dismissed, he realized that it was inevitable, as Dayong's personal problems would cause trouble for the performance of the entire company. Jerry wanted to find out a better way to understand employees' personal characters so that in the future he could hire the most suitable employees. However, he realized that available character tests were designed by Western psychologists, and he could not find a suitable test to examine Chinese personal compatibility.

In contrast to Dr. Ru, Jerry and Susan tried not to emphasize their American experience in front of their Chinese employees. Rather, they wanted to become "local" in order to have a closer relationship with Chinese people. For example, they introduced themselves by their Chinese names to Chinese friends, and Susan tried to speak Chinese as much as possible. When she heard someone sneezing in the office, she would say "Baisui," instead of "bless you." They both understood that doing business in China had to rely more on their cultural knowledge about Chinese society than their American experience. In front of their Chinese employees, they would often make connections between themselves and Chinese culture. At a Monday meeting, Jerry shared with us how living in China changed his life. He said that before coming to China, he never ate wood ear and tofu, but now it has become his favorite dish. He also appreciated Chinese hospitality very much. One time, he celebrated his daughter's 24th birthday in the US by taking his family to a Chinese restaurant. The Chinese owner was very warm

and gave them a free dish and a bamboo plant as a birthday gift. In relating this experience, Jerry joked that he would speak Chinese in front of God in heaven. All his Chinese employees laughed. In another instance, Susan described how she and Jerry encountered a lot of problems when living in China. For example, Chinese had a different understanding of personal space. When she walked down the street, she was often jostled by other Chinese who would not apologize. For a Chinese person, this was a natural response, since the street was full of people. But in the US, everyone would be very careful about personal space. However, Susan had adjusted to the Chinese way and joked to me, "today, I wonder who will bump into me on the street." She imagined that other foreigners would experience similar problems upon arriving to China. Finally, Jerry and Susan emphasized that they started their company after living in China for two years, because they wanted to learn how Chinese people think and do things first. Susan also joked about how their experience in China changed the way they thought. Now when they visited the US, they experienced "counter-cultural shock." For example, they realized there were a lot of overweight people in America, and they never felt such a thing before. To Susan, many problems are caused by cultural differences; they cannot be simply categorized as right or wrong. But trying to understand the problem as a culturally specific condition will help identify the problem more clearly, and thus find relevant solutions.

At Sunny Networks and Atlantis Net, I have observed how certain social relations are structured and how problems are caused by cultural differences. In both companies, professionals with Western experience would prefer more egalitarian social relationships among employees, while local Chinese consider that it is more "proper" or "natural" to form a hierarchical relationship between a boss and employees. However, hierarchy is more obvious in the Haigui company, since the boss is also Chinese. A less strict hierarchy is identified between the American boss and Chinese employees. In contrast to the Haigui company, where social relationships among the employees are more impersonal, I observed strong social bonding among the Christian employees at Atlantis Net. In both companies, the bosses encounter problems caused by certain work ethics which are considered "unprofessional" according to Western standards. However, while Dr. Ru emphasizes his overseas experience to validate the need to use more professional ethics, Jerry tries to avoid openly expressing the "superiority" of the West, and solves the problem by relying on the Chinese resources available and identifying a closer relationship with the Chinese employees in the company.

5.2.4 Gender Issues in Innovative Entrepreneurship

In contemporary China, gender is constantly reconstructed in workplace and public space (Barlow 1993; Pun 2005; Lee 1998; Rofel 1999; Yang 1999). The high-tech industry is dominated by male professionals. As a result, there is a masculine culture because most engineers and managers are men. My fieldwork experience reflected this trend; most entrepreneurs working in the high-tech industry that I encountered were men too. However, in such a male-dominated field, women play an interesting and significant role, and have shaped certain gender relations with their male counterparts. At Sunny Networks, all of the engineers were men, but there was a central figure in the company, Gina. In her mid- to late 20s, Gina earned a Master's degree in computer science from one of the top universities in China. Although she was not in charge of the technical work in the company, Gina was considered the most important employee to Dr. Ru, who relied on her in many aspects. As a spokeswoman in the company, she was the bridge between Dr. Ru and outsiders. She followed Dr. Ru to various events, greeted potential business partners, worked as Dr. Ru's teaching assistant in the leadership class, kept contacts with students, arranged the meetings for Dr. Ru with journalists, and represented the company when Dr. Ru was not present. Gina had a great smile, elegant figure, and a gentle and pleasant personality. In the company, she received a lot of attention from technical men. When she was in the office, engineers seemed to have more energy and enthusiasm. Similarly, outside the company, she was a good communicator and knew how to build guanxi with people for Dr. Ru. As a result, Dr. Ru trusted Gina very much and valued her views when he made decisions.

At Atlantis Net, Windy played a similar role. In her mid-20s, she was an outgoing, enthusiastic, and creative person. She spoke very fluent English, so during business meetings, she interpreted for Jerry, since Jerry's Chinese was insufficient. Windy was also in charge of designing the platform and associated products, and Jerry valued her creativity very much. However, I observed some conflicts between Ping and Junpei. Although Ping left Atlantis to work with her husband's company, I came to understand that there was a second reason for her departure: Ping felt that her strength could not be fully realized in the company. Before Junpei joined the company, Ping was the most senior employee with the most experience. However,

after Junpei arrived, things changed. Junpei had more knowledge than Ping and took Ping's responsibilities to manage the company, while as a woman, Ping was assigned to take care of administrative details. However, Ping was not comfortable with this new role, because "an elder sister should not listen to a younger brother." Jerry understood the gender relation issue and purposely tried to arrange for Ping to report to him instead of Junpei.

My other Haigui informants shared with me some other problems caused by gender stereotypes. Jian was a typical example. She earned a Master's degree in electrical engineering and an MBA from two American universities. After working in the US for a few years, she decided to return to China. She said that being a woman in a male-dominated field was challenging. As a chief director of the technology department at a software company, she had to work harder than other male directors to prove her ability. "At first, they would not trust me very much, although I have much more overseas experience than other men. But after one year of hard work, I could show them that women could also excel in the technical world." However, Jian also told me, at work, she had to purposely hide her feminine features by wearing a black suit and short hairstyle.

> Showing a tough personality can help. I even hide my smile at work, because the smile of a woman usually shows too much femininity, while a serious face helps build an image of authority. Sometimes, I do not feel that they treat me like a woman. I am equal to men in their eyes. On most occasions, I am the only woman among dozens of male executives. Sometimes, I myself can forget about my gender identity. To survive in this tough business, I am aware that being a woman can pose a lot of challenges during the work with men.

In order to build an image of competence and trustworthiness, Jian had to deconstruct certain gender stereotypes while accepting others.

Similarly, Tiantian experienced gender discrimination at work. In her early 30s, Tiantian became the chief architect in a big Chinese company. She held a Master's degree in science from a top architecture program in the US, and had previously worked in one of the largest design firms in the Bay Area. She told me that, because of her age and gender, she worked under tremendous pressure in a male-dominant setting. "I was always the best student in school, since the measurement of performance was simple. I did

not feel much discrimination at that time. However, when I started to work, things were much different. I often felt that my ideas were not valued. When I spoke at some meetings, those old men did not want to listen carefully and showed no respect." She said that even her female boss did not trust her at first, because she looked like a young little girl who did not have much experience. "But the less attention I can get from them, the more I feel I need to prove to them that they are wrong about me." The work was hard, but she finally achieved great success. At present, she had been promoted to chief architect in a large company; in fact, Tiantian was the youngest chief, and the only female chief, in the history of the company.

Professionally, female Haigui such as Jian and Tiantian are considered successful. However, many female Haigui have another problem to confront: marriage. Jian told me that she actually had a good career in the US, but her husband made her give up her American life and return to China. No matter how independent and powerful Jian tried to pretend to be in front of other male colleagues, she transformed into a gentle and caring lady at home. For her part, Tiantian faced an even more complex problem: she was 30 years old, and still single. In China, she was considered to be a "San Gao" woman. "San Gao" means "three highs:" a high degree, high income, and a high age. Chinese society portrays these women as "Sheng Nv," meaning women who are left without a husband. One major reason why Tiantian decided to return to China was that she wanted to find a husband in China, where there were more Chinese men compared to those in the US. After Tiantian returned to China, she actively participated in social activities to find a husband, but she had high standards. A potential spouse for Tiantian must be highly educated, have a successful career, good looking, and single. However in China, an attractive, educated, and successful man would rarely also be unmarried by early middle age.

One day, Tiantian invited me to go with her to a party, and there I met Jing, another young, attractive, professional woman who had lived in England for six years studying management. Like Tiantian, she was still single at the age of 29, she had begun to worry about her marriage prospects. At the party, there were a few middle-aged men who claimed they had studied in Canada. Later, Tiantian told me that these men all had powerful family backgrounds. In their mid- or late 30s, these men were sent by their families to study in Canada to study, since it was easier than going to the US. Afterward, they returned to China with the title of "Haigui," and due to their family guanxi networks, they could easily find a good job in China.

One was working as a senior manager at a large semiconductor company in China, one was a vice president of a local bank, and the third was the CEO of an auction company. Tiantian seemed to know the CEO very well. After the party, the CEO invited us to accompany him and his friends to a karaoke bar, where they ordered expensive alcohol. People started to drink and have fun, and all the while, the men were flirting with the women. However, like Cinderella at the ball, around midnight the women insisted upon leaving. The men were disappointed, but still paid the taxi drivers to take the women home. The next day, Tiantian told me that these men were not serious about having a relationship or finding a marriage partner. Instead, they just wanted to have a "high-quality" girlfriend they could show off to their "low-educated" buddies and gain "face." However, this put Tiantian in a predicament, as she could not "De Zui" them, meaning upset them, because they have strong guanxi networks upon which Tiantian needed to rely. She truly wanted a marriage instead of a flirtatious relationship, but Chinese men were often threatened by her professional success and her independent, competitive personality. Some time later, I heard from Tiantian that Jing had become a mistress of a Japanese businessman working in China, but this kind of relationship did not last long either. By the time I left the field, these women were still single, and worried about their uncertain marriage future while working as professional women in competitive male-dominated fields.

Women play an important role in various business settings in China. In my research, my female informants were found to be central figures within their companies. They utilized their expertise and their gender advantages to earn trust from their bosses. However, in the process of producing innovative entrepreneurships, female engineers and mangers have to cover their gender disadvantages to display a gender-neutral image in order to be considered professional. To achieve the same success as men, women have to work harder and prove to men that they can do their job well. Although these women can be successful in their careers, their very success presents further challenges in their personal lives. My Haigui informants have to compromise themselves for the sake of their husbands. The single professional women in my research must negotiate with men in different ways using their feminine bodies and gender identities. And as they search for a husband, they need to build particular gender relations with men who consume their feminine image and intellectual capital.

5.2.5 Guanxi Politics in Innovative Entrepreneurship

Guanxi is understood as social networks with Chinese characteristics. It is considered an important cultural element in Chinese society. Guanxi is a personalized relationship through which trust and "Renqin"—reciprocal obligation--can be circulated among people, and can also serve utilitarian purposes as a form of social capital. In my research, I have observed different kinds of guanxi developed among my informants. Dr. Ru relied on two types of guanxi. One was the connection he had maintained from his earlier years, before he left China for the US, and the other was the social circle of Haigui. Because of his old alumni guanxi, he could find an office on the university science park at CPU, live close to the university, and use the resources on campus. He also used his alumni guanxi to find an affiliation with the Business School at CPU. While he taught classes on campus, he could use the university reputation, facilities, and human resources to promote his own company and product. Once, he was asked by the Business School to host an international MBA orientation at CPU, and needed to find a guest speaker immediately. Since there was not enough time to find an executive, he contacted his old friend, Mr. Yang, a successful Haigui businessman and Dr. Ru's former college friend. This alumni guanxi helped Dr. Ru solved an emergent problem.

Mr. Yang and Dr. Ru both participated in a social circle of Haigui. With shared similar overseas experience, Haigui often like to identify with each other. When two Haigui strangers meet, the identity of Haigui can immediately help them shorten the social distance between them (see Figure 34). For example, when Dr. Ru met Dr. Hu, a founder of another Internet company in ZGC, they started a conversation about the same city where they lived in the US. It seemed that sharing the same experience as Haigui would signify the possibility of sharing similar values and goals among Haigui. The Haigui architect, Tiantian, told me, "you have been living in the US, and you have a better idea about what I have been through as well. When I tell you my experience as a Haigui, you are able to understand how I feel. But when I talk about it with a local Chinese, she cannot echo what I am trying to express." The overseas experience has become a symbol of a shared past which is an important element to build guanxi among Haigui. I have noticed that most of Dr. Ru's business partners who have built collaborations with Sunny Networks are Internet companies established by Haigui as well. For example, as I attended some private parties that my informants held, I noticed that all the attendees I met had more or less similar overseas

experience in different countries. They not only worked in similar fields professionally, they also shared similar lifestyles and consumption habits. At these parties, they discussed their career issues, and exchanged professional information about certain industries. As they discussed real estate investments, international travel, and luxury products that would soon be on the market, I perceived that this was an exclusive social circle of Haigui, in which people without overseas experience would not be able to participate.

Figure 34 Haigui discussing potential collaborations

However, Haigui have encountered some uncertainties with respect to building guanxi with local Chinese companies or individuals after they have returned to China. One day, when Dr. Ru was checking out the conference hall for his new class at CPU, two professionals came in. They were also checking out the room, because they were planning to organize a workshop for executives from different parts of the country. These professional were from a for-profit organization to promote entrepreneurship, and Dr. Ru immediately thought it would be a good opportunity to collaborate with them. He introduced to them his company and invited them to visit his class. They exchanged their name cards and promised to meet for future collaboration. However, I never saw them again or heard Dr. Ru talked about them. Obviously, he did not establish a successful guanxi with them. I suspect that the local Chinese institution would fear competition from Dr. Ru's Haigui company, and therefore, they would not be willing to collaborate with someone without guanxi.

In another case, Dr. Ru found that Chinese guanxi could play a negative role in building a transparent and equal business environment. One day, an

MPA student at CPU came to a meeting with Dr. Ru, and they discussed a potential guest speaker Dr. Ru would like to invite. When the MPA student heard the name of the speaker, he shook his head and said, "he would not be an ideal speaker, because he is not popular among journalists, and if we invited him to speak, we will not get enough public attention." Dr. Ru was confused and asked why. The MPA student explained, "journalists say he is very 'Kou Men.' He does not give journalists 'Hao Chu,' so journalists do not like to write about him." "Kou Men" in Chinese means stingy, and "Hao Chu" in this case signifies monetary benefits. It has become normative to "bribe" journalists and "buy" public attention in Chinese society, and the MPA student knew that the potential speaker was known for being against such a norm. Therefore, he is considered to be a stingy man who is not welcomed by journalists. Upon hearing this, Dr. Ru felt disappointed by the Chinese reality, which was so different from the West. He believed that most Western media would not report news based on how much "Hao Chu" they could gain from the particular person they would write about. Similarly, when I attended another conference with a Haigui CEO, Mr. Dong, in 2006, he paid RMB 200 (about $30) to a journalist to write three sentences about his company in the newspaper. Also, he paid RMB 1500 (about $200) to three TV professionals so that he could appear on a local TV news program for 10 seconds. It is not uncommon to build guanxi through "Hao Chu" for utilitarian purposes. This is something Haigui find frustrating in China compared to their work in the West.

Guanxi networks can be contingent. Even if one has a good guanxi with an institution, one may not be able to accomplish a business deal with them, especially if there are personnel changes in the institution. My informant, Deng, suffered from an unexpected change of guanxi when he was running a start-up in China. After earning a Ph.D. in science from a top university in the US, he decided to return to China immediately thereafter. He had a collaborative project with an American institution, and planned to open a company in China. As a result, he spent a lot of time and money building guanxi with a local insurance company, which would be essential to in building his product, which usually involved drinking and socializing in informal parties (see Figures 35 and 36). After a few months, he established good guanxi with a few key figures in the company, and his product was almost ready to be launched in the market. However, suddenly, the insurance company changed their strategy with respect to collaborating with Deng, and this eventually led to his company's failure. Deng told me with great disappointment that his product failed because the insurance company

decided not to work with him, because a new leader joined the company, and he changed the team. In Chinese, there is a saying, "Every emperor has a cabinet composed of his own favorite." A new chief would bring in his new aides, and all of Deng's earlier investment in guanxi with a few key figures was void. Moreover, he could not afford another few months and money to build guanxi with new figures, since other competitors had already done the same. Building guanxi is a challenging practice for many Haigui, as they realize that the trust and mutual dependence embodied in guanxi networks are very contingent and uncertain.

