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STUDENT WORKERS IN THE FOXCONN EMPIRE: THE COMMODIFICATION OF EDUCATION AND LABOR IN CHINA

YIHUI SU
Peking University

ABSTRACT

This article reveals the mechanism involved in the mutually complementary commodification of education and labor, and the results of this commodification. Emphasizing institutional factors, this article argues that the state plays a dominant role in the combination of the two types of commodification. It also scrutinizes the impact of this dual commodification on student workers—deskilling, alienation, fragmented social lives, and industrial injury—as well as their response.

INTRODUCTION

In 2010, 17 workers committed suicide at a factory in China operated by Foxconn Technology, the world's biggest contract electronics maker and a major supplier to Apple, Dell, Hewlett-Packard, and other companies. This rash of suicides attracted attention from the general public and raised questions about the harsh regime enforced by Chinese factories to produce a growing share of the world's goods. Media, academic groups, and labor rights groups all joined in the discussion of migrant workers' working conditions within factories. Foxconn's employment of "student-workers" also led to a discussion about collusion between technical schools and Foxconn. Most of these-student-workers were "interns" who were second or third year students at technical schools. Sent to Foxconn by their schools after the wave of suicides, these students received the same treatment

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as their colleagues except that they had no insurance. In contrast to the workers who had committed suicide, these student workers mobilized to protest against Foxconn and their schools. On September 16, 2010, thousands of student-workers clashed with Foxconn's janitors. The students were dissatisfied with the terms of their employment agreement, and they asked Foxconn to change their articles of employment. Sending janitors to threaten students did not enable Foxconn to prevent the conflict from escalating into unrest. As a result, the Shanxi Education Ministry had to force Foxconn to stop its recruitment of student interns. Likewise, students in Shenzhou Communication Technical School threw bottles out of windows to express their anger and unwillingness to work at Foxconn. In the events leading to these two protests, student workers had been bought and sold by Foxconn and their schools. Due to the collusion between their technical schools and Foxconn, the students' labor and education both became commodities.

The purpose of this article is to make sociological sense of the "dual commodification"—of labor and education—through a reconstruction of Karl Polanyi's theory of the "fictitious commodity." Explaining how the commodification of labor and the commodification of education work together, this article attempts to analyze the mechanism involved in this dual commodification. It also examines the impact on students and their response. In brief, three questions are asked in this article: How are the commodification of education and the commodification of labor brought together? Who is the main actor in this dual commodification? How does it impact students? How do the students respond?

In this article, I first outline a theoretical framework that examines the dual commodification and students' response to it. Second, I introduce the basic data on student workers at Foxconn. Next I sketch the history of technical schools in China and provide an analysis of the mutually complementary commodification of education and labor. In addition, I will demonstrate the impact of this dual commodification on student workers and their response.

METHODOLOGY

A case study is the ideal way of examining dual commodification in China. Foxconn offers an ideal case study with which to reconstruct the theory of commodification. As a Fortune 500 company, Foxconn Technology Group is the largest final assembler-supplier in the global electronics industry. By the end of June 2010, its net income had risen to US$1.08 billion (Culpan, 2010). It employs over 800,000 staff worldwide, mostly in China (Foxconn Technology Group, 2010). Providing "manufacturing, assembly, and after-sales services to global Computer, Communication and Consumer-electronics (3C) leaders," Foxconn undercuts its competitors in terms of the price, speed of delivery, and quality of its finished products by shortening its supply chain. Most importantly, it has signed employment agreements with many technical schools. Student interns account for a large proportion of its workers. Thus, analyzing Foxconn's

collusion with technical schools and the impact on its student interns can clearly demonstrate how the commodification of education and labor works together at the organizational level and the micro-level.

In addition, a historical study of technical schools provides an institutional explanation of the mechanism involved in dual commodification at the macro-level. Scrutinizing the rise and decline of technical schools can clearly illustrate how the commodification of labor and the commodification of education are brought together and the role the state has played in this process.

The data were collected through interviews and questionnaires. An investigating group made up of 60 students from 20 universities went to 12 Foxconn plants to study the factory regime and its cooperation with technical schools. From June to October 2010, these students conducted 300 interviews and sent out 1,500 questionnaires in nine cities. I participated in this group in July 2010 and interviewed workers, several managers at Foxconn, employment agency staff members, and some teachers at technical schools. The questionnaire included questions dealing with workers' majors, wages, contracts, working time, working conditions, social insurance, and relations with their schools and Foxconn.

FICTITIOUS COMMODITY, DUAL COMMODIFICATION, AND MORAL POWER

Due to the decline of state socialism and the expansion of neoliberalism, China's economy and society have undergone a wave of marketization. Following decades of economic reform, land, labor, and money in China have gradually become commodities open to the expansion of global capitalism. Thus, increasing numbers of scholars pay attention to the mechanism of marketization in China and its impact on society. Nevertheless, most studies focus on the commodification of land, labor, and money and the social movements struggling against this trend (Hooper, 2005; Hurst, 2009; Lee, 2007; O'Brien & Li, 2006; Palmer, 2006; Tsai, 2007; Yan, 2009; Zhang, 2001). The marketization of other areas, such as education and medical care, rarely attracts sociologists' attention. Moreover, the relationship between different types of commodification and their impact on society have not been widely discussed in the academic field. This article attempts to explain how the dual commodification—of labor and education—works together. Drawing on Polanyi's theory of the "fictitious commodity," this article explores how labor and education became commodities bought and sold on the market. For Polanyi, labor, land, and money are all "fictitious" commodities that are not produced for sale on the market. Their commodification involves the intervention of the state. However, the state has dual faces in Polanyi's work. On the one hand, the state has agreed to the commodification of land and labor. The state has intentionally opened the road to the free market. On the other hand, the state has also enacted numerous laws and regulations to inhibit this commodification. This paradox results from the ambivalent role of the state.

