



The entrepreneurial labor of reinvention in Beijing's Zhongguancun high-tech district

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Abstract

Deploying the concept of the entrepreneurial labor of reinvention, this article contrasts the experiences of elite and grassroots IT entrepreneurs as they navigated China's post-2008 economic restructuring centered around IT innovation and entrepreneurship in Beijing's Zhongguancun high-tech district, also known as China's Silicon Valley. By situating the changing labor practices and subjectivities of a new generation of Zhongguancun IT entrepreneurs in the history of the post-Mao evolution of IT labor and entrepreneurship, this article emphasizes the specificities of digital work that both continue from and reinvent historically situated local labor practices. It also deconstructs the universalism of the state-led entrepreneurialization campaign to highlight its regime of inequalities and persisting politics of exclusion.

Keywords

China, digital labor, entrepreneurship, innovation

At 34, Dan is CEO of the Beijing-based start-up company Serica Crypto-Chip Technologies. I met him at an incubator affiliated with state-run Tsinghua University in 2016 during the height of China's "mass entrepreneurship and innovation campaign," which was launched in 2014 by the Chinese premier, Li Keqiang, to stimulate a slowing economy and stem growing unemployment. Ultimately, however, its goal was to restructure China's export-oriented, manufacturing-based economic model to enhance indigenous technological innovation capacity and expand domestic consumption. Among other technological and economic transformations in the past decade, such as the popularization of 3G mobile and platform technologies and the boom in the venture capital market, the campaign led to the proliferation of IT-related entrepreneurship, ranging from high-tech chip design start-ups to family-based e-commerce workshops.

Dan was one of the many relatively elite entrepreneurs whom I met in Beijing's Zhongguancun (ZGC) district, known as China's Silicon Valley. In 2011, Dan quit his doctoral program at a top-ranked California university, where he worked in a chip design lab, and returned to China to launch his own start-up specializing in the design and production of crypto chips. A techno-nationalist, Dan identified strongly with state efforts to enhance local innovation. He told me that he named his company

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Serica—the Latin word for "silk"—because he wanted his chips to emulate the unrivaled superiority and sophistication of ancient China's silk-making techniques. However, Dan's American education experiences had not only honed his chip-design expertise but also shaped his management style. He had had such a good time as a summer intern at Google that he tried to implement the company's "people-centric" management culture in his start-up. His small team of employees enjoyed plenty of autonomy and benefits, including a free snack bar.

When I first interviewed him in 2015, Dan felt disadvantaged by state-owned IT monopolies. During our early 2016 interview, he complained about the cronyism, shortsightedness, and inefficiency of China's IT start-up scene. Nevertheless, this criticism, he told me, did not temper his faith in China's state-led but increasingly market-driven high-tech innovation system. In 2019, Dan's market instinct and techno-nationalist commitment finally paid off. Deep into the US-China technology war, he received generous Series A funding led by a reputable state-owned venture capital firm.

Still, Dan's success as an elite IT entrepreneur set him apart, especially from the non-elite entrepreneurs I met in ZGC's famous co-working space, the Garage Café. Self-identified grassroots entrepreneurs lacked Dan's technological expertise, educational credentials, and institutional network. Many of them were drawn to ZGC by media stories about grassroots entrepreneurs scoring big investments with brilliant business ideas-stories that circulated nationwide in the heat of the Mass Entrepreneurship and Innovation campaign. Fu, for example, worked on the assembly line of Foxconn, the Taiwanese electronics manufacturer, before coming to ZGC in 2014 to join the digital entrepreneurial gold rush. He spent most of his days in the Garage Café socializing with fellow aspiring entrepreneurs and the angel investors who visited the café regularly in search of fundable projects. To save money, he crashed on the Café's sofa in the evening and went to a nearby public bathhouse if he needed a shower. Like many of the non-elite entrepreneurs I met in ZGC, Fu participated in several projects and learned how to write business proposals and pitch ideas to investors, but obtained no investment. The last time I talked to him

in the summer of 2019, he was working as a waiter in the Garage Café, now part of Innoway—the government-supported street of café-style incubators, co-working spaces, and exhibition sites showcasing the state's progress in promoting entrepreneurship and innovation. He told me that he just could not go back to factory work now that he saw himself as an entrepreneur. Besides, the factory he had worked for was being automated and many of his old fellow coworkers had been fired.