Figure 35 Haigui building guanxi through drinking

Figure 36 Building guanxi at a karaoke bar

At Atlantis Net, Jerry also needed to build a certain amount of guanxi for his business. Different from Dr. Ru, he relied on two types of guanxi in China: the social capital of his own Chinese employees, and his guanxi network built with church groups in China. One important social resource was Ping's family, because her husband was head of a publishing redistribution company. Ping helped Atlantis Net to promote its business through using the resources available in her husband's company. In addition,

Jerry and Susan developed good guanxi with a few local churches as well as some in other parts of China. Every Sunday, they went to the English service at a local Church in ZGC, and one Sunday, I accompanied them to the service. To my surprise, there were more than 500 people there. Some were foreigners living in Beijing, but most of the attendees were young Chinese professionals and students who wanted to learn about Christianity, Western religious cultures, and practice their English. Jerry introduced me to the head of the church, Pastor Hu, a middle-aged man who used to live in the West. After learning why I was at church that Sunday, he teased me, asking if I was a spy for the Chinese government. I also accompanied Windy and Xiaofang to a Chinese service at another location in ZGC. At that service, I observed over 200 people, most of whom were young and middle-aged Chinese professionals and their families. These churches I went to were called "San Zi" churches. "San" means three, and "Zi" means self. "San Zi" churches are self-governed, self-supported, and self-missioned Christian churches in China. They are independent from foreign Christian communities, and they are censored by the Chinese government. Many Western church organizations are suspicious about the nature of "San Zi" churches, but these are the only legal churches in China. Therefore, Jerry and his employees went there to practice their religion and build their Christian connections, while at the same time, the church community was a valued resource for their company.

Jerry and Susan understood the importance of guanxi in doing business in China. They tried to build Chinese guanxi, however, they sometimes felt frustrated in the attempt. One of the problems they encountered was the conflict between their warehouse landlord and local government officials. They rented a 3,000 square foot room in southern Beijing as their warehouse to store religious products, and to get a license for their business, they needed to register the address of the warehouse. However, the landlord told Junpei, who was in charge of the license application, that Atlantis needed to pay RMB 1,000 (around $140) to process the paperwork. But the landlord was not willing to offer a receipt for this payment, saying that the money was a "public relations" fee he could use to build guanxi with local government officials. For example, he would use it to invite officials to dinner and give them some small "gifts" such as cigarettes and alcohol. Ultimately, Jerry decided not to pay this fee, because, as he told me, "It is illegal to do so. We are Christians and will not do such a thing." Junpei countered, saying that it was part of Chinese culture to build guanxi with government officials. Susan disagreed, and said that guanxi should not be

built in this way. Moreover, if they paid this "fee" once, it would ensure that there would be continuing requests for money, which would lead to endless troubles. Although RMB 1,000 was not much money, Susan said that the nature of using money to "bribe" local officials was against their Christian values. However, Susan also believed that this kind of bribery was a phenomenon among local government officials, and the central government hoped to fight against briberies. In order to fix the problem, they decided to find another warehouse where they did not need to bribe a landlord and officials to process the registration paperwork.

In China, foreigners do not have social capital to do business in the same way that local companies do. Local Chinese do not trust them, because they have no strong guanxi with them. When Jerry started the company in China, he went through many difficulties. Without guanxi, he had to register the company in China through official channels, which caused a lot of unnecessary problems. For example, the Chinese bureau needed Jerry to prove his American identity. He had to fly back to the US to get a seal from his local city government, then travel to the state capital for their seal in order to prove that his "local" seal was valid. Then, he needed to mail these materials to the Chinese Embassy in a different state in order to prove that his "state" seal was valid. The entire process took Jerry over six months to finally get his American identity approved. He told me that in the US, registering a company was very different. "You just need to sit in front of a computer and fill in some forms. 30 minutes later, done! You can start a company."

Once the registration paperwork was completed, however, the obstacles were far from over. Because Jerry did not have strong guanxi with officials and the local landlord, he encountered more problems after he registered his company. The local Chinese bureau did not believe that the address of the company was valid, and asked Jerry to provide proof. He went to the manager of the building, but the manager did not want to validate the address for him, saying that the building was rented from another owner. Therefore, Jerry had to think about ways to contact the actual landlord. Jerry felt it was frustrating at times to have to go through all of these unnecessary problems. In China, when one has good guanxi, he or she can save a lot of time and trouble, thus lowering operational costs in doing business. It is why many businessmen try to develop and utilize guanxi to smooth over incomplete institutional mechanisms, while people without guanxi are left to cope with an inefficient bureaucratic system.

My fieldwork has revealed that guanxi remains an important element in producing innovative entrepreneurship. It is a double-edged sword in Chinese society. One the one hand, guanxi helps my informants cope with difficulties and to access various kinds of resources in an efficient way. On the other hand, cultivating and maintaining guanxi challenges my informants' businesses and increases their operational costs. As a distinguishing Chinese characteristic, guanxi creates inclusive and exclusive social circles in Chinese society. With Western experience and a different understanding about how social relationships function in business, Dr. Ru and Jerry both experienced frustration regarding guanxi politics in China. However, facing these challenges of guanxi politics, at Sunny Networks, Dr. Ru depended on his alumni connections and a social circle formed by Haigui with similar backgrounds. At Atlantis, Jerry relied on his Chinese employees and church groups to develop his own social capital. As both business owners understood the crucial impact of guanxi politics on their businesses, they maintained certain values they truly respected, and reconstructed some other values to negotiate with various political, economic, and cultural situations.

5.3 Innovative Entrepreneurship as a Cultural Experience

In this chapter, I have presented an ethnography of innovative entrepreneurship in the high-tech industry in China. By examining the daily practices of how transnational professionals interact with local Chinese, I have illustrated how professional entrepreneurialism is shaped through the cultural practices that remake various Western and Chinese values and ethics inside and outside of an office setting. Besides interviewing and following my informants at different events, I focus on participant observation in two business settings. Sunny Networks and Atlantis Net are two Internet companies, defined as Information Technology High-tech enterprises according to the Chinese standard in official terms. Located in China's largest high-tech zone, Sunny Networks is a typical small Internet start-up in ZGC established by a Haigui entrepreneur that focuses on developing an online social networking platform. With its main offices in the central business area in downtown Beijing, Atlantis Net is a company headed by an American living in China. Using the online e-commerce platform, Atlantis

Net helps Christians living in China to access religious information and promote Christian products including books and accessories.

These two sites signify cross-cultural situations where transnational and local high-tech professionals understand and reconstruct both Western and Chinese values and ethics. They are not only the sites for professionals to fulfill their economic agendas, but more importantly, these sites embody their wills to search for certain meanings in their lives. Having lived in Silicon Valley for years, my Haigui informant, Dr. Ru, has been influenced by the entrepreneurial spirit for innovation and leadership in the West. He tries to promote this value in China through building a virtual social network of entrepreneurs among young generations of Chinese. Once an educator, he wants to contribute toward changing the educational system by encouraging students to truly lean about their individuality. In much the same way, as a pious Christian, Jerry hopes to build a business that can benefit his Christian community, employees, shareholders, and customers. Once employed in the technology department of a large company, he considers technology an efficient way to promote Christian values in Chinese society. Although his company has encountered various challenges, he tries to incorporate cultural values to fulfill his professional and life goals.

Successfully producing innovative entrepreneurship in China does not solely rely on the originality of a product or the advancement of technology. Rather, the production of innovation in small high-tech start-up companies shows that it is a complicated process that combines economic and cultural practices in order to succeed. Moreover, different groups have different understandings of what innovation truly means in a specific context. To many transnational professionals who want to develop technological innovation in China, incorporating advanced Western technology into a culturally specific market requires various social innovations. The management of a high-tech company and the production of a technological product are dependent upon socially creative practices that develop during day-to-day workplace interactions. Through such practices, transnational professionals strategically re-arrange their goals and reconstruct their values to cope with various kinds of difficulties. Through developing professional entrepreneurialism to negotiate with nationalistic entrepreneurialism, these transitional subjects open up new possibilities that engender new meanings of creativity, professionalism, productivity, individuality, leadership, and teamwork, as well as gender and guanxi relations in China. In the following chapter, I will show how the making and remaking of various Western and

Chinese values driven by professional entrepreneurialism shape transnational Chinese subjects in cross-cultural settings and reflexive practices.

VI Reflexive Subjectivity of Transnational Chinese

A 30-year-old Chinese researcher working at a European university wrote in his journal:

> I have my own thoughts about my (Chinese) fellows' lives. In China, especially big cities are fast growing places, economic development has become the top priority, whereas everything else is less important. The main social force--namely, our generation—is striving to find a social position in society, while involuntarily devoting most of our life to work…But later on, what I have seen more is actually (our generation's) helplessness in society. Once I talked about future plans with my Chinese friends. Most of the plans were as simple as a job promotion, a salary increase, a further job promotion, and a further salary increase. What about the end? One fellow mentioned, "normally it is something like a manager." Just as my friends do not understand my values, as a matter of fact, I cannot agree with their values and lives. However, regarding such similar lifestyles (among my Chinese fellows), it is an outcome of the environment rather than individual choices. If I ask, to what extent can we choose our own lifestyles? The answer is "not much." It is the destiny of most of us in developing countries. And it is something helpless and sad about the fast growing China. Nevertheless, maybe in the future, our next generation will be able to backpack and explore different parts of the world like the middle class in developed countries, to open their hearts and chase their own dreams, to sail in the ocean, to participate freely in their favorite sports, to go to museums, concerts, plays, or to go water-rafting, hiking, and car racing. But currently most of us have to compromise our own lives and sacrifice individual interests in order to work hard and to move forward under the stress within Chinese society.

In his diary published online, Dong shows his concerns about the limits of living in China. After getting his Ph.D. in Marine Science and engineering in Japan, Dong moved to Demark, working as an assistant professor at a local university. Within recent years, he has considered moving back to China. However, after discussing it with some of his friends in China, and visiting big cities like Beijing and Shanghai, Dong is struggling with whether or not he should become a Haigui after living abroad for six years. The cross-

cultural clashes of values and lifestyles that hold him from moving back is common among Chinese like him, as well as those who have actually returned to China. On the one hand, many Chinese living abroad think about going to China to grasp opportunities engendered by China's economic boost, as well as giving additional meaning to their lives as Chinese nationals. On the other hand, they hesitate to return to China due to the uncertainties and contradictions that other Chinese Haigui have experienced. To be or not to be a Haigui has become one of the most crucial questions that thousands of Chinese abroad ponder as they consider the kind of life that they want to pursue. In order to better understand this ambiguous situation for Chinese living abroad, I was drawn to look closely at how Haigui have understood and coped with these uncertainties and contradictions. I focus on their daily practices in China, as well as how such dynamic experiences are shaping their Haigui subjectivity. The primary interest of this chapter is a reflection of my ethnographic work on the multiple ways in which Haigui subjects have been shaped through their daily practices in Beijing.

In my earlier chapters, I have argued that a dramatic increase of transnational Chinese high-tech professionals within recent decade signifies the possible emergence of a "global class," whose experiences raise critical questions and inspire anthropological scrutiny. This inquiry can reveal additional insights into what globalization means to China's modernity, and how global processes are being constructed by modern Chinese subjects. The transnational Chinese are not just conventionally seen as "middlemen" who mediate between local institutions and international corporations, but they act as independent and active players in China's innovation development in the global market (Ong 1997, 2006). For example, the newly appointed minister of Ministry of Science and Technology, Wan Gang, is a Haigui expert from Germany, an engineering professor and chancellor of Shanghai Jiaotong University. He is also the first non-Communist member to become a PRC (People's Republic of China) minister since 1972. Similarly, the founder of Vimicro, one of the largest semiconductor companies in China that develops microchips, Deng Zhonghan, is an electrical engineering Ph.D. graduate from the University of California, Berkeley. He was awarded the influential title of "China's Economic Figure of the Year" in 2005, and became the youngest member of the Chinese Academy of Engineering in 2009. The founders of the most successful

Internet companies in China such as Baidu, Sohu and Eachnet[87] are also Chinese Haigui who hold advanced degrees from top universities in the United States.

Along with the numerous portraits of successful Haigui figures, many media reports tell contradictory stories about the failures of Haigui, ironically capturing "sea turtles" (Haigui) who become "seaweeds" (Haidai): in other words, Haigui who are unemployed and waiting for job vacancies. Moreover, many of today's Haigui have higher expectations than in previous years, and thus oversimplify the social reality they encounter in China. Additionally, these professionals who have become accustomed to non-Chinese lifestyles and values do not have adequate skills to cope with Chinese working environments, living conditions, and ethical standards. Therefore, many Haigui find it difficult to locate a satisfactory job or to work with Chinese who have never been abroad. At the same time, doubts are raised questioning Haigui expertise as well as their capability to deal with the "real Chinese" environment.

Since my primary interest in this chapter is to understand the subject-making of Chinese Haigui, I focus on how transnational Chinese subjects create new forms of personal and interpersonal experiences by being subjected to state control, cultural structures, and by reconfiguring their own values and beliefs in a process of self-making. In order to grasp the experiences of transnational Chinese subjects, I examine the following questions. Why do these professionals want to return to China--either permanently or on a part-time basis--in the first place? How do their overseas experiences enable them to traverse different markets, social domains, and value spheres? What kind of cross-cultural uncertainties and conflicts do they face in their daily lives? Finally, how do transnational Chinese utilize their knowledge and expertise to gain access to resources and fulfill their agendas? With these questions in mind, I have analyzed the qualitative data collected through participant observation fieldwork, as well as interviews with Chinese Haigui who work in managerial or technological positions. I have found out that my Haigui informants develop a mode of reflexive thinking to evaluate different cultural norms, ethics, and values in China and the West. This chapter reveals the complexity embedded in the daily practices and techniques of transnational elites in the Chinese context, and also presents varied ways in which certain global forms of experience

[87] To put it into a simple way, they are China's Google, yahoo and ebay respectively.

and knowledge are produced. The chapter concludes by arguing that reflexive subjectivity is not only a form of professional entrepreneurialism shaped by transnational Chinese, but that it enables these high-tech professionals to flexibly respond to cross-cultural situations and negotiate with nationalistic entrepreneurialism. Ultimately, the symbolic values of what being "global" means and what being "Chinese" means in such a context are questioned and tackled as a problem of China's modernity.

6.1 Making Transnational Chinese Subjects

6.1.1 Negotiating Chinese-Ness

Nationalism is a collective representation of national subjects, emerging with the rise of modern nation-states. It reflects the nature of national traditions and the identity of citizens of a nation as manifestations of a social-cultural concept and emotional legitimacy. Benedict Anderson (1991) in his *Imagined Communities* explores the relationship between the rise of national consciousness and modern capitalism. He examines the role of modern technology and "print capitalism" in spreading the consciousness of national space, territory, and citizenship. Popular discourses and communication disseminated national languages and ideologies across borders to unite previously disconnected groups of people within a shared experience and identity. The idea of a "nation" is a socially-constructed and imagined category among transnational communities with a shared experience and identity. Anderson labeled these places "imagined community:" "all communities larger than primordial villages of face-to-face" (and perhaps even these) are imagined. Communities are to be distinguished, not by their falsity-genuineness, but by the style in which they are imagined" (Anderson 1991: 6). Therefore, nationalism as a constructed narrative of the nation-state is created through invented representations and symbolic articulations in imagined communities beyond fixed racial categories and geophysical sites.

Today, the dynamism of a populous nation like China requires us to examine the symbolic and cultural content of nationalism in subjective, unstable, and invented processes (Robinson 1993). The meanings of China and being Chinese are intertwined with Chinese culture and society as a

living, dynamic reality and imagination. Moreover, the conceptions of political development, economic growth, social transformation, and cultural change provide alternative understandings of consciousness of Chinese-ness (Tu 1991/1994). While the meaning of being Chinese is always discursively articulated in a nationalist or cultural sense, this "Chinese-ness" is reflexively reconfigured under capitalist accumulation, displacement, and the cosmopolitan lifestyles that exist within Chinese communities in different parts of the world.

Fulfilling the meaning of Chinese-ness is one primary and important element constituted in the subject-making process through the actual and discursive practices of my Chinese Haigui informants. When I asked them why they chose to move back or travel to China, they showed a strong sense of personal attachment to their motherland that "legitimizes" their decision to return to China and maintain Chinese culture and connections. A common response is "my roots are in China." The making of a Chinese subject is situated in a discursive articulation of one's "rooted-ness," which is described as a particular aspect of Chinese identity, the responsibility for their family in China, as well as one's personal sentiments toward one's homeland. A strong Confucian ethic of being a filial child is deeply rooted in these Haigui subjects. Although living conditions may be much better abroad, Haigui are not emotionally attached to their host countries, nor do they necessarily enjoy Western lifestyles. In host countries, Haigui continue eating Chinese food, watching Chinese TV, and socializing with Chinese friends. "I am lonely and bored in this country. I can have a more colorful life in China" is another common response among my informants, illustrating their cultural attachment to their family and Chinese lifestyles more generally. The displacement and dissatisfaction with preserving their cultural identity in the West destabilizes the sense of Chinese rooted-ness in Western cultures and creates a generational gap between themselves as Chinese and their descendants in the next generation as Americans, more specifically Chinese-Americans (Wang 1991).

My informants gave their sense of belonging to China and their Confucian ethics as their primary reasons for their decision to return to China after having lived abroad. For example, Kevin graduated from a top American university with a Ph.D. in engineering, then returned to China, taking a position as an investment manager at a large U.S.-based multinational telecommunications company in Beijing. He shared his motivations for returning to China:

> I came back to repay an obligation, an obligation to my home country. It is not "uttering a slogan" (Han Kou Hao)[88]. My personal sentiment is stronger for China than other countries, because I was treated well by my country. I could study abroad, but many other fellow Chinese did not get such a benefit. Therefore, I should repay it. I can have a career in other countries too, and I can do better in China. But the most important reason is to repay the obligation. Moreover, my parents and friends are in China. I am more comfortable and feel free in China, because it is easier to be accepted in this cultural environment.