According to Polanyi, the state seems like an arena where one class fights against or allies with another. Various classes have had different attitudes toward the commodification. However, the state is an autonomous structure—"a structure with a logic and interests of its own, not necessarily equivalent to, or fused with, the interests of the dominant class in society or the full set of member groups in the polity" (Skocpol, 1979: 27). From this perspective, the state has its own attitude toward the commodification. This article treats the Chinese state as an actor and scrutinizes its role in the dual commodification. It argues that the commodification of education and the commodification of labor are brought together via the state's strategy of the "combination of learning and working" (*gong xue jie he*). The "internship," as an important "node," connects technical schools, students, and Foxconn in the dual commodification.

Aside from the mechanism involved in this dual commodification, this article also examines its impact on students and their response. For Polanyi (1957: 71), "Labor and land are no other than the human beings themselves of which every society consists and the natural surroundings in which it exists. To include them in the market mechanism means to subordinate the substance of society itself to the laws of the market." As a result of commodification, he considers that constituents of society such as the household and culture will be undermined. This article asserts that education is also a fictitious commodity, because it is a part of life and connected to human morality and values. Examining how the "internship" system has led to students' deskilling and fragmented social lives, this article observes that reducing education to the commodity of "knowledge" undermines students' socialization.

In addition to expounding his theory of the "fictitious commodity," Polanyi thinks the expansion of the self-regulated market inevitably provokes a corresponding countermovement to protect society. Nevertheless, many scholars criticize Polanyi on the grounds that his spontaneous countermovement is far from empirically demonstrated (Burawoy, 2008; Silver, 2003). With his failure to demonstrate how and under what conditions countermovements can erupt, Polanyi leaves numerous puzzles. Instead, Beverly Silver (2003) uses a world-historical framework to demonstrate the dynamic of labor protests—the crisis of profitability and the crisis of legitimacy. Arguing that Polanyi ignores the concept of "power," Silver borrows from Erik O. Wright's (2000) distinction between associational power (power from the formation of collective organizations of workers) and structural power (power from workers' location in the economic system). Nevertheless, Silver's discussion can not completely demonstrate how and under what conditions workers with weak structural power and contested labor rights can leverage alternative sources of associational power (Chun, 2009). Drawing on Bourdieu's concept of symbolic struggles, Chun shows how marginalized workers rebuild the basis of their associational power by using recognized symbols, strategies, and slogans from existing political actors and past social movements. In comparison to the marginal workers in Chun's account,

student-workers in China have encountered a larger dilemma because they have had neither the symbols nor the slogans to mobilize a "politics of shame" to exert pressure on Foxconn. However, they also use moral norms and cultural values to forge meaning and a consensus on the legitimacy of their struggles. Given that their moral discourse and rhetoric relate to the traditional Confucian understanding of education, this article explores how the student-workers have been mobilized and what resources they have used. It shows that their moralization of "injustice" is rooted in the "moral crises" of technical schools.

STUDENT WORKERS AT FOXCONN: BASIC INFORMATION

According to my investigation, 18% of the Foxconn workers range in age from 16 to 18, compared to 42.7% who range from 21 to 25. Student-workers account for one-third of those aged 16 to 18 (Foxconn Investigation Group, 2010). In Kunshan, the Foxconn workforce is about 60,000 strong. Among these, 10,000 workers are student interns. On the Longhua campus, likewise, student interns in some departments constitute up to 50% of the workforce. A worker at Computer Module Move & Service Group (CCMSG) disclosed that 700–1,000 out of 2,600 workers in her department were student interns. According to a news article in late June 2010, around 100,000 students were deployed to work at Foxconn's Shenzhen production facilities (Hu, 2010). Kunshan Foxconn had received more than 500 student interns by the end of August. In addition, 119 vocational schools in Chongqing also promised to send students to work in Foxconn (Hu & Wang, 2010).

These student interns come from a wide variety of majors—they are training to be nurses, locksmiths, security guards, and so on—few of which are relevant to their work at Foxconn. Officially, the length of the "internship" ranges from two to seven months, but some students have even worked in Foxconn for two years. Their basic monthly wage is the same as that of other workers—CNY940 in Tianjian, CNY950 in Wuhan, CNY1,250 in Hangzhou, CNY1,100 in Kunshan, and CNY1,200 in Shenzhen (see Table 1). None of these student workers can be exempted from overtime work. In 2008, the monthly overtime of Foxconn workers amounted to 120 hours during the peak production time (SACOM, 2010). After the suicides, workers including student interns continued to work 10 hours a day and six days per week. Though they received overtime premiums, these student workers had neither contracts nor social insurance. Indeed, student interns at Foxconn are de facto workers on the production line. As they are de facto workers with intern status, they are not protected by labor law and labor contract law, which provide that workers are entitled to contracts and social insurance.

So why and how did these students enter Foxconn? How did their schools cooperate with Foxconn? In the following section, I outline the history of technical schools in