Both Dan and Fu are individuals whose lives have been transformed by the global IT-driven entrepreneurialization of labor. In the past three decades, especially following the 2008 global financial crisis, governmental and corporate stakeholders have championed the discourse of *entrepreneurialism* to re-invigorate global capitalism and to legitimize off-loading growing economic and social risks onto individual workers. The Chinese government's mass entrepreneurship and innovation policy initiative exemplifies the euphoria and universalism of entrepreneurialism that encourage variously positioned individuals to reinvent themselves as entrepreneurs while glossing over the vast differences in their capacity to succeed.

In my current book project, I draw on existing work on digital and creative labor, and deploy the analytic of the entrepreneurial labor of reinvention to counterbalance and deconstruct the celebratory, universalist claims of entrepreneurialism. In contrast to entrepreneurialism's celebration of the individualized entrepreneur of the self as an ideal subject of the neoliberal market economy, scholars of digital and creative labor situate the recent IT entrepreneurial boom in the history of neoliberal flexibilization and individualization of work since the 1970s. Taking a labor perspective on digital entrepreneurship reveals not only its new characteristics-such as refined algorithmic control, monopolistic domination of digital platforms, and the muddled distinctions between work, entrepreneurship, and consumption—but also the persistence of capital-labor conflict, technology-mediated labor exploitation, and inequalities in the so-called "social factory" that we live in today. My work also joins an emerging body of research that moves beyond the focus of existing literature on middle-class White workers in major

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metropolitan centers of the global north. This empirical parochialism runs the risk of universalizing knowledge claims abstracted from the experiences of particular global populations.

By spotlighting practices of labor and reinvention, I show how the global circulation of IT entrepreneurialism becomes confluent with existing systems of meaning and regimes of governance and production. I also emphasize the specificities of digital work that continue from and reinvent historically situated local labor practices. Through historically informed ethnographic case studies, I problematize the singularity of the Euro-American individualizing trajectory and the total domination of the economy over the social. Instead, I underline the persistent but mutating power of the state and the significant but changing meaning of family in complicating the technology-driven individualization of work and economization of life. I pay particular attention to the contradictions and tensions inherent in these culturally situated processes of hybridization as experienced by entrepreneurial workers variously located along lines of class, locale, gender, and age.

To better understand Dan and Fu's experiences at the post-2008 historical conjuncture, we have to situate their stories in the history of the state-led entrepreneurialization of labor in the post-Mao ZGC—a history shaped by inherent tensions between development, nationalism, and socialism in state governance. This history started with ZGC's socialist transformation into the nation's science and technology center when the nascent socialist regime adopted a techno-nationalist approach to development that prioritized technological independence and import substitution. However, the state's competing agenda to simultaneously promote rapid industrialization and socialist egalitarianism resulted in a tug-of-war between a technocratic model of a centrally planned economy and a Mao-style mobilization that emphasized class struggles and grassroots participation in economy and politics. The life experiences of danwei-based ZGC red scientists and engineers were shaped by the struggle between these two visions of socialist development until the system self-exploded in the late 1970s turmoil of the Cultural Revolution.¹

As China re-integrated into the global capitalist system and transitioned into an export-oriented development model in the 1980s, sharp cuts in state military spending and new business opportunities prompted an exodus of ZGC scientists and engineers from their socialist danwei. As pioneers of the entrepreneurialization of IT work in contemporary China, scientist-turned-IT-entrepreneurs founded China's first non-governmental (minying) IT companies on ZGC's Street of Electronics. Yet, these companies not only received start-up funding, free technology transfer, and personnel and facilities support from their supervisory danwei, but district and municipal governments also tolerated and protected them from the plethora of political risks in the early years of reform.