Kevin felt he had an obligation to his motherland, while at the same time, he did not feel a sense of belonging while living in the US. In addition, he was emotionally attached to his family and friends in China. Only by physically residing in China could he could maintain his social circle. Like Kevin, many Chinese return to their homeland for searching their cultural identity as Chinese. Although while back in China, they keep certain Western practices they have adopted in Western countries, Haigui prefer their Chinese identity by adjusting back to Chinese ways of living (Sussman 2010).

For female Haigui, family and marriage play an even more critical role in their decision-making process. Wang, a manager of international trade in one of the largest state-owned telecommunications companies, explained her reason for returning:

> I came back from New Zealand, because my parents really hoped that I would. Last year, I came back to attend my brother's wedding, and my father used this as an excuse to ask me to stay. Although I booked a round trip ticket, I decided to stay. Moreover, my husband does not speak English well, and it will not be easy for him to live in New Zealand.

Wang compromised her own will for that of her parents and her husband. After carefully considering her family's needs, she gave up her residency in New Zealand and started her life and career in China. Similarly, after living

[88] This Chinese expression means to say some words or phrases that are intended to sound impressive to the listener, but in reality, are meaningless to the speaker. In colloquial American slang, it is similar to the phrase "blowing smoke up one's ass."

and working in the US for nine years, Li came back to China and worked as a senior software manager at a British company in Beijing. She said to me: "life in the US was comfortable and simple, and I could have stayed there if my husband had wanted to live in the US." Another Haigui researcher had concerns about her marriage options. As a single Chinese woman in her early 30s, Qin had lived in the US for nine years. She decided to return to China in order to establish her own biological research lab at a research institute after she completed her postdoctoral research in a top national lab in the US. However, her return was not motivated by research opportunities, but by familial ones: "if I would not have returned, I am afraid I would never find a husband in the US. Moreover, I want to be closer to my parents. Although I may produce better research in the US, my family in China is more important." Among my informants, it seemed that female Chinese tended to enjoy their lives living in a foreign culture more so than men did, and were able to adjust to the lifestyles in their host countries more flexibly than their male counterparts. To those who have returned, many claimed that their family/parents were the main reason driving them to return to China.

Responding to another question about what the best outcomes were from living abroad, one informant immediately answered: "it was my son," and another informant said: "it was my husband. We met in England. He is a gift beyond my expectations." It was obvious from their responses that a sense of belonging to the motherland, as well as and a strong Confucian ethic valuing an orientation towards one's family, were profoundly rooted in these Haigui subjects. Chinese-ness means to Haigui the continuation of Chinese traditions and norms, and maintaining Chinese values is naturalized in the process of making a Chinese subject. When they are outside of China, the sense of being Chinese is heightened for them as they reflect upon the cultural differences they encounter while living abroad. While many Haigui feel alienated and displaced from Western culture and society, transnational Chinese also feel nostalgic for their previous Chinese lifestyles and communities, and thus develop a stronger emotional connection with China.

While working in a non-Chinese environment, these overseas Chinese can easily identify the differences between Chinese ethics and foreign norms, and think reflexively in their decision-making. After living in the US for nine years, Rao, who holds an MBA and an MS degree from two American universities, chose to open his own Internet startup company in China with another Haigui he met in the US. He told me that he returned to China because:

> there are big differences when working in the US and in China. In the US, I worked at a big company that has more than ten thousand employees. The system is very standard and professional. I was like a small cog in a big machine. But in China, my role can make a difference… In China, lots of aspects are not as mature as in the US. The Chinese market has its own characteristics, different from the US, which is why American Internet companies are not successful in China. Really understanding how Chinese customers think is a big challenge.

He also mentioned to me that "the mechanism is complete and the market is mature in other countries[89]. Running a company relies on efficiency, but opportunities lie in an inefficient system." His rationality was that an efficient system benefits large companies, while an inefficient system benefits small start-ups. Therefore, there are more opportunities in China, because its market is less efficient.

In this case, Chinese-ness is somewhat different from the previous articulation of maintaining Chinese ethics and norms. To Rao, Chinese-ness was characterized through the current political economic conditions in China: a less mature system and market, but full of economic opportunities with promises for growth. Reflecting upon the difference of his role in the US and China, he believed that being an invisible "cog" in a US machine was less meaningful, and he could play a more influential role in China. His sense of Chinese-ness not only relied on his optimism for China's growth prospects, but also on his confidence that being a Chinese native who was more familiar with the Chinese culture and market would give him an economic advantage with respect to foreigners. He knew well that he possessed a unique position as well as advantages compared to local Chinese professionals and foreign investors: Rao spoke fluent Chinese and English, had social capital in both local Chinese communities and Silicon Valley, was aware of dramatic changes both in the Chinese and global markets, and had acquired advanced managerial and financial techniques from his experience working in the US. Such advantages helped him flexibly negotiate with venture capital firms and other technological companies in China and the US and access resources promptly in different markets. His reflexive practice ultimately made his self-improvement possible, transforming from a "cog" to a successful CEO.

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[89] The term "other countries" or "foreign countries" often implies advancement and modernity in Chinese society. It is a discursive representation of the "West" as a modern society imagined by Chinese individuals.

The rapidly expanding Chinese economy creates an imaginary excitement in various discursive forms, both in the media and among Chinese individuals, including those residing abroad. As a strategy for the Chinese state to encourage transnational Chinese to return to China, the meaning of Chinese-ness is articulated in this discursive space, either as a nationalist obligation or in preferential policies that provide incentives to Chinese Haigui. In this way, the call for transnational Chinese to return to serve the home country becomes a normative slogan in various official publications and news reports. In addition, there is a standard way of writing to claim that Haigui are valuable citizens who can contribute to China's nationalist modernization. For example, in *The Age of Returnees* (Haigui Shidai), Wang Yaohui (2004) writes:

> those who have overseas education are always playing a pioneering role in the recent social progress and transformation in China. They are disseminators of advanced cultures and scientific technologies and productive forces of development and social change…Since economic reform, Haigui function as the pioneers to fill in the blanks and reduce the differences in the fields of economy, science and technology, military, culture, and education between China and the developed countries in the West…They promote the communication and fusion between Western and Eastern cultures and help China's economy to enter the global economic system faster and better. They have brought to China a great amount of new ideas, new cultures and new styles, and they have voluntarily acted as pioneers in China's opening to the outside world in every aspect. They are natural bridges for China to communicate with the world.

Through similar writings, the state and the public try to create an official way of viewing Haigui as part of a nationalist project. At the same time, the state has carried out various programs and regulations to favor Haigui in this project.

However, beyond the abstract claims of Haigui contributions to China's nation building as well as favorable programs to attract Haigui, transnational Chinese have an alternative view of their civil responsibilities and benefits. Deng, a physics Ph.D. graduate from an elite university in the US, claimed that when he opened his health care service company in China in collaboration with an American Health Promotion Resource Center, he

found that there were many benefits provided by the state. But "the offices are not satisfactory, or they have been rented to non-Haigui companies…However, I came back not because of the benefits at all. I wanted to run my own business, and never thought about staying in the US." When I asked Rao whether he had benefited from any preferential programs provided by the state, he answered similarly: "the state provides programs for Haigui such as reduced taxes, rentals, but they are not very useful. The offices in the returnee science park are too small, and it is not necessary for us to rent their offices." In a similar vein, Ge, a Haigui from England with a Master's degree in e-commerce who currently represents a British university in Beijing, also mentioned that "the state provides benefits for Haigui, for example, discounts if you buy a car. But the car has to be a Chinese car, and we finally bought a Japanese car. We did not take any advantage of the benefits provided by the state government." These statements reflect the sentiment that while the Chinese government provides various benefits to Haigui, the specific implementation of these programs does not always effectively help transnational Chinese.

As a matter of fact, no informants considered preferential programs or benefits as the key reason why they returned to China, and few of those who returned actually took advantage of the benefits. Although the state uses Chinese-ness in a nationalist sense to invite transnational Chinese back to China, there is a disparity between the state and Haigui, and between the "official" discourse and personal articulations of Chinese-ness. The discourse of calling transnational Chinese back is more symbolic than practical, and the benefits that the discourse promotes are not implemented effectively on the ground. Moreover, this kind of discursive articulation of Chinese-ness by the state is rarely taken into consideration as Haigui engage in subject-making.

However, Haigui also strategically use the nationalist sense of Chinese-ness in various public situations. For example, Deng Zhonghan, the founder of one of the largest semiconductor companies in China, gave a speech at Tsinghua University in 2005, the most renowned university in China, in which he stated:

> When I was standing on the Great Wall thinking about what I should do in the future, I made my decision that I wanted to come back and promote the semiconductor industry in China, the industry in which China has been left behind for decades. And I can contribute my

expertise, which I gained from Berkeley, Stanford, Sun, and Lucent, to the nation-building of our motherland.

Similarly, some of my informants specifically stressed their obligations to China as Haigui in different public forums, classes, and public interviews (see Figure 37). Such a strategy to show their patriotic position in China to public audiences is a way to help them gain a positive social reputation, symbolic capital, as well as favor the state's nationalist agenda. As a dynamic symbol, Chinese-ness is being understood differently through traditional and metamorphic articulations and experiences. It continues to embody static meanings in Confucian ethics and norms as well as a sentimental connection with Chinese history, culture, and communities[90]. Meanwhile, it also represents the dynamism of the political and economic realities in China today. Chinese-ness is embedded both in the imagination and in actual practices of how to be a Chinese in transnational situations between the East and the West. Additionally, Chinese-ness can be strategically adopted to fulfill certain political and public agendas, and it can be reflexively incorporated into a transnational subjectivity among Chinese Haigui.

Figure 37 A transnational Chinese articulating his patriotic goals on TV

[90] E.g. Feng and Bodde 1948, Fei 1992; Freedman 1966 & 1979; Redding 1993; Levenson 1968

6.1.2 Maintaining Flexibility

The global system has "enabled the emergence of global 'class'," which is a "stratum of transnational professionals and executives" who favor mobility and flexibility across national borders (Sassen 2006: 298). However, the global class is not necessarily cosmopolitan because they "remain partly embedded in localized environments" (Sassen 2006: 300). These localized environments mainly refer to "global cities," such as London, New York, or Tokyo, where global networks are centralized by corporate power, capital and resources (Sassen 1991). These localized global spaces are developed for "articulating and regulating global flows of technology, culture and actors" (Ong 2007). Global professionals and executives prefer to reside in localized global sites, as they are centers of finance and cosmopolitan culture as well as a denationalized space to articulate universal entitlements (Sassen 1998). Within these global sites, transnational Chinese executives become calculative and self-enterprising by accumulating multiple passports, contingent rights as well as different kinds of capital flexibly, with their high mobility conditioned by the infrastructure of global flows (Ong 1999). The traditional Chinese economic norms and values are rearticulated in new global political, economic, and social-cultural structures, and the transnational business practices are complicated by specific cultural advantages and limits at the global level (Ong 1999). All my Haigui informants displayed a preference for transnational status even as they settled down in China and valued Chinese traditions and ethics in their lives.

There are various ways to make sense of their desire to retain transnational status: keeping a permanent residency in a Western country, having family ties or investing in Western real estate, working for a multinational company in China, regularly traveling to foreign countries, and maintaining a cosmopolitan lifestyle by consuming Western products in China (see Figures 38 and 39). These transnational Chinese professionals have become a certain type of "global class" who are engaged in activities that situate multiple global forms of practices and consciousness at the local level. They try to claim their Chinese-ness while they reside in the West, where Western lifestyles and values are normative. However, in China, they choose to identify themselves through their overseas experience and prefer a transnational lifestyle that is not confined to the local Chinese setting. Their transnational experiences enable Haigui professionals to reflexively interact between the global and the local as well as between China and abroad.

Figure 38 Modern office design

Figure 39 A CBD restaurant that is popular among Haigui

Many of my informants preferred to work in an English-speaking environment in Beijing because they wanted to maintain their "international characteristics." Kevin claimed that it did not make much difference to work in Beijing, because he spoke English at work, and his colleagues were American natives or Chinese with American passports. Similarly, Pang—recently returned from the US--is an assistant to the Vice CEO of one of the largest computer companies in China. He mentioned that after his company bought a sector of an American company, he traveled for work between China and the US. Within one year, he flew more than eleven times across the Pacific Ocean. Wang's experience is comparable; as she led international telecommunication projects, she needed to travel to Africa and India on

behalf of her company regularly. Haigui who are in their 40s and 50s usually have green cards and keep their family in the host countries, but spend half of their time in China. While spending the other half of time with their families overseas, they work from home on Skype, usually via webcam to talk to their employees on the other side of the earth. Younger Haigui do not necessarily have a family yet, but they still prefer to have a connection with their host country, such as buying a house as a foreign investment. Speaking English and cross-border traveling are routine for these professionals, and they believe their previous overseas experiences give them a prominent advantage, enabling them to flexibly traverse cross-cultural domains and maintain transnational ties.

To Rao, the overseas experience meant more than just the flexibility and mobility to deal with cross-cultural issues; he also utilized overseas resources to maximize his career potential in China. Foreign investments and networks with other high-tech elites in the US helped him establish his own business in China. "In our previous start-up company that we sold, we raised six million dollars from two American venture capital firms, a Japanese firm, and a Chinese technological firm. Western companies are very interested in China." Transnational networks enabled him to gain resources beyond local Chinese communities, while his Haigui position earned him a trustworthy, professional reputation with foreign investors and local Chinese companies alike. Rao also mentioned:

> …another thing about living abroad is that you can broaden your views and know what is possible. You can learn from good companies that your friends establish, and there is a possibility to be part of it. It is very good encouragement, an encouragement of personal development. Also, you can learn about a lot of ideas. When you enter a knowledge economy and develop Internet businesses, a lot of things depend on ideas and on how to turn these ideas into profitable business models. Things that are international can provide a lot of inspirations.

Interestingly, Rao used Chinese and English interchangeably when expressing his opinion during the interview, which was stopped twice by two overseas telephone calls. All my informants clearly know that their transnational experiences serve as a backbone through which resources and opportunities can be accessed. Being transnational is constituted in their subjectivity through their work, their perceptions, and their lifestyles.

My informants mentioned that their transnational experiences also allowed them to broaden their views and deepen their insights. They claimed that their overseas experiences helped them to secure their job as well as understand various problems, both professional and personal. With MBA and MS degrees from the US, Li believed that her working experiences at a large telecommunication company and living experiences in the US have been of great benefit. When I asked her what the most important thing her overseas experience had brought to her, she answered: "My views are widened, and my thinking is not extreme. This is the most important. I can accept a lot of things more easily. I do not blackball different things, just because my understanding is different. Staying in the US for a long time leads to this mentality naturally, because American society is complicated with complex elements. People tend to be tolerant there." Li attributed her changed mentality to having adopted some American values. She argued that she was not bounded by one type of value system, but instead became more tolerant and flexible in terms of understanding cultural differences.

Sun, after studying information management, came back to work at one of the largest American companies in Beijing. She shared a similar response: "I studied abroad to experience a different life and to see a different world. I can accept different values, for example, gays and lesbians. I am not a lesbian, but I can accept them. One of my sisters[91] is a lesbian, and I even shared the same bed with her once. It took courage to do so." Rich experiences and interactions with diverse groups of people in various kinds of value spheres and cultural domains make transnational professionals more tolerant when facing different challenges. In turn, their experience allows them to flexibly respond when confronted with different situations and values. Ge mentioned that her confidence in interacting with different people came from her overseas experiences:

> If you have overseas living experience, when you come back, you are not afraid [of dealing with people], because you understand many cultural differences in China and abroad. Especially in my job, I need to pay special attention to my words and behaviors. It is very important for my work. This is what I benefit from my overseas experiences. My personality is not very outgoing. If I did not go abroad, I would not have such a concept [of how to deal with different people] in my mind. I feel

[91] "Sister" to many Chinese can mean a sister who shares the same parents, or a cousin, or in general, an elder female friend. Here, Sun was referring to a friend.

> learning a foreign language is not the biggest advantage; learning how to deal with different things is. It is not obvious in the short term, but it is a subtle influence over the long term. With more time, its value will be more apparent.

Like Ge, many Haigui develop cultural knowledge and confidence when they meet with people from diverse backgrounds and know how to flexibly reposition their ethics to interact with them. At the same time, they consider their changed way of interacting with people a long-term benefit that can significantly influence their life.

Their overseas experiences not only allow these professionals to work confidently in different cultural settings, but also enable them to think more critically and scrutinously through reflexive practices. Jay was a top American university graduate who used to be in charge of the Asian branch of a US automatic control company in Silicon Valley. After living in the US for almost eleven years, Jay moved back to China. While working fulltime at a foreign-based company in Beijing, he freelanced as a novelist and screenplay writer. He became somewhat well-known among the younger generation through his novel, which revolved around an overseas gay love story, and he publicly came out as a gay man himself after the novel was published.

One important reflection of Jay's was the understanding of what freedom and individualism meant in different cultures. He enthusiastically shared his insights with me:

> In America, people have a fundamental understanding of freedom. Today, some Chinese children want to be a maverick and self-centered. But Chinese values are too monolithic, and the influence of family is profound. If you ask Chinese people what the best life is for them, you will get the same answer from 90% of the respondents, even from those who are "unique." One famous female writer once wrote an article about the life of "petty bourgeoisie" in China…To her, the life of bourgeoisie is to get up at noon, sit in a sofa from Ikea, drink a cup of coffee from Starbucks, read a fashion magazine and enjoy the afternoon sunshine. Her bourgeois life is "branded."

Jay did not agree with the idea of individualism in the way that many local Chinese understood it, and he had a different understanding of "the bourgeoisie" as well. Based on his observation and understanding in the West, he defined it thusly:

> the "bourgeois" springs from the idea that people do not judge what is good and comfortable according to a public definition, but live a life based on what they want. For example, one person likes hiking, so he can work for half a year and hike for the other half. It is not that he does not know what to do at work, but he is happy even others think he is suffering.

He also shared with me another example about an American friend. He said:

> I have an American friend who always competes in bike racing. No matter where the competition is, he will go, and he will never win. But he does not care, because he always competes with himself, and he is happy if he can ride faster than before. Making money is for a living, but there is no uniform standard about what happiness is. In America, there is no such a uniform aesthetic criterion. Having no standard lifestyle is what the petty bourgeois is about, and what an individual/ego is about.

His thoughts were echoed by many other Haigui. In the beginning of the chapter, I presented how Dong, the researcher working in Demark, understood a happy and meaningful life to be. Like Jay, he also thought many local Chinese in China had a uniform definition of what the "good life" was about: job promotions and salary increases. To achieve this goal, many Chinese would sacrifice their individual interests to try to make money in order to satisfy material needs as defined by mainstream Chinese society. Jay argued:

> This notion of individualism is not the same as the one in China. Here in China, there are always criteria about what kind of car we should drive and what kind of house we should live in. For their self-interest, people can trample others' interest. In China, the 'ego' is selfishness, not individualism…The ten years or so of living in the US did shape my life and my mind. I do not care much about public definitions…The most important thing that I have learned is not to rely on others' definitions, but to think about what I myself really want. And my own pursuit of what I want is not based on trampling others' interests.

Like Jay, many Haigui are able to identify the normative values that they naturally incorporated in their earlier lives in China, and develop a more critical view of the differences between the two cultures.

Jay's overseas experience finally helped him to overcome stress and embarrassment as he faced prejudice and discrimination against gay people in China. He not only was brave enough to openly discuss his gay identity and experience, but he also helped other Chinese understand the rights and struggles of this marginalized population in China. "Living abroad makes my angle of view broader, and I can accept more modes of thinking. These changes of different thinking can only be noticed after I return to China." To Jay, his reflexive practices allowed him to observe the changes and differences embodied in his own mind and life, which were realized through his transnational experiences between China and the US. Through their transnational experiences, like Jay, these Haigui have developed certain cosmopolitan, flexible, and reflexive characteristics in their skills, values, and ethics. While Haigui traverse various ethical, social, and economic domains, these characteristics have profoundly shaped their subjectivity.

The transnationality of a subject is articulated and experienced through reflexive practices among these professionals. After moving back to China, they can easily and clearly reflect upon differences between China and their former host country. Upon returning home, Haigui notice aspects of China—different from the West—that previously seemed "natural" before they left. When I asked about these differences, almost everyone immediately responded that in China "there are so many people," "the air is not clean," and "the sky is rarely blue." In terms of cultural norms, one informant exclaimed that in China, "sales people are so rude!" Another complained that when she wanted to buy something from the local Chinese: "it seems that I am the one who is selling the thing and should be serving them." Some informants also complained that in China "people drive crazily," and "never stand in line when waiting for bus or buying things." "People never follow rules in China. If you yield, you will never get on the bus or get your turn to buy things." "Where I live in England, people smile at each other and say hello on the street, even to strangers. When I came back and went to the restroom at the airport in Beijing, I greeted the woman who was cleaning the bathroom. She gave me a very suspicious look." In fact, what these Haigui complain about regarding China used to be normal and natural. However,

after living abroad, they can quickly reflect upon the differences they see after comparing two different societies.

Moreover, many dramatic changes occurred during the recent two decades when Haigui were still living abroad. Some Haigui feel that they have missed out on these experiences that their Chinese fellows have gone through, and this can pose various challenges to Haigui when they return. Jay said:

> …in the last four or five years traveling back and forth between China and the US, I felt nothing uncomfortable in China. I always wanted to come back and stay for a few days. It was very comfortable with tasty food and abundant goods, and I went out with friends. [It is] a life better than the one in the US. However, after I moved back to live in Beijing, things became different. The conditions of the whole society and people are very different…The differences on the surface are less important such as material conditions or air quality, etc. The main thing is people's thinking, the mode of understanding things, which is very different...You have not experienced the same thing with them… and understanding is different. Changes happen so fast. Some people say that foreigners who live in Beijing for a long time may become even "worse" than the local Beijing residents[92]. In fact, it is not "bad", but it is caused by insecurity. People do not have a sense of security here. If you go to buy something or to obtain a service, nothing is secure. If there is no guarantee of following certain procedures to do things, problems will arise.

Clearly, Jay was reflecting upon the norms of rules and security in American society when he talked about conditions in China. He became accustomed to a system with credible, standard ethics and procedures, but is now confronted with a polar opposite set of ethics and customs while in China. Therefore, once home, he needed to remind himself of how things should be done in China by reflexively thinking about norms and ethics in Chinese culture.

Reflecting upon the differences in the two different societies, Jay could understand why he needed to do things in the "Chinese" way:

[92] Here, Jay was trying to explain that people may not be able to cope with changes within a limited time-space compression. The sudden transition from the Western to an Eastern environment makes foreigners who are accustomed to a secure system feel even more insecure within the Chinese system, and therefore become more cautious and skeptical about everything around them in China. This kind of skepticism leads to some certain behaviors that are not "friendly," which is considered "bad" by the local Chinese.

> It is the problem of the system…Easterners and Westerners are not the same. The mode of thinking and the sense of credibility are different in two cultures. In China, there is little sense of credibility. It is the difference in essence. Chinese values are different. In the US, it is clear to judge what is right and what is wrong; what can be done and want cannot be done. In China, such values are not clear. People do things based on sentiments, which means whether I can understand why you do so is based on whether you have a reason for it. Even when judging a murder case, people need to see the reason and what the motive is. It is easy to sympathize with the murderer, [if there is a "reasonable motive."] It is a distinguishing thing between China and the West. It leads to a system without strict standards and rules here…a lot of people can do things without rules through different channels. Of course it is stimulated by economic interests, un-transparent reasons, and value discrepancies.

While Western society favors clearly defined rules and systematic procedures, Chinese rules are always negotiable and flexible. Haigui need to cope with this flexibility and uncertainty at work when they interact with local Chinese individuals and institutions. Thinking reflexively, Jay understood the things he did not like in China and flexibly adjusted when coping with problems. It is a process of transitioning his subjectivity in different cultures through reflexive practices.

Jay shared with me an example to show how he reflexively coped with a conflict involving local Chinese:

> In China, when I wanted to help those whom I think deserve sympathy, I finally realized that they did not appreciate my help. Instead, they used my good will to get further benefits. I bought a house after I moved back and hired some local Chinese to change the interior design. I thought they worked hard, so I paid a little bit more for their hard work…But they believed that I did not care about money and started to charge more money [on everything else]… I felt disappointed and did not think it was unfair, because I wanted to help them at the beginning. They thought I was a fool. In these years, I have adjusted my mind and understood their mode of thinking. They have never experienced my "ascendant" lifestyle and they do not share my views of value. Their value is based on how to survive and try to get what they can get. "Since

> you can give me more, I will ask for more. The more, the better." From this perspective, they did nothing wrong. It is caused by society. They did not get much help when they grew up and therefore did not consider help a "noble" thing. They may think of it as " pie falling from the sky."[93] If they cannot catch it today, they will miss it tomorrow…Now I think it through and consider that helping others simply makes me happy without caring about how others think. But helping others does not mean trusting others. I need to know my bottom line.

Based on his own and other's experiences, Jay became conscious of different modes of thinking and practices that were embedded in the structural differences in China and in the US. Like Jay, the subjectivity of these transnational professionals is transformed to adjust to different norms and ethics through their reflexive practices between various ethical, social, and economic structures.

6.1.3 Mobilizing Transnational Expertise

To Chinese high-tech elites, transnational experiences inform their skills, values, and lifestyles in China. Moreover, their technical and managerial expertise and skills play a central role in transnational contexts and cross-cultural encounters to help them gain social and economic capital. Describing transnational Chinese, Ong (1999, 2007) argues "the émigrés will eventually return with their Western knowledge and cultural practices to help modernize Asian nations" (for example, Ong 1999: pp. 43–48). With desires for global knowledge and technology, megacities favor educated and talented experts and professionals, both local and foreign, who produce elite economic and cultural values, and fast-moving innovation (Ong, 2007). Responding to the challenges of global capitalism and innovation production, the preferential strategies adopted by the state have created scaled geographies of megacities and articulated various "mutations of citizenship," resulting in "a variegated patterning of zones." as well as different governing strategies of groups and populations, which is a form of "graduated sovereignty" (Ong 2006, 2007:85). In Asian megacities such as Beijing, "[e]xperts and expatriates alike are now coded as values in their own right. Their pied-a-terre location adds speculative value to the Asian

[93] This Chinese expression means having a good luck to get an unexpected gift.

metropolis, helping to shape an economy of symbolic real estate. The city as a spectacle of globality—international residents, cutting edge industries, stunning skyscrapers—draws its aspirational value from the concentrated presence of expatriates. Developers, entrepreneurs, and professionals directly and indirectly represent the city's stock of economic and cultural worth" (Ong 2007:90). With advanced knowledge and expertise, transnational high-tech professionals are granted special opportunities and resources in megacities as an emerging class of new technocrat elites.

Although some choose to return to smaller cities in China, most Haigui still claim that large cities such as Shanghai or Beijing are where their knowledge and expertise can be most valued and utilized. Rao said: "opportunities in Beijing are good. China for me is a familiar environment, a huge space for development with lots of resources. Many things need to be done here." Reflecting upon a more mature system of global capitalism in the US, Li believed that she could bring her expertise in technology and management back to Beijing. When she first joined a Haigui software start-up in Beijing, she needed to reorganize the whole department that she was in charge of. She stated:

> I like systematic structures and do not like chaos. It has something to do with [my experience in] the US, which is like a machine that runs well with a complete system. I appreciate it. In my work [in China], I pay special attention to this aspect. I established a set of criteria [in my company]…Small companies have more space to be reorganized and improved. I helped build a system to put things in order…Merely doing technology work in the US has little space [of self-development], very stable…After I came back, I am very committed to my job, and I like it very much…Initially, I was a team manager, and half a year later, I became the director of research and development of the company…There is a large space for me to work here…I feel excited and interested. Also I can continue to learn a lot of new things in my job.

Their advanced expertise and Western experiences are recognized by the state and local companies in China, while at the same time, they are capitalized to generate greater value in the Chinese market.

With an engineering background and the experience of working with world-class experts, Eric claimed that he made a rational choice for his career as a venture capital investor in China:

> I am interested in VC[94] and like to interact with small start-ups. I like to see small companies grow little by little, like my own baby. I like to see how technology is applied in society. I have a lot of ideas, and I think this [VC] is a good place to start with. There are many kinds of VC. Traditional VC deals with finance. There are successful VCs of this kind in China such as IDG. But I think this path is not good for me, because if I go there, my position will be junior and it is a high risk. I have no advantages there. Therefore, I think about VC in big technology companies. With technological support, this kind of VC will be more effective. In China, the brand of investment is important.[95] My technology background is a big advantage…This is a rational choice for me.

Eric considers his technology background very relevant in his career in investment and reflexively makes his decision. Like Eric, transnational high-tech elites play a crucial role in China's development through applying their knowledge and expertise. Their educational and work experiences also define their social position and function in Chinese work settings.

Interestingly, I have also observed how flexibly my Haigui informants position themselves at different situations through certain kinds of self-branding of their knowledge and expertise. My informant Dr. Ru is a typical example of such self-branding. After finishing his Ph.D. and MBA degrees from the US, he returned to Beijing and founded his Internet company at the Science Park of CPU, where he previously earned his MS degree. While he ran his own company, he was also hired by the Business School at CPU to teach some MBA classes due to his educational background and his earlier networks at this university. Ru therefore prepared two sets of different name cards for use and strategically makes use of his expertise as both professor and entrepreneur, depending on the situation (see Figures 40, 41 and 42). For example, at an opening ceremony of the international MBA program, his business professor title gave him legitimacy to speak to a large audience of graduate students. Conversely, at an international business forum, Ru gave an important speech on leadership, made credible through his status as a Haigui entrepreneur. At other times, he used the facilities and the reputation

[94] Venture Capital

[95] Here Eric means that the company he works for has a good global reputation. In China, when start-ups seek investment, they care about the "brand" and the reputation of an investment company very much. Therefore, Eric thinks that a company with a good reputation is a good place to begin his investment career.

of Tsinghua to invite important business leaders in China to speak to his MBA classes. While in this context, he used the title of professor, he also used the teaching platform to build his business networks for his own company. This flexibility and strategic use of his social position and expertise helped him traverse different markets in order to accumulate varied capital and resources.

Figure 40 Hosting a university event

Figure 41 Being interviewed by two journalists

Figure 42 Giving a talk at a business event

In Beijing, the ambition of the city to become an innovative player in the global system engenders a space for these transnational professionals to use their expertise and knowledge to create greater economic and cultural value. At the same time, such experiences crystallize the self-improvement and self-fulfillment of these transnational subjects. They reflexively examine the differences and opportunities in various situations and scrutinize their choices available, thinking carefully about the kind of life they want and how their expertise and knowledge can be best applied toward that end. Through such self-scrutiny practices, a reflexive subject is formed.

6.2 Reflexive Subjectivity

In this chapter, the notion of making a subject is associated with ethical justifications and the conditions of possibility of being who we should and can be in a global process of transformation. Subjectivity is formed in various discursive social spaces, as well as through personal and interpersonal experiences of self-scrutiny, self-improvement, and reflexivity of awareness.

The development of a particular mode of self is conditioned by historical specificities (Liu 2002). With global transformation and Chinese economic growth, modern Chinese subjects have become "self-containing and right-bearing individuals" who are "seeking to maximize their own well-being" and participate in creating a society "by the sum of their actions and interactions" (Liu 2002). The practices of modern liberal subjects presents

ethics and virtues of "self-control, self-denial, self-esteem, and self-possession" through daily experiences (Liu 2002:114). Favoring "flexibility, mobility and repositioning" at the transnational level, Chinese businessmen are able to respond "fluidly and opportunistically" to "markets, governments and cultural regimes" (Ong 1999). Through cross-border experiences and accumulating multiple passports and contingent rights, transnational subjects become "flexible citizens" who are able to scrutinize their self-conditions and thus improve their personhood (Ong 1999). "Flexible citizenship" is not only a form of neoliberal formation that relates individuals to particular historical moments of political economy, but it also captures the making of a subject by cultivating cultural capital and producing symbolic values as strategies and practices of self-improvement.

In this way, the subject itself becomes an object to be reflected upon. The self-scrutiny of a subject is situated in relation to one's inner self-consciousness and the existence and experience of the self. Taylor (1989) captures the historical character of the inner space within oneself as "radical reflexivity," which deals with the objectification of experience itself. Modern subjects need to reflexively be aware of their awareness and experience their experiencing. This kind of reflexivity is a conceptual inquiry into the making of a subject by certain kind of performative practices. The subject is not only able to act and experience under certain historical structures, his very awareness of his experiences also become an object that can be reflected upon by the subject.

This performative practice allows transnational Chinese professionals to deal with various cultural limitations in cross-cultural situations. In this process, transnational professionals have developed flexible identities and a reflexive mode of thinking to negotiate with state power, different markets, and values. I call this form of practice "reflexive subjectivity." I argue that it is a major form of professional entrepreneurialism developed through the entanglements with nationalistic entrepreneurialism. The contradictions between various Chinese and Western values usually put transnational Chinese into ambiguous situations. However, reflexive subjectivity—as the ability to displace oneself from the two cultures—can often create a liminal space for these professionals to free themselves from one bounded set of rules and to generate possibilities for new practices and ways of thinking. Transnational Chinese reflect upon their own experiences in China and the West, and as a result, Chinese and Western values are subjected to practices of reflexive justifications. In this way, solving specific problems in cross-

cultural practices and applying reflexive knowledge are internalized to the self-making of transnational Chinese.

In the globally social processes situated in Beijing that embrace migratory talents and elites, a new form of transnational subjects is being constituted and reconstituted through reflexive practices. Haigui turn inward, subjecting themselves to self-scrutiny as they question how to live the life they should live. Although transnational high-tech professionals experience challenges and difficulties while repositioning themselves in cross-cultural settings, their knowledge, expertise, and cosmopolitan experiences enable them to capture resources and opportunities for self-development and to produce economic and cultural value. Their transnational experiences in cross-cultural settings provide a space for them to problematize their experience, to think reflexively based on cultural differences in order to tackle specific problems, and to produce certain values at the technological and ethical level. Such reflexive practices ultimately lead to the emergence of a new form of transnational subjectivity.