Nonetheless, the emergence of a new technocratic-commercial elite class in the 1980s stirred up new class tensions and ideological battles, which reached a breaking point during the 1989 Tiananmen protest. In 1992, Deng confirmed the Chinese Communist Party's (CCP) commitment to further economic reform and opening up. This temporarily put an end to the ideological debate about socialism versus capitalism to prioritize economic development and technological "catch-up" with advanced capitalist economies.

At the turn of the new millennium during the peak of Silicon Valley's dot.com boom, a new generation of Internet entrepreneurs—including many who had been educated abroad or had overseas connections—set off a new wave of Internet-based IT entrepreneurship in ZGC with the endorsement of global venture capital. Meanwhile, as China became the world's largest electronics manufacturer in the 2000s, Internet entrepreneurs were joined by numerous petty tech vendors scattered around the bustling electronics malls that had sprouted across ZGC. The backgrounds of these small-scale electronics sellers were more diverse: many were rural migrant workers or urban workers laid off by state-owned work units.

These entrepreneurial opportunities provided channels of upward social mobility for both knowledge elites and working-class Chinese at a time of mounting social inequalities in the 2000s. Yet, the country's export-oriented manufacturing model appeared increasingly unsustainable. The 2008 global crisis heightened long-held tensions between

economic development and technological independence and social justice, which were further intensified by the US-China trade war waged since 2018 under the leadership of Xi and Trump. These conjunctural challenges have animated a major economic and social restructuring in China with the goal of transitioning to a more sustainable developmental model driven by indigenous innovation and domestic consumption.

This is the context in which elite and grassroots entrepreneurs like Dan and Fu were thrust into a new wave of entrepreneurialization of IT work. Dan's techno-nationalist stance, despite his appropriation of Silicon Valley management culture and his critique of the state-led Chinese IT industry, makes better sense when we consider the persistence of the state's techno-nationalist governance. Threatened by US sanctions on Huawei and ZTE, the state ramped up support to spearhead development of its domestic semiconductor industry. Along with announcement of an "unreliable list," which prompted Chinese tech companies to replace imported chips with domestic versions whenever available, the state also injected new rounds of investment into its "Technology Innovation Guiding Fund." In an innovative way to distribute public money, the state partners with existing private funds to direct investment into strategic sectors via market mechanisms. Thus, Dan's start-up profited from these strategic policy initiatives both as a beneficiary of the guiding fund and as the new chip provider for several Chinese tech firms that used to rely mostly on foreign import.

The Mass Innovation and Entrepreneurship policy was implemented with dual goals: to promote innovation and to restore social justice/ease unemployment. While it is still early to say how effective the policy has been in helping China enhance innovation capacity and achieve technological independence, so far, its results in redressing social inequalities and

generating employment opportunities are mixed. Like many other grassroots entrepreneurs in China today, ranging from e-commerce shop owners to platform-based gig workers, Fu had embraced the entrepreneurial labor of self-reinvention to adapt to the changing structure of the Chinese economy. However, by playing down the vast differences in how variously positioned entrepreneurial workers experience China's "economic restructuring," political and corporate efforts to tout the universalism of IT entrepreneurship only reveal inherent inequalities and the politics of exclusion. The grassroots entrepreneurs whom I met in ZGC's now proliferating co-working spaces more closely resemble the flexibility and precarity of the petty electronics sellers in the 2000s. Their co-presence with elite IT entrepreneurs in the same social infrastructure speaks more about unresolved tensions in the state's science and technology policies than their democratizing effect.

Note

1. Danwei means "work unit" in Chinese, which refers to the urban employment place established during the socialist years by the Communist Party-State. People who worked at danwei were granted by the state an "iron bowl of rice," a lifelong employment and benefits guarantee for the urban worker, and the "soft budget constraint," which ensures the government "bailout" of under-performing economic units.

Author biography

Lin Zhang is an Assistant Professor of Communication at the University of New Hampshire. She studies digital capitalism and intersectionality with a focus on China in the global context. She wrote about digital labor, video games, visual culture, and debates on race in cyberspace. She is currently completing a monograph about China's post-2008 innovation and entrepreneurship-centered economic restructuring from a labor perspective.