The most important aspect is the mode of thinking among transnational subjects that is highly reflexive, which provides more flexible techniques for them in negotiations and reformations in their work and life. The sensibility to capture the differences between multiple markets and societies is not just driven by political or economic factors. Importantly, cultural and ethical differences often spark the process, as Haigui encounter situations that require their reflexivity and flexibility of repositioning. Therefore, the emerging global class/group of transnational professionals are not merely equipped with the characteristics of speaking more than one language, carrying multiple passports, maintaining transnational networks, or accessing capital from various countries. Haigui also shape the meaning of "the global" which lies in their capability of understanding and exercising multiple modes of thinking and doing in a reflexive way that can be flexibly situated within specific local contexts.

VII Conclusion: Nationalism and the Rise of Chinese Technologies

During the second half of 2009, dozens of large companies in the West encountered a cyber attack that attempted to access and modify their source code repositories. These were mainly technology, security, finance, and defense contractor companies, including Google, Adobe, Juniper, Rackspace, Yahoo, and Morgan Stanley. It was believed that the attack originated from China. This attack was called "Operation Aurora" by the cyber security company McAfee. Google was the first of the victims to publicly acknowledge an attack in January 2010. Since Google had been discontented with the censorship imposed by the Chinese government on Google's search engine in China, Google wanted to use the incident as a bargaining chip to negotiate with the Chinese government. Google stated that if it could not operate its search engine in China without censorship, it would close its Chinese offices. Negotiations with the Chinese government failed two months later, and Google decided to withdraw from the Chinese market.

Google's decision to close its offices in China changed the landscape of the search engine market in China. Google's biggest competitor in China, Baidu, a company established by a Haigui who returned from the United States, was the largest beneficiary of Google's retreat from China. Google's market share in terms of the web search function in China was 18.4% in the first season of 2010, and it dropped to 11.1% in the last season of 2010, whereas Baidu increased its market share from 73.5% in the first season of 2010 to 83.6% in the last season.[96]

Chinese Internet users had different interpretations of Google's "war" with the Chinese government. On the one hand, some netizens argued that the Chinese government tried to reinforce its protection and support of Chinese companies and favored Haigui companies over multinational companies. Google encountered significant obstacles in an unfavorable market, and therefore Google simply used the incident as an excuse to cover its lack of success in the Chinese market so as to maintain a public image of a successful and innovative global leader in technology. On the other hand,

[96] Source: iresearch.com.cn

Chinese netizens in transnational Chinese online communities are known for being cynical about the Chinese government and social problems in China, and they tended to admire Google as a new innovative global power and embrace the spirit of freedom of speech. However, in the name of protecting China's social and political "integrity," surprisingly most Chinese netizens condemned instead of supported Google's decision to withdraw from the Chinese market. The case of Google's exit from China evokes issues of the politicization of technology as well as its cultural values in producing technology. How shall we understand Google's rationale that favors its spirit of innovation and the freedom of speech over economic profits? How shall we analyze Chinese netizens' nationalistic mentality that challenges Western democratic values? How shall we draw a conclusion about the political and cultural practices of innovation beyond the materiality of technological advancement?

In this concluding chapter, I first use the case studies of Google's exit from China and the rise of Chinese tech companies on NASDAQ to show a nationalistic agenda of innovation development in China. I argue that innovation development is the product of nationalistic entrepreneurialism that attracts economic resources and human capital to build China as a modern nation. The economic worth of a technology is given more value than its innovative potential among Chinese companies and government institutions. However, political stability and social integrity are the fundamentals of Chinese society that cannot be challenged in favor of any other incentives. An anti-China movement in the West, such as the case of Google's departure from China, reinforces Chinese nationalism as resistance to Western values and power. Meanwhile, nationalist entrepreneurialism provides more favorable incentives and opportunities to Chinese companies. While Western companies such as Facebook, Youtube, Twitter, Wikipedia, LinkedIn, and Foursquare are banned in China, Chinese companies, especially Haigui companies, have efficiently adopted Western technologies and business models. With the growing Internet population and fast-expanding domestic market, small IT startups have created a large user base in order to grow their own businesses under the protection of nationalistic entrepreneurialism. In sum, innovation is a situated notion in specific political and cultural contexts. Innovation development is fundamentally a political tool for the Chinese government to reinforce its governing power over resources and populations through exercising nationalist entrepreneurialism to enhance its sovereignty in China in response to the changing landscape of global geopolitical and economic systems.

Second, I augue that by imitating and adopting Western technologies, China is enhancing its talent pool, technological infrastructure, and entrepreneurial culture to develop innovation. In this process, Chinese Haigui play a significant role in introducing Western managerial and technological knowledge and experience as well as cultivating professional entrepreneurialism in cross-cultural contexts. Although in daily practices of producing innovative entrepreneurship in China, Haigui encounter various challenges caused by the cultural differences of work ethics and values, they try to identify innovative markets in China and develop socially creative practices to fulfill their professional and personal goals. They capture culturally-specific features of Chinese users and modify existing Western technologies to better fit the Chinese market. In developing professional entrepreneurialism between different cultures and markets, Haigui have formed flexible strategies and reflexive subjectivities in search of what it means to be Chinese and modern subjects. Innovation development not only engendered local Chinese companies such as Lenovo, Huawei, and Alibaba with the potential to become leading technology players in global markets, but also led to grassroots movements for imitating innovative products, known as the "Shan Zhai" phenomenon. Meanwhile, professional entrepreneurialism developed among Chinese companies, especially Haigui companies such as Baidu, Sohu, and Renren, which helped China to better access transnational resources, expand its investor base, and enhance its global brand and influence, for example, by listing Chinese high-tech companies on NASDAQ.

Finally, I conclude that as a symbol of modernity, innovation is being re-defined and implemented in politically and culturally specific ways in contemporary China. Innovation goes beyond a unitary version that relies on economic productivity, instrumental relationships, and technological materiality. The Chinese interpretation of innovation not only represents how Chinese society desires social changes to achieve a social reality that is called "modernity," but also shows a contingent and complex process full of contentions, ambiguities, uncertainties, and contradictions within Chinese society and between China and Western contexts. But such a process is exactly how modernity is continually being reconfigured as an integral part of conceptualizing and practicing what it means to be modern and what it means to be modern subjects in the contemporary world.

7.1 Unmaking and Remaking Western Innovation

On January 12, 2010, David Drummond, the Chief Legal Officer of Google, released an official statement on behalf of the company that Google was considering shutting down its business operations in China after its launch there in 2006. The main reason was that its corporate infrastructure in China was under a "highly sophisticated and targeted attack," which resulted in "the theft of intellectual property from Google."[97] Drummond claimed that more than 20 other large companies were hacked in the same way. The goal of the attack was to access Gmail accounts of human rights activists in China. Although not many accounts were hacked successfully, Google believed that this was a critical issue that raised concerns about China's human rights and intellectual property issues. Drummond wrote:

> We have taken the unusual step of sharing information about these attacks with a broad audience not just because of the security and human rights implications of what we have unearthed, but also because this information goes to the heart of a much bigger global debate about freedom of speech…These attacks and the surveillance they have uncovered–combined with the attempts over the past year to further limit free speech on the web–have led us to conclude that we should review the feasibility of our business operations in China. We have decided we are no longer willing to continue censoring our results on Google.cn, and so over the next few weeks we will be discussing with the Chinese government the basis on which we could operate an unfiltered search engine within the law, if at all. We recognize that this may well mean having to shut down Google.cn, and potentially our offices in China.[98]

Although the source of the attack was unknown, many people believed that this cyber attack was a political means for the Chinese government to hack Western systems in order to spy on human rights activists. Having implemented a censored version of its search engine in China for about four years, Google stated that they would negotiate with the Chinese government about operating a completely uncensored search engine "within the law, if at all."[99] If the negotiation did not work out, they would close their offices in China. On March 23rd, David Drummond announced that Google had decided to withdraw most of its businesses in mainland China and move its

[97] http://techcrunch.com/2010/01/12/google-china-attacks/, retrieved January 13, 2010
[98] http://googleblog.blogspot.com/2010/01/new-approach-to-china.html, retrieved January 12, 2010
[99] http://en.wikipedia.org/wiki/Operation_Aurora#Response_and_aftermath, retrieved January 1, 2011

China-based search functions to Hong Kong. The original Google site in China, www.google.cn, was no longer in use.

Portrayed by the Western public media as a symbol of Western innovation, Google not only represents the new generation of entrepreneurs with its spirit of creativity and individuality, but it also claims to embrace the democratic ideas of freedom of speech and fair competition based on meritocracy in a free market. While Google competes with other innovative companies in technological wars and strives to challenge the limits of human capital by continuously experimenting with cutting-edge, innovative ideas, it was inevitably enmeshed in a political war between China and the US. The result was Google's shutting down its Chinese businesses to reinforce its claimed values against the censorship of "a domineering governmental regime" (Dahiya 2010).

Right after Google released this statement, the US and Chinese governments, the Western and Chinese media, Chinese Internet users, and companies in China and the US generated heated responses and discussions about Google's departure from the Chinese market. Secretary of State Hillary Clinton stated that she was seriously concerned about the situation. The US Congress planned to investigate the cyber attack in more detail. The US government considered Google's case another piece of evidence showing China's implementation of "cyberwarfare and cyberespionage against American interests." To Congress, China was "the single greatest risk to the security of American technologies."[100] The Western media and US companies and individuals similarly raised concerns about the vulnerability of their intellectual property under Chinese attacks and viewed Chinese hack attempts as serious cyber threats to critical industries in the West and their own businesses. On Techcrunch, one of the most influential technology blogs in the Western media, many people openly discussed their concerns based on the case of Google. A commenter called "Jay" wrote:

> I think people better start taking notice of the Chinese. I think they are doing more than attacking Google. I think they are attacking many US businesses. My server is attacked on a daily basis with IP address[es] coming from China. I think they are trying to attack much of our systems

[100] http://en.wikipedia.org/wiki/Cyberwarfare_in_the_People's_Republic_of_China#cite_note-iw-5, retrieved January 1, 2011

> to gain knowledge and find weakness in much more than our military & technology but our way of life.[101]

Another commenter called "Ryan" attributed Google's failure in China to the non-democratic system in China. He wrote:

> You know Democracy works only with Democracy. Internet and Google foster democracy. Essentially it is difficult to sustain and grow in a place which is non-democratic. Google should spread its wings more in countries that are democratic and where freedom and human rights are respected.[102]

To most Western audiences, the news of Google's exit from China was further proof of the fundamental differences and conflicts between a "democratic" society with freedom of speech and a "non-democratic" regime with authoritarian power. China again was portrayed as a political regime that threatened the hegemonic power of Western democracy, the free market, and innovation.

However, the Chinese government, according to Reuters, considered Google's action the latest manifestation of Western imperialism through a private agent. The Chinese government expressed its anger and dissatisfaction with Google's unreasonable scapegoating of the Chinese government.[103] The government stated that there would be alternative ways to resolve a problem, but "every foreign company including Google will have to abide by Chinese laws" (Dahiya 2010). To many Chinese, it was surprising news that a big company like Google could make a critical decision at the cost of its potential economic benefits; it seemed to them an irrational decision. Such an action meant that Google would lose its competitive advantages in one of the most promising markets in the world. This decision would also make Google lose 600 million dollars of revenue in 2010.[104] Still, some supported Google's decision. A well-known blogger in China, Zhou Shuguang, said, "I welcome the move and support Google because an uncensored search engine is something that I need." Some referred to Google's name in Chinese as "Gu Ge" (Bone Brother), meaning a man with moral honesty, to praise its bravery in fighting against

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[101] http://techcrunch.com/2010/01/12/google-china-attacks/. Retrieved January 13, 2010
[102] Ibid.
[103] http://www.voanews.com/chinese/news/20100323-Google-made---good-promise-88901037.html. Retrieved April 15, 2010
[104] http://theory.people.com.cn/GB/11227749.html. Retrieved March 1, 2010

authoritarian power.[105] However, more Chinese people were suspicious that Google was trying to use the cyber attack as an excuse to cover its unsatisfactory performance in China. In the name of protecting its value of freedom of speech, Google could exit the Chinese market with "dignity." Chinese netizens argued that the exit was due to Google's failure to compete with its counterpart, Baidu, a Chinese search engine built by a Haigui.

According to an online survey by Global Times, a Chinese online media outlet sponsored by the Chinese government, more than 70% of the 13,000 Chinese netizens who participated in the survey believed that the exit of Google was part of a US government conspiracy.[106] In another survey among 110,000 participants, 80% believed the Chinese government should not accept Google's demand to run an uncensored version of its search engine, and 75% of the participants called Google's action an attempt to intervene in the internal affairs of China.[107] A Chinese Internet user published an article to condemn Google on the grounds that "the US government put efforts and money, and Google put technology to support American cultural imperialism."[108]

Many Chinese did not support Google's decision. One the one hand, they felt pity for Google. On the other hand, they believed Google's action was "irresponsible" with regard to its Chinese employees.[109] Moreover, it would create a lot of inconvenience and trouble for Chinese users.[110] A netizen published an open letter to the Chinese government and Google to complain about the ignorance of public interests and the rights of Chinese users in the process of the negotiation between the government and Google.[111] He argued that the politicization of the event went beyond the economic rationale and led to tremendous damage to the Internet communities of millions of Chinese netizens. According to media studies in Shanghai, Google did not earn compassion from its previously loyal Chinese users.[112] Some Chinese argued that the censorship in China was not something new or even unique to China. In fact, it existed in all countries, just at different levels. They believed Google was overreacting in this case to sacrifice the

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[105] http://hk.news.yahoo.com/article/100325/4/h7aa.html. Retrieved March 1, 2010
[106] http://china.huanqiu.com/roll/2010-01/690527.html. Retrieved June 18, 2010
[107] http://tech.huanqiu.com/net/web/2010-01/689044.html. Retrieved June 18, 2010
[108] http://www.voanews.com/chinese/news/20100325-Congress-Slams-China-Praises-Google-89109352.html. Retrieved March 25, 2010
[109] Interview with a tech journalist in one of the biggest online media companies.
[110] http://www.bbc.co.uk/zhongwen/simp/china/2010/03/100323_googleusersreaction.shtml. Retrieved March 15, 2010
[111] http://www.rfa.org/mandarin/yataibaodao/google-03222010093656.html. Retrieved March 25, 2010
[112] http://news.163.com/10/0324/17/62IARSNF000146BD.html. Retrieved March 25, 2010

benefits of millions of Chinese users.[113] The famous Chinese writer Han Han wrote, "Google overestimated the values of freedom, truth, and fairness in Chinese netizens' mind[s]. Its explanation to exit China could not earn consent and resonance among most Chinese…Their endurance is way beyond what can be imagined and their needs are way below what can be imagined."[114] Han Han is well known for his cynical views about Chinese society. His articles about Google's exit were banned in China after their release. Although he did not agree with Chinese censorship, he also criticized Google's impulse as stemming from immature ignorance of Chinese culture and society.

The incident of Google's dispute with China's authoritarian power and censorship strategies is a classic example of how Western innovation and values clash with Chinese political and cultural regimes. As one of the global leaders of innovation, Google can contribute to technological and economic development in China. Chinese people also appreciate the spirit of creativity and corporate culture that Google has brought into China. According to the Western point of view, freedom of speech, the right to access the truth, and democracy are the core values symbolizing civilization and modernity that American society seems to value and hope for. Such a cosmopolitan perspective has experienced cultural limits in China, however. Western critiques would often blame the so-called "authoritarian" government and a "non-democratic" society in non-Western contexts for creating such cultural limits.

Some Chinese who are cynical about Chinese hegemony understand this point of view among Westerners, but consider them ignorant and unable to understand the social reality of China that is historically, culturally, and politically specific and situated. But most Chinese, especially within China, would understand the Western agenda as an imperialistic instrument for the interests of the West and nationally form an antagonistic response to the Western attempts in China. Such a response is largely based on a sense of nationalism in order to protect the political and social integrity of China. To build a self-defended nation, the Chinese government adopts nationalistic entrepreneurialism, a political technology to maximize cultural, spatial, and economic resources to reinforce its sovereignty, and mobilize Chinese people to form an emotional and cultural alliance through nationalistic

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[113] http://www.bbc.co.uk/zhongwen/simp/china/2010/03/100323_googleusersreaction.shtml. Retrieved March 15, 2010
[114] http://www.voanews.com/chinese/news/20100325-Congress-Slams-China-Praises-Google-89109352.html. Retrieved March 25, 2010

discourses. This nationalistic connection can be traced back to the memories and the societal foundation of nationalism in modern Chinese history, during which China strived to protect its sovereignty against Western imperialism and colonialism between the 19th century and the first half of 20th century. This political and cultural bonding between a government and its people goes beyond calculative rationality and economic incentives. The case of Google shows that technological entrepreneurship is greatly affected by political interference in China. But the interference is based on a nationalistic foundation among Chinese people. Characterized as the stabilizing forces of the state's power and Chinese society, political sovereignty and social integrity are the top priorities for the Chinese government when technological entrepreneurship and sovereignty are being challenged by Western agendas.

Since nationalistic entrepreneurialism is a state-governing technology that strategically administers and restricts the role and function of Western multinational companies in China, it creates a business environment that favors local Chinese companies and Haigui companies. Nationalistic discourses created by the government encourage Chinese citizens to support indigenous products. Various disputes of multinational companies with the Chinese government such as the case of Google usually result in nationalistic responses from Chinese citizens. While foreign companies are labeled as "imperialistic enemies," which threaten China's sovereignty and the social benefits of Chinese people, Chinese companies are portrayed as "patriotic warriors," which protect the rights and interests of Chinese people. Economically and politically, Baidu was the biggest winner in the case of Google's exit from China.

As a Haigui company, Baidu is portrayed by the media as a model company that has successfully transferred, modified, and implemented Western technologies in the context of China. At the same time, Baidu is more sensitive than foreign companies to Chinese culture and society. The name of "Baidu" comes from a famous poem written in the 1100s during the Song Dynasty, which expresses a complex and exciting feeling when someone finally finds the one beloved after a long search. Baidu therefore represents a cultural symbol of China's technologies and innovation.[115] After

[115] Whether Baidu is a Chinese company is controversial, since the founders established the company in Silicon Valley and the registration locations included the Cayman Islands and British Virgin Islands. But public discourses still consider Baidu a Chinese company since the founders are Chinese nationals, and its headquarters and main businesses are located in China.

Google shut down its operations in China, Baidu has reinforced its leading position in controlling the Chinese market of online search services. With increased profits, Baidu was able to strengthen its research and development (R&D) to modify its search functions and technologies to serve Internet users. Compared to Google, "an arrogant Western superstar" in Chinese eyes, Baidu is portrayed by the public media as pursuing its goals to understand Chinese culture and politics while expanding its transnational networks and brand influence.

The background of Haigui helps the founder, Robin Li, to strategically navigate across national and cultural borders. Robin Li has been portrayed by the Chinese public media as one of the most successful Haigui entrepreneurs in China. After studying and working in the US for years, Li established Baidu in 2000 and decided to help China improve its search engine industries. Growing from a small high-tech start-up, Baidu has become the biggest search engine in China. It has taken over more than 80% of the Chinese market in online search businesses with a total revenue of six hundred million dollars and more than six thousand employees. The company was listed on the NASDAQ stock market in 2005 and surpassed Yahoo to become the world's second largest search engine in 2009 with the market share of 6.9% in the global markets, as reported by comScore, a digital marketing research service based on the US.[116] Like Google, it also has designed various services on its website to attract Internet users, such as a government information search, patent search, and statistics search. One of the most frequently used features of Baidu is Baidu MP3 search, through which anyone can download music for free from the link searched on Baidu. While the West labels Baidu a "notorious" company that violates intellectual property laws, these "notorious" features enable Baidu to generate a lot of profits. With the support of nationalistic entrepreneurialism, Baidu is empowered by the Chinese government to gain competitive advantages in the global markets.

Nationalistic entrepreneurship not only restricts certain functions of foreign companies in China while giving much flexibility to Chinese companies, this governing technology also excludes many popular companies in the West, such as Facebook, Youtube, Foursquare, Twitter, and recently LinkedIn, from entering the Chinese market. The exclusion of foreign companies engenders opportunities for Chinese companies,

[116] http://searchengineland.com/how-to-get-into-baidu-the-worlds-2nd-largest-search-engine-26388. Retrieved March 1, 2010.

especially Haigui companies, which can quickly adopt Western business models and technologies and create clone companies in China. There are two sides of the story. On the one hand, due to the limited implementation of intellectual property laws in China, thousands of clone companies are created in China by directly copying Western products. This violation of intellectual property irritates a lot of high-tech professionals, especially those working in Silicon Valley, who have invested significant economic and human capital on the R&D of their products. One the other hand, the instant copying practices allow Chinese companies to efficiently respond to markets, and their cultural knowledge and sensitivity to the Chinese market and users help them effectively grow a large user base and generate economic profits. The most successful ones make it to the NASDAQ stock market and are able to access more transnational resources for further growth.

In February 2011, a new round of criticism was raised in Western technology online forums. The discussions centered on the investments of a few Chinese IT startups that significantly copy the user interface of Western products (see Figure 43). These investments were raised from a newly established venture capital firm in China, "Innovation Works," headed by Kai-fu Lee. Lee is an influential IT figure, especially in China. He was born to a Taiwanese family and received education in the US. Before he established his own firm, he worked as an executive for Apple and Microsoft, and headed Google China. In China, Lee emphasizes his Chinese ethnic background and tries to identify cultural connections with Chinese people, especially young college students. In their eyes, Lee is a patriotic Chinese who wishes to help China build a better technology base in order to compete with global technological players. Innovation Works claims to aim at helping young Chinese entrepreneurs to implement their creative ideas and realize their dreams. However, because of their investments in startups which imitate 80% of the functions of Western companies, Western professionals and some local Chinese professionals mock the nature of "Innovation Works" and argue that the firm should be called "Copy Works" instead. However, it is because of nationalistic entrepreneurialism that small Chinese startups are able to localize their clone products in China efficiently and successfully. There are no laws to regulate user interface designs in China, and therefore Chinese companies can freely copy the successful models of Western companies. Haigui who can easily access first-hand information and resources in global markets are able to transfer Western ideas and localize their products instantly in the Chinese market. Meanwhile,

since many Western products are not allowed to enter the Chinese market regulated by the Chinese government, Chinese companies gain advantages to control the Chinese market without much outside competition.

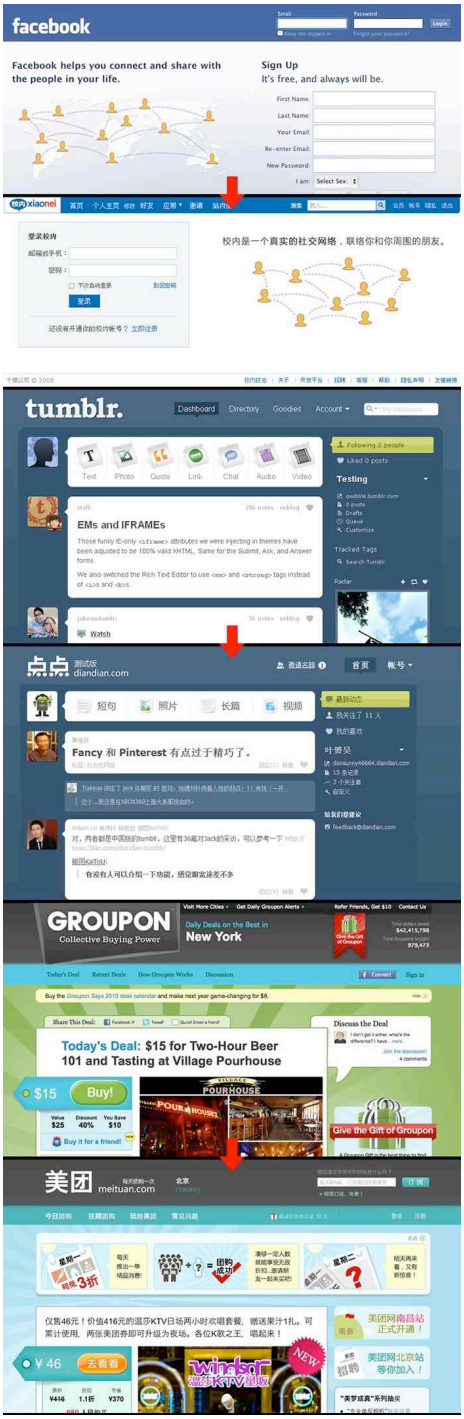

Figure 43 Western companies and Chinese clones
Source: 9gag.com

Such nationalistic entrepreneurialism helps small startups to grow significantly in a short period of time. For example, a few clone companies that have successfully localized Western ideas and models in China are able to grow bigger and go global by securing transnational resources in overseas stock markets. In 2009 and 2010, more than 60 Chinese companies were listed on NASDAQ, more than any other US exchange.[117] NASDAQ-listed Chinese companies, including Baidu, Sohu, and many other Haigui companies, have grown from 70 to 170 since 2008, and now have a total capitalization of 1.3 billion US dollars.[118] On May 4, 2011, another Haigui company, Renren, known as China's Facebook, became the world's first social networking company listed on NASDAQ even before the "authentic" Facebook, which has not been listed publicly. For many Chinese high-tech companies, becoming internationalized in overseas markets and collecting transnational capital are the most efficient and pragmatic ways to measure their success. Nationalistic entrepreneurialism has created certain inclusive conditions for these small Chinese startups to expand their translocal and transnational networks while excluding the participation of foreign companies from gaining the same advantages in China.

In sum, innovation development is a political strategy that I have labeled as "nationalistic entrepreneurialism," implemented by the Chinese government in order to attract and govern transnational and national resources to re-build a modern nation of China. The government uses nationalism to culturally and emotionally mobilize Chinese citizens at home and abroad to participate in innovation development in China. Governing technologies such as zoning special spaces; granting preferential rights to certain people with expertise; prioritizing specific knowledge, expertise, and industries; creating nationalistic discourses to cultivate an imagined innovation and modern citizens; as well as restricting and excluding the functions of foreign companies in China, optimize choices and opportunities that help Chinese companies grow fast to capture global resources. The inclusive and exclusive strategies also represent the government's rationale that favors the sovereignty of the state and the political and social integrity of Chinese society. Moreover, the government's reasoning also emphasizes

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[117] http://www.nasdaq.com/newsroom/news/newsroomnewsStory.aspx?textpath=pr2010\ACQPMZ201001060700PRIMZONEFULLFEED181218.htm&year=01/06/2010%20+7%3A00AM. Retrieved March 1, 2010.

[118] http://business.globaltimes.cn/china-economy/2011-04/620035.html. Retrieved March 1, 2011.

short-term economic values as significant incentives to support innovation development. As a result, this nationalistic entrepreneurialism does not help cultivate the spirit of creativity and risk-taking that are fundamentally important to innovation, yet engenders a number of enterprises that can effectively respond to global competition and take advantage of the fast-growing needs of the Chinese market.

7.2 Innovative Entrepreneurship: Limits and Opportunities

"Building an Innovative Country" is a new popular slogan in official discourses in China. Innovation is considered an important index to measure a country's competitiveness and the level of modernization. While China is actively increasing its investment in R&D and developing high-tech industries, its innovative capacity is doubtful, especially from the Western point of view. In this dissertation, I have used an ethnographic study to try to show certain cultural limits to innovation development in China. By studying the involvement of the Chinese government and transnational high-technology professionals, especially Haigui, I have found that there are a few major limits to the political agenda and cultural practices of producing innovative entrepreneurship.

Along with my case study of Google's exit from China and the rise of Chinese companies, I argue that building innovative entrepreneurship in China is not simply based on economic efficiency and technological productivity. Innovation development is a political strategy, which I have called "nationalistic entrepreneurialism," that is largely affected by the Chinese government's involvement. The Chinese government defines what is considered "innovative." Science and technology are politically conceptualized as means to achieve nationalistic goals to build a modern nation. Building a modern nation is heavily dependent on the economic value a specific innovation can generate. However, a precondition of such economic value is its compliance with China's political sovereignty and social integrity, which signify the political stability of the Chinese state and social harmony in Chinese society. This political agenda to protect the political and social regimes of China does not support the development of "liberal" ideas that may jeopardize the harmonious agendas of Chinese society. The political agenda also does not favor innovative experiments that run risks at the costs of failures. Therefore, a validated technology in the

West would be more easily accepted in China than a truly innovative idea that has not been tested.

With this political logic of nationalistic entrepreneurialism, innovation is a strategic concept created by the Chinese government to fulfill its political agendas. First, it creates an "imagined innovation." There are two levels of imagination in innovation development. One is a spatial conceptualization of imagination: the creation of an imaginary "West." The West remains a symbol of modernity to the Chinese, and the West is imagined as an advanced space. Therefore, innovation in China needs to rely on the production of an imaginary West. Learning from the West, adopting Western technologies, prioritizing Western experience, and getting approval from the West are considered the basic techniques of developing and evaluating innovation in China. The other level is a temporal conceptualization of imagination. The Chinese government tries to create an imagined future for modernity and civilization. With the vision for a promising future, the government cultivates imagination among Chinese people to work to achieve such a goal of becoming an innovative modern society. The imagination is sustained by quantitative evidence to show the annual growth and achievements of innovation development. As long as the growth rate is maintained, the future would be a visionary reality. Imagined innovation plays a critical role in helping the government consolidate human and economic resources at the transnational level. However, imagined innovation does not necessarily generate the innovation defined according to the Western standard. First, imagined innovation serves as a political strategy to reinforce nationalism among the Chinese. Innovative production needs to be developed within certain political restrictions and in accord with the political agenda. In addition, imagined innovation relies on the imitation of the West. It largely discourages an indigenous origin of creativity of its own. Lastly, imagined innovation focuses on quantitative growth of the economic value innovation can generate and overlooks the qualitative features of creativity and productivity. Therefore, imagined innovation is heavily produced in a pragmatic culture in China.

Second, nationalistic entrepreneurialism produces certain types of Chinese subjects and new social relationships and practices among these subjects. The ideas of building a knowledge-based economy and an innovative country heavily influence the construction of Chinese subjects. The Chinese government considers cultivating *suzhi*, the competence of a person, as a governing strategy of controlling its population. Suzhi embodies

bodily, moral, and intellectual qualities. To increase these qualities, the governing strategies prioritize the importance of education and the value of certain knowledge. The suzhi rationale is also a political tool to classify the population into different groups based on their suzhi. Favoring certain suzhi, the government targets specific groups of Chinese as the key players in innovation development. Science, engineering, economics, and management become favored knowledge subjects. The prioritization of suzhi leads to the capitalization of certain knowledge and expertise. With this logic, Chinese citizens develop strategies to maximize their resources to gain intellectual and professional expertise which eventually can be converted to economic capital and social prestige. This self-governing strategy is incorporated into the subject making of Chinese and serves as a rationale to engender a new generation of Chinese who consider studying abroad a way to achieve social well-being as a form of being modern subjects. Improving suzhi is not only a reflection of an individual choice, but also an integral part of a historically specific process of nation building through governing and self-governing of Chinese subjects.

The governing and self-governing strategies of Chinese subjects create a certain group of Chinese who have adopted Western values and expertise and hope to utilize their overseas experience to fulfill their professional and personal agendas in China. I argue that this group of people, labeled as "Haigui," signifies an emerging global class in transnational spaces across national borders, markets, and cultural spheres. The emergence of Haigui is not only a political practice by the government to govern its population and human capital, but it is a social practice in which officials, transnational professionals, and local Chinese form certain social relationships and meanings through various kinds of discourses. As a historically specific product, Haigui is not simply a unitary category, but represents socially conditioned ambiguities, uncertainties, and contradictions engendered by fast-growing economic and social development in China and dynamically changing transnational landscapes and movements. Moreover, the representation of Haigui undergoes a process of deconstruction and recreation through linguistic and communicative rationality formed and circulated in the emerging modes of transnational public spheres among transnational Chinese subjects. With similar experience abroad, Haigui shape a collective identity to distinguish themselves from local Chinese who do not have overseas experience. This strategic use of the Haigui identity helps them form an exclusive social circle that favors a cosmopolitan lifestyle and certain Western values in order to identify resources they can

adopt to live in China. However, this distinction also increases the social distance between Haigui and non-Haigui. Haigui face certain discrimination from local Chinese, *Tubie*, and are stereotyped as people who do not have enough local knowledge or who always fawn on foreign countries, *Chong Yang Mei Wai* in Chinese. I call the disparities and conflicts of Haigui and Tubie, "Neo-regionalism."

Neo-regionalism between Haigui and Tubie causes various problems when they try to develop innovative entrepreneurship in the high-tech industry in China. Based on an ethnography of how Haigui and foreign professionals interact with local Chinese in cross-cultural high-tech settings, I argue that cultural practices of remaking Western and Chinese values and ethics significantly shape the outcomes of high-technology production. The first cultural practice is based on different understandings of what innovation means. Transnational professionals realize that in China, experimenting with an innovative idea is risky. The innovation system in China does not tolerate the failures of experiments or is insufficiently able to protect innovative ideas and intellectual property. In order to sustain their innovative production, transnational professionals working in small start-up companies need to apply Western technologies that are validated in the Western markets to form successful businesses in China. Transnational Chinese need to adjust their understanding to generate innovation that is both meaningful to them and practically suitable in China. Transnational professionals should realize there are different work ethics about how to be professional and effective in high-tech production in China. Local Chinese have a different cultural understanding about time. Transnational professionals need to adjust their own perception to view time as a more flexible category in China. Managing teamwork in China is challenging to transnational Chinese. Transnational professionals need to figure out a leadership style to enhance social relationships among Chinese employees and equitably distribute social responsibilities among them. For female transnational professionals, their gender identity may pose various challenges in their work and personal lives in China. They need to strategically utilize their gender identity to negotiate with masculine power in a field occupied by men. Building guanxi networks is another cultural limit for transnational professionals. Without a systematic mechanism to circulate and accumulate credibility and trust existing in the West, Chinese businesses largely rely on personalized and flexible guanxi techniques to access resources and make successful deals. Transnational professionals find it frustrating to deal with guanxi politics with government officials and local companies. It poses a lot of uncertainties

and increases operational costs for transnational professionals who have limited guanxi capital to fulfill their professional goals to develop innovation in China.

Although transnational high-tech professionals encounter various cultural limits in the process of building innovative entrepreneurship in China, they develop flexible strategies to cope with these challenges and shape reflexive subjectivities, which I have called "professional entrepreneurialism." The production of high-tech products is not only a practical procedure for transnational professionals to fulfill their economic agendas; their products also embody certain cultural meanings from their lives. By recognizing these cultural meanings, these transnational professionals continuously construct their cultural identities, build a sense of belonging to their communities, and search for well-being. Innovation does not solely depend on materialistic originality, creativity, and advancement of technology. Rather, small start-up companies try to generate other meanings of innovation through identifying innovative markets and formulating socially creative practices in their daily work of entrepreneurship. These innovative markets are based on specific social and cultural conditions in Chinese society and may or may not be relevant to the West. Therefore, even an innovative product that is successfully adopted in China may have limited application in the Western markets. Transnational professionals flexibly utilize their transnational networks and expertise to reconstruct managerial and technical strategies. They shape flexible identities to negotiate with local institutions and individuals in China to maximize their opportunities to access resources locally and transnationally. These socially creative and flexible strategies of professional entrepreneurialism characterize the meaning of innovation in China.

Meanwhile, through professional entrepreneurialism, transnational professionals, especially Haigui, continue to rethink their own values and identities in cross-cultural encounters between Western and Chinese spheres. The border crossing between countries, markets, and values creates a liminal space for Haigui to reflect upon their personal and interpersonal experiences with ethical justifications and reformulations. Such self-scrutiny, self-improvement, and self-awareness allow transnational subjects to develop a reflexive subjectivity. I argue that "reflexive subjectivity" is a new form of transnational experience that symbolizes the meanings of modernity in fast-changing conditions of global processes. In sum, beyond its economic rationale and instrumental relationship with high-technology production,

innovation is a cultural experience contingent on the social reality of a certain context, and it is also an imaginary site where new forms of subjectivities, social relationships, and cultural meanings are produced.

With the contests of cultural values and meanings between Western and Chinese sites and subjects, China is undergoing various changes in response to global competition and local desires. Interconnected nationalistic and professional entrepreneurialism facilitate the dynamism of China's innovation development. Small high-tech companies are among the many kinds of innovative players in China that contribute to the emergence of Chinese innovative culture. The Chinese government continues to actively develop an economic infrastructure to provide a strong material basis for innovative entrepreneurship. The government also invests a large amount of money to train indigenous talents by sending more scholars and students to study abroad, especially through a redistribution of resources beyond the top universities that used to receive the most attention and support. This strategy helps other institutions and universities to enhance their research capacity. The government also encourages collaborations between research institutes, universities, and companies. Vibrant exchanges between industry and pure research benefits companies by increasing their research ability and helps professors generate economic support to improve their research facilities. The government continues to implement its intellectual property laws and clarify the definitions of private property. Increasingly, companies and individuals have gained awareness of the possibilities to legally protect their work.

Services to support innovation diversify ways of producing innovative entrepreneurship. Incubators in many science parks continue to provide facilities and opportunities for young professionals to experiment with their ideas. Foreign venture capital firms actively search for ideas to invest in China. Some successful Haigui become independent angel investors or establish their own venture capital firms to help Chinese start-up companies. The stock market for start-up companies was also established in China to help high-tech companies and other small companies to gain investment. Although this stock market is far behind NASDAQ, it shows potential opportunities for upgrading the innovation system to support innovative deals and entrepreneurship. A new profession of intellectual property lawyers has emerged in big cities to help local companies apply for and protect their patents. Consulting firms also find increasing market needs among local Chinese companies to develop business strategies. Public

relations and information services facilitate events about innovation to build local communities among high-tech elites and professionals. Chinese technology blogs and Internet portals provide real-time updates about global and local technology news and reviews for local Chinese professionals to access the most recent information. An innovative culture is being implemented among many young Chinese professionals working in high-technology industries.

Chinese companies are going global. Lenovo, the biggest computer provider in China, has become the world's fourth largest PC vendor. Established as a spin-off company of the Chinese Academy of Sciences with eleven employees in 1984, Lenovo has grown to be a multinational company with more than 22,000 employees globally and an annual revenue of 16 billion dollars in 2010. In 2005, Lenovo purchased IBM's PC sector as a major step to enter the Western markets. Lenovo is playing a significant role in implementing innovation in China and may become the first symbol of Chinese innovation in the global markets. Another IT company, Alibaba, has become one of the most profitable e-commerce companies in the world. Established in 1999 by a local Chinese businessman, Ma Yun, Alibaba now has more than 22,000 employees with more than 53% market shares in China. Its e-commerce business model has changed the consumption patterns of Chinese people. Other major Chinese IT companies are considered by the Western media the fastest-growing companies in the world, including Sohu, Baidu, and Tencent, three main Internet service companies in China[119]. Although they are not innovative leaders in terms of producing the most cutting-edge technologies in the global markets yet, these leading companies develop "process innovation" to flexibly improve its production and redistribution mechanisms, and "product innovation" to modify existing technologies based on the unique requirements of Chinese consumers (Breznitz and Murphree 2011). These companies will represent the rise of Chinese technologies in the global markets.

Besides these successful Chinese companies that help develop innovation in China, a new kind of grassroots culture has emerged to complicate the meanings of innovation in China. It is called "Shan Zhai" culture in Chinese, meaning the mass and efficient simulated production of western products. Shan Zhai literally means "villages in small mountains." But it is used in public discourse to describe simulated products that copy Western ideas and

[119] E.g. Jim Cramer's Mad Money TV Program, Fortune magazine, Businessweek.

brands. A massive simulated production of western technologies and designs emerged in 2007 and 2008. Chinese can spend much less money on a simulated product than on the real product from the West. For example, in the Chinese market, one can find a Shan Zhai iPhone, a Shai Zhai Chanel Bag, or a Shai Zhai Alexander McQueen dress. It usually costs a tiny portion of the actual price of the product that is sold in the Western markets. For many Chinese who cannot afford a real Western product, buying a Shan Zhai product is a more practical and efficient way to "consume" Western values. These Shan Zhai products are not completely copies of Western products, but rather Shan Zhai companies try to modify some features or even incorporate a few features of multiple products into one in order to make it more functional. A Shan Zhai cellphone may have more functions than a regular smartphone, combining feasures of an iPhone and a Blackberry phone. Shan Zhai companies take advantage of low investment in R&D and designs, the needs of Chinese consumers, low manufacture costs, and insufficient law implementations against intellectual property violations. There are many profitable Shan Zhai companies in recent years. Based on their business experience and profits generated earlier, some of them have started to develop their own innovative technologies. Some have expanded their businesses in Southeast Asia, India, and Africa. Shan Zhai culture shows an alternative but not entirely legitimate way to develop innovation among local Chinese companies.

7.3 Rethinking Modernity through Innovation and Haigui

Anthony Giddens defines modernity as "modes of social life or organization which emerged in Europe from about the seventeenth century onwards and which subsequently became more or less worldwide in their influence" (1990:1). This definition represents a Western view of what modern is with specific temporal and geographical characteristics. The movements of modernity involve institutional changes toward capitalism, reason, and the formation of nation-states. Giddens (1988:94) views modern society as an industrialized civilization which has three characteristics:

> (1) a certain set of attitudes towards the world, the idea of the world as open to transformation, by human intervention; (2) a complex of

> economic institutions, especially industrial production and a market economy; (3) a certain range of political institutions, including the nation-state and mass democracy.

Giddens's definition implies both institutional changes and transformations of world view among individuals. Although Giddens believes that modernity can be a worldwide category with influence in non-Western societies, his view of modernity is historically and geopolitically specific to the Western context.

Although, in the West, post-modernism has become a category to critique the nature of modernity, in China, the concept of modernity remains fundamental to shaping a social order in Chinese society to achieve further development. Coming from a different historical and political background, the Chinese understand and interpret the idea of modernity in different ways. On the one hand, modernity remains a category belonging to an imaginary space of the West. The West serves as an occidental reference to China. Western institutions, markets, values, and knowledge are imagined by Chinese as something defined as "modern." Between the modern West and China, there is an imaginary disparity rooted in Chinese minds. The Chinese desire to build a social reality to lessen such a disparity as a way of modernizing the nation. On the other hand, Chinese values and histories are deeply structured in Chinese societies. Achieving Western modernity is not a simple application of Western values. The movement of modernization in China is characterized by certain cultural practices deeply influenced by its Confucian values, political rationales, and economic conditions entangled with Western ideas and global forces.

The idea of innovation represents how contemporary Chinese society views what modernity means. However, the spirit of risk-taking, the values of creativity and originality, the implementation of technology, and the instrumentality of productive relations do not always fit into the daily practices of producing innovation through entrepreneurship. Through culturally specific practices in the innovation system in China, the Chinese government and companies in high-tech industries fulfill their agendas to create a meaningful definition of innovation. Transnational Chinese professionals, especially Haigui, seek opportunities in transnational spaces to find a life they should and want to live. They are considered modern Chinese subjects who may have choices to be included and excluded in the modernization movement in China. According to a Western point of view,

innovation is slowly developed in China due to various cultural limits. Nevertheless, in developing innovation, China continues to define its own way of achieving a nationalistic goal of being a modern nation in a globalizing process. Chinese people continue to search for well-being according to their own standards. Western innovation remains an imaginary entity to China and its people. But they have their own choices to envision a possible future of modernity.

Bibliography

Abu El-Haj, N. 2001. *Facts on the Ground: Archaeological Practice and Territorial Self-fashioning in Israeli Society*. Chicago: University of Chicago Press.

Adams, Walter (Ed.). 1968. *The Brain Drain*. New York: Macmillan.

Adas, M. 1989. *Machines as the Measure of Man*. Ithaca, NY: Cornell University Press.

Amabile, T. 1988. A Model of Creativity & Innovation in Organizations. *Research in Organizational Behavior,* Vol. 10. JAI Press.

Amabile, T. et al. 1996. Assessing the Work Environment for Creativity. *Academy of Management Journal*, 39(5): 1154-1184

Anagnost, A. 2004. The Corporeal Politics of Quality (suzhi). *Public Culture*_16. 189-208.

Anderson, B. 1991. *Imagined Community: Reflections on the Origin and Spread of Nationalism*. London: Verso.

Anderson, B. 1998. *The Spectre of Comparison: Nationalism, Southeast Asia and the World*. London: Verso.

Appadurai, A. 1996. *Modernity at large: cultural dimensions of globalization.* Minneapolis, University of Minnesota Press.

Aronowitz, S. 1988. *Science as Power: Discourse and Ideology in Modern Society*. University of Minnesota Press

Barlow, T. E. 1993. *Gender Politics in Modern China: Writing and Feminism.* Durham, Duke University Press.

Beck, U., Giddens, A., & Lash, S. 1994. *Reflexive Modernization: Politics, Tradition and Asthetics in the Modern Social Order.* California: Stanford University Press.

Bian, Y. 1997. Bringing Strong Ties Back in: Indirect Ties, Network Bridges,

and Job Searches in China. *American Sociological Review* 62 (3): 366-385.

Bieler, S. 2008. Rong Hong: Visionary for a New China. Carol Lee Hamrin, ed. with Stacey Bieler, *Salt and Light: Lives of Faith that Shaped Modern China*. Eugene, Oregon: Wipf and Stock Publishers, Pickwick Publications.

Bhagwati, J. and Hamada, K. 1974. The Brain Drain, International Integration of Markets for Professionals and Unemployment: A Theoretical Analysis. *Journal of Development Economics* 1 (1): 19-42.

Breznitz, D. 2007. *Innovation and the State: Political Choice and Strategies for Growth in Israel, Taiwan, and Ireland*. New Haven: Yale University Press.

Breznitz, D. and Murphree, M. 2010. Run of the Red Queen: How China Innovates. *China Economic Quarterly*. September: pp. 21-25.

Breznitz, D. and Murphree, M. 2011. *Run of the Red Queen: Government, Innovation, Globalization, and Economic Growth in China*. New Haven: Yale University Press.

Bourdieu, P. 1975. The Specificity of the Scientific Field and the Social Conditions of the Progress of Reason. *Social Science Information* Vol.14 No.6.

Bush, V. 1945. *Science - The Endless Frontier: A Report to the President on a program for Postwar scientific Research.* Washington, DC: Office of Scientific Research and Development, (July).

Calhoun, C. (editor). 1992. *Habermas and the Public Sphere.* Cambridge: MIT Press.

Callon, M. 1986. Some Elements of a Sociology of Translation in John Law, ed. *Power, Action and Belief: A New Sociology of Knowledge?* London: Routledge. pp. 196-233.

Callon, M. ed. 1998. *The Laws of the Markets*. Oxford University Press.

Cao, C. 2004. Zhongguancun and China's High-tech Parks in Transition: ''Growing Pains'' or ''Premature Senility?'' *Asian Survey,* 46(5).

Castells, M. 1996. *The Rise of the Network Society.* Cambridge, Mass., Blackwell Publishers.

Chartrand, H.H. 2003. *The Competiveness of Nations in a Global Knowledge-Based Economy.* www.compilerpress.atfreeweb.com/b.%20Pro%20Forma%20ToC.htm. Retrieved Dec 4, 2006.

Chen, K. and Kenney, M. 2007 Universities/Research Institutes and Regional Innovation Systems: The Cases of Beijing and Shenzhen. *World Development*. Vol.35, No.6, pp.1056-1074.

Chen, Y. 2008. The Limits of Brain Circulation: Chinese Returnees and Technological Development in Beijing. *Pacific Affairs*, Special Issue. 81(2): pp. 195-215

Ching, C.C. 1984. Psychology and the Four Modernizations in China. *International Journal of Psychology*, Vol 19(1-2), Apr, 57-63.

Comaroff, J, and Comaroff, J. 1991. *Of Revelation and Revolution.* 2 vols. Todate. Chicago: University of Chicago Press.

Confucius, *the Analects of Confucius (Lun Yu).* Open Source.

Cohen, W.M., and Levinthal, D. 1990. Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, Volume 35, Issue 1 pg. 128-152.

Crow, M and Bozeman. B. 1998. *Limited by Design: R&D Laboratories in the U.S. National Innovation System.* New York: Columbia University Press.

Dahiya, R. 2010. Google's Exit From China: A Case Study. *Delhi Business Review.* Vol. 11, No. 2. July-December.

Drucker, P.F. 1985. *Innovation and Entrepreneurship: Practice and Principles.* New York, NY: Harper & Row.

Epstein, S. 2004. Bodily Differences and Collective Identities: The Politics of Gender and Race in Biomedical Research in the United States. *Body and Society,* Volume 10 (2-3): 183-203.

Erickson, M. 2005. *Science, culture and society: Understanding science in the 21st century.* MA: Polity Press.

Etzkowitz, H. 1999. *The Second Academic Revolution: MIT and the Rise of Entrepreneurial Science.* London: Gordon and Breach.

Etzkowitz, H., Webster. A. 1995. Science as Intellectual Property. In *Handbook of Science and Technology Studies,* edited by Sheila Jasanoff, Gerald Markle, James Peterson, and Trevor Pinch, 480-505. Thousand Oaks, CA, Sage Press.

Feng, Y. and Bodde. D. 1948. *A Short History of Chinese Philosophy.* New York: Macmillan Co.

Fei, X., G. Hamilton.G., et al. 1992. *From the Soil, the Foundations of Chinese Society : a Translation of Fei Xiaotong's Xiangtu Zhongguo, with an introduction and epilogue.* Berkeley, University of California Press.

Florida, R. 2004. *Cities and Creative Class*. Routledge.

Fong, V. L. 2004. *Only Hope: Coming of Age under China's One-child Policy.* Stanford, Calif.: Stanford University Press.

Franklin, S. 1995. Science as Culture, Cultures of Science in *Annual Reviews of Anthropology.* Vol. 24, pp.163-184.

Franklin, S. 2007. *Dolly Mixtures: the Remaking of Genealogy.* Durham and London: Duke University Press.

Freedman, M. 1958. *Lineage Organization in Southeastern China*. London, University of London Athlone Press.

Freedman, M. 1966. *Chinese Lineage and Society: Fukien and Kwangtung*. London, New York,, Athlone P.; Humanities P.

Friedmann, J. 2005. *China's Urban Transition*. Minneapolis : University of Minnesota Press

Foucault, M. 1972. *The Archaeology of Knowledge.* London: Tavistock Publications.

Foucault, M. 1980. Conversation with Michel Foucault, *Three Penny Review1* Winter/Spring.

Foucault, M. 1994. Governmentality. In James D. *Faubion*. The New York Press.

Fuller, D. 2010. How Law, Politics and Transnational Networks Affect Technology Entrepreneurship: Explaining Divergent Venture Capital Investing Strategies in China. *Asia Pacific Journal of Management* 27(3): 445-459.

Fuller, S. 1997. *Science*. MN: Open University Press.

Fuller, S. 2006. *The Philosophy of Science and Technology Studies*. NY: Routledge.

Furman, J. L., Porter, M. E., and Stern, S. 2002. The Determinants of National Innovative Capacity. *Research Policy*. 31: 899-933.

Gibbons, M. et al. 1994. *The New Production of Knowledge*. London: Sage Publications.

Gibbons, M. 1999. Science's New Social Contract with Society. In *Nature*. vol 402.

Giddens, A. 1990. *The Consequences of Modernity*. Stanford: Stanford University Press.

Giddens, A. 1994. Living in a Post-traditional Society." U. Beck et al (eds). *Reflexive Modernization. Politics, Tradition and Aesthetics in the Modern Social Order*. Cambridge: Polity Press

Giddens, A. 1998. *Conversations with Anthony Giddens: Making Sense of Modernity*. Stanford, Calif.: Stanford University Press.

Guthrie, D. 1999. *Dragon in a Three-piece Suit : the Emergence of Capitalism in China*. Princeton, N.J., Princeton University Press.

Habermas, J. 1962. *Structural Transformation of the Public Sphere. Structural Transformation of the Public Sphere*. Translated by Thomas Burger,

Cambridge, MA: The MIT Press. 1989.

Habermas, J. 1981. *The Theory of Communicative Action, Volume 1: Reason and the Rationalization of Society*. Boston: Beacon Press.

Habermas, J. 1983. *Moral Consciousness and Communicative Action. Trans. Christian Lenhardt and Shierry Weber Nicholsen*. Introduction by Thomas McCarthy. Cambridge, MA: The MIT Press. 1995

Habermas, J. 1989. The Public Sphere, in Steven Seidman (ed.), *Jurgen Habermas on Society and Politics: A Reader*. Boston: Beacon Press.

Habermas, J. 1992. Further Reflections on the Public Sphere. *Habermas and the Public Sphere.* Ed. Craig Calhoun. Cambridge, MA: MIT Press.

Habermas, J. 1995. Reconciliation through the Public Use of Reason: Remarks on John Rawls's Political Liberalism. In *Journal of Philosophy* (XCII:3 [March, 1995] 117-8)

Hamilton, G. G. 1996. *Asian Business Networks*. Berlin ; New York, Walter de Gruyter.

Harvey, D. 1989. *The Condition of Postmodernity: an Enquiry into the Origins of Cultural Change*. Oxford, England ; New York, NY, Blackwell.

Haraway, D. 1991. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Simians, Cyborgs, and Women: the Reinvention of Nature*, pp.183-202. New York: Routledge.

Hayden, C. 2003. *When Nature Goes Public: The Making and Unmaking of Bioprospecting in Mexico*. Princeton and Oxford: Princeton University Press.

Hayden, C. 2007. Taking as Giving. In *Social Studies of Science*, Vol. 37, No. 5, 729-758

Hertz, E. 1998. *The Trading Crowd: an Ethnography of the Shanghai Stock Market.* Cambridge ; New York, Cambridge University Press.

Honneth, A., Joas, H. 1991. *Communicative Action: Essays on Jurgen Habermas's the Theory of Communicative Action*. Translated by Jeremy

Gaines and Doris L. Jones. Cambridge: The MIT Press.

Hsing, Y. 1998. *Making Capitalism in China: The Taiwan Connection*. New York: Oxford University Press.

Hsing Y. 2003. Ethnic Identity and Business Solidarity: Chinese Capitalism Revisited, in L. Ma and C. Cartier eds., *The Chinese Diaspora; Space, Place, Mobility, and Identity*. Lanham: Rowman and Littlefield. pp.221-236.

Hsing, Y. 2010. *The Great Urban Transformation: Politics of Land and Property in China*. Oxford: Oxford University Press.

Inda, J. X., and Rosaldo, R. (editors). 2002. *Anthropology of Globalization: A Reader.* Malden, MA: Blackwell Publishers.

Jaffe, A. 1989. The Real Effects of Academic Research. *American Economic Review*.79 (5): 957–970.

Kanter, R.M. 1983. *The Change Masers*. New York: Simon and Schuster.

Kanter, R. M. 1988. When a Thousand Flowers Bloom: Structural, Collective, & Social Conditions for Innovation in Organizations In Staw & Cummings (eds.) *Research in Organizational Behavior*, Vol. 10.

Kearns, M. 2010. China Attempts to Shake Off "Copycat" Stigma. Cnbc.com. Retrieved 1 Nov 2010.

Kenney, M, Florida, R. 2003. *Locating Global Advantage: Industry Dynamics in the International Economy*. Stanford Business Books.

Kindleberger, C. 1968. Study Abroad and Migrations. In Walter Adams (Ed.) *The Brain Drain* (New York: Macmillan): 151-53.

Kipnis, A. B.1997. *Producing Guanxi : Sentiment, Self, and Subculture in a North China Village.* Durham N.C., Duke University Press.

Kipnis, A. 2007. Neoliberalism Reified: Suzhi Discourse and Tropes of Neoliberalism in the People's Republic of China. *Journal of the Royal Anthropological Institute* (N.S.) 13. 383-400.

Kodama, F., Branscomb, L.M. 1999. University Research as an Engine for Growth: How Realistic is the Vision? In: L. M. Branscomb, F. Kodama, and R. Florida (eds.) *Industrializing Knowledge: University-Industry Linkages in Japan and the United States*. MIT Press, London, 3-19.

Kogut, B. 2004. From Regions and Firms to Multinational Highways: Knowledge and Its Diffusion as a Factor in the Globalization of Industries. In M. Kenney with R. Florida (Editor) *Locating Global Advantage: Industry Dynamics in a Globalizing Economy*. (Stanford: Stanford University Press): 261-284.

Kuhn, T. 1996. *The Structure of Scientific Revolutions.* Chicago: The University of Chicago Press.

Laclau, E. 1990. *New Reflections on the Revolution of Our Time*. London: Verso.

Latour, B. 1987. *Science in Action : How to Follow Scientists and Engineers through Society*. Cambridge, Mass., Harvard University Press.

Latour, B. 1988. *The Pasteurization of France.* Cambridge MA: Harvard University Press.

Latour, B. 1993. *We Have Never Been Modern*. Cambridge MA: Harvard University Press.

Latour, B. 1998. From the World of Science to the World of Research? *Science*, 280: 208-209.

Latour, B; Woolgar, S. 1986. *Laboratory Life: The Construction of Scientific Facts*. Princeton: Princeton U. Press

Law, J; Lodge, P. 1982. Science for social scientists. London: Macmillian Press.

Lee, C. K. 1998. *Gender and the South China Miracle: Two Worlds of Factory Women*. Berkeley, Calif., University of California Press.

Lessa, I. 2006. Discoursive Struggles within Social Welfare: Restaging Teen Motherhood. *British Journal of Social Work*. 36 (2): 283–298.

Levenson, J. R. 1968. *Confucian China and its Modern Fate; a Trilogy.*

Berkeley, University of California Press.

Leydesdorff, L. and Zeng, G. 2001. University-Industry-Government Relations in China: An Emergent National System of Innovations. *Industry and Higher Education* 15 (3): 179-182.

Lindbeck, J. 1961. Organization and Development of Science. In *Sciences in Communist China*, ed Sidney Gould. 3-58. Maryland: The Horn-Shafer Company.

Liu X, Shuo Yuan, Bian Wu, Open source.

Liu, X. 2002. *The Otherness of Self: A Genealogy of the Self in Contemporary China*. The University of Michigan Press.

Liu, X. 2009. The Mirage of China: Anti-Humanism, Narcissism, and Corporeality of the Contemporary World. New York and Oxford: Berghahn Books.

Liu, X., Lu, J., Filatotchev, I., Buck, T. and Wright, M. 2009. Argonaut Entrepreneurs, Knowledge Spillovers and Innovation in High-tech Firms in Emerging Economies. *Journal of International Business Studies* 40 (6): 1005-1021.

Lock, M. 2002. *Twice Dead: Organ Transplants and the Reinvention of Death.* Berkeley and Los Angeles, CA: University of California Press.

Lu, Q. 2000. *China's Leap into the Information Age*. Oxford: Oxford University Press.

Mahon. M. 1992. *Foucaults Nietzschean Genealogy, Truth Power and the Subject*. Albany: State University of New York Press.

Marshall, G. 1982. *In Search of the Spirit of Capitalism : an Essay on Max Weber's Protestant Ethic Thesis*. New York, Columbia University Press.

Mauss, M. 1967. *The Gift : Forms and Functions of Exchange in Archaic Societies*. New York, W. W. Norton & Company.

Merton, R. 1942 [1973]. The Normative Structure of Science In *The Sociology of*

Science by Robert Merton, pp. 267-78. Chicago: University of Chicago Press.

Miller, H, L. 1996. *Science and Dissent in Post-Mao China*. University of Washington Press.

Mitchell, T. 2002. *Rule of Experts: Egypt, Techno-Politics, Modernity.* Berkeley, Los Angeles, London: University of California Press.

Mokyr, J. 1992. *The Lever of Riches*. New York: Oxford University Press.

Mowery, D. C., Rosenberg, N. 1993. The U.S. National Innovation System, in Nelson, R. R. *National Innovation Systems*. Oxford: Oxford University Press.

Mu, Q. and Lee, K. 2005. Knowledge Diffusion, Market Segmentation and Technological Catch-up: The case of the Telecommunication Industry in China." *Research Policy* 34 (6): 759-783.

Nandy, A. (edits). 1989. *Science, Hegemony and Violence: A Requiem for Modernity*. Oxford University Press, USA.

Needham, J. 1954. *Science and Civilization in China*, in many volumes. Cambridge: Cambridge University Press.

Needham, J. 1969. *The Grand Titration: Science and Society in East and West*. George Allen & Unwin Ltd, London

Nelson, R., Rosenberg, N. 1993. Technical Innovation and National Systems in Nelson, R. R., ed. *National Innovation Systems: A Comparative Analysis.* New York: Oxford University Press, pp. 3-21.

Nowotny, H., Scott, P., Gibbons, M. 2002. *Rethinking science.* MA: Blackwell Publishers Inc.

Ong, A. 1987. *Spirits of Resistance and Capitalist Discipline: Factory Women in Malaysia* Albany: State University of New York Press.

Ong, A. 1999. *Flexible Citizenship: The Cultural Logics of Transnationality*. Durham: Duke University Press.

Ong, A. 2004. The Chinese Axis: Zoning Technologies and Variegated

Sovereignty. *Journal of East Asian Studies* 4, 69-96.

Ong, A. 2006. *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty*. Durham: Duke University Press.

Ong, A. 2007. Please Stay: Pied-a-Terre Subjects in the Megacity. *Citizenship Studies* 11(1): 83-89, February.

Ong, A., Collier, S. 2005. *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*. Blackwell Publishing.

Ong, A., and Chen, N. 2010. *Asian Biotech: Ethics and Communities of Fate.* Durham: Duke University Press.

Pepper, S.1996. *Radicalism and education reform in 20th-century China*. Cambridge: Cambridge University Press.

Petryna, A. 2005. Ethical Variability: Drug Development and Globalizing Clinical Trials. *American Ethnologist,* Vol. 32, No. 2, pp. 183-197.

Poggi, G. 1983. *Calvinism and the Capitalist Spirit: Max Weber's Protestant Ethic*. Amherst, University of Massachusetts Press.

Porter, M. E., Stern, S. 2001. Innovation: Location Matters. *Sloan Management Review* (Summer), pp. 28-36.

Porter, J. 1979. Foreign Affairs (Yang-Wu) Expertise in the Late Ch'ing. *Modern Asian Studies*. 13-3. Pp 459-483.

Pun, N. 2005. *Made in China : Women Factory Workers in a Global Workplace.* Durham, Hong Kong, Hong Kong University Press,, Duke University Press.

Rabinow, P. 1984. What is Enlightenment? In *The Foucault Reader*. New York: Pantheon.

Rabinow, P. 1996a. *Making PCR: A story of Biotechnology*. The University of Chicago Press.

Rabinow, P. 1996b. Artificiality and Enlightenment: from Sociobiology to Biosociality. *Essays on the Anthropology of Reason*. New York: Routledge.

Raymond W. 1983. *Keywords: a Vocabulary of Culture and Society*. London: Fontana.

Redding, S. G. 1993. *The Spirit of Chinese Capitalism.* New York: Walter de Gruyter.

Robinson, M. 1993. Enduring Anxieties: Cultural Nationalism and Modern East Asia, in *Cultural Nationalism in East Asia: Representation and Identity,* ed Harumi Befu, Berkeley: Institute of East Asian Studies, University of California, Berkeley.

Rofel, L. 1999. *Other Modernities : Gendered Yearnings in China after Socialism*. Berkeley, University of California Press.

Sassen, S. 1991. *The Global City: New York, London, Tokyo*. Princeton: Princeton University Press.

Sassen, S. 1998. *Whose City Is It? Globalization and the Formation of New Claims Globalization & Its discontents*. New York: The New Press.

Sassen, S. 2006. *Territory, Authority, Rights: From Medieval to Global Assemblages.* Princeton University Press.

Saxenian, A. 1994. *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Harvard University Press: Cambridge.

Saxenian, A. 2006. *The New Argonauts: Regional Advantage in a Global Economy.* Cambridge: Harvard University Press.

Saxenian, A. et al. 2002. *Local and Global Networks of Immigrant Professionals in Silicon Valley*. CA: Public Policy Institute of California.

Segal, A. 2003. *Digital Dragon: High-technology Enterprises in China*. Ithaca, NY: Cornell University Press.

Smith, M.P., Garnizo, L. (eds.) 1998. *Transnationalism from Below. New* Brunswick, New Jersey: Transaction Publishers

So, Y. L. and Walker, A. 2006. *Explaining Guanxi : the Chinese Business*

Network. London; New York, Routledge.

Strathern, M. 2004. Accountability Across Disciplines and Re-Describing Society In *Commons and Borderlands*, Oxon: Sean Kingston Publishing. pp. 68-102.

Sunder Rajan, K. 2006. *Biocapital: the Constitution of Postgenomic life*. Duke University.

Sussman, N. M. 2010. *Return Migration and Identity: A global Phenomenon, a Hong Kong Case*. Hong Kong: Hong Kong University Press.

Talor, C.1989. *Sources of the Self: The Making of the Modern Identity*. Cambridge: Harvard University Press.

Thrift, N. 1999. Globalisation of the System of Business Knowledge. In Olds, K., Dicken, P., Kelly, P., Kong, L. and Yeung, H.W.-C., editors, *Globalization and the Asia Pacific: Contested Territories*, London: Routledge

Traweek, S. 1988. *Beamtimes and Lifetimes: the World of High Energy Physicists.* Cambridge, MA: Harvard University Press.

Tu, W. 1995. *The Living Tree: The Changing Meaning of Being Chinese Today*, Stanford: Stanford University Press.

von Zedtwitz, M. 2004. Managing Foreign R&D Laboratories in China. *R&D Management*, 34(4), 439–452.

Wang, Y. 1993. *China's Science and Technology Policy: 1949-1989.* Ashgate Publishing Company.

Wang Y. 2007. *Contemporary Chinese Returnees*. Beijing: China Development Press.

Wang Y. 2007. *Reflections of 100 Chinese Returnees*. Beijing: China Development Press.

Wang Y. 2005. *Age of Returnees*. Beijing: China Development Press.

Wang Z. *Wunderkind Poems* (Shen Tong Shi). Open Source.

Wang, Z. 2002. Chinese American Scientists and US-China Scientific Relations. In Koehn, P.Yin, X. (edits) *The Expanding Roles of Chinese Americans in U.S.-China Relations: Transnational Networks and Trans-Pacific Interactions.* M.E. Sharpe

Weber, Max. 1958. *The Protestant Ethic and the Spirit of Capitalism*. New York: Scribner.

Woodside, A. 2006. *Lost Modernities: China, Vietnam, Korea and the Hazards of World History*. Cambridge (MA): Harvard University Press.

Woolgar, S.; Latour, B. 1986. Cycles of Credit in *Laboratory Life: The Construction of Scientific Facts*, pp.187-208. Adas, M. 1989. Machines as the Measure of Man. Ithaca, NY: Cornell University Press.

Wu, C. The Journey to the West. Open source.

Yan, H. 2003. Neo-Liberal Governmentality and Neo-Humanism: Organizing Value Flow through Labor Recruitment Agencies." *Cultural Anthropology* 18(4):493-523.

Yan, H. 2006. Self-Development of Migrant Women and the Production of Suzhi (quality) as Surplus Value in Madeleine Yue Dong and Joshua Goldste, ed. *Everyday Modernity in China.* University of Washingtong Press

Yan, Y. 1996. *The Flow of Gifts: Reciprocity and Social Networks in a Chinese Village*. Stanford: Stanford University Press.

Yan, Y. 2003. *Private Life under Socialism: Love, Intimacy, and Family Change in a Chinese Village, 1949-1999.* Stanford, Calif., Stanford University Press.

Yan, Y. 2009. *The Individualization of Chinese Society*. Oxford: Berg.

Yanagisako, S. 2002. *Producing Culture and Capital.* Princeton University Press.

Yang, M. 1989. The Gift Economy and State Power in China, *Comparative Studies in Society & History*, vol. 31, no. 1, January.

Yang, M. 1994. *Gifts, Favors, and Banquets: The Art of Social Relationships in China*. Cornell University Press.

Yang, M. 1999. *Spaces of Their Own: Women's Public Sphere in Transnational China*. Minneapolis, MN, University of Minnesota Press.

Yang, M. 2000. Putting Global Capitalism in its Place. In *Cultural anthropology*. Vol 41. No 4.

Yang, M. 2002. The Resilience of Guanxi and its New Deployments. *The China Quarterly*.

Yao, S. 2002. *Confucian Capitalism: Discourse, Practice and the Myth of Chinese Enterprise*. London; New York, Routledge Curzon.

Zhang, L. 2001. *Strangers in the City: Reconfigurations of Space, Power, and Social Networks within China's Floating Population.* Stanford, Calif., Stanford University Press.

Zhang, L and Ong, A. 2008. *Privatizing China: Socialism from Afar*. Cornell University Press.

Zweig, D., Chen, C. and Rosen, S. 2004. Globalization and Transnational Human Capital: Overseas and Returnee Scholars to China. *The China Quarterly* 179:735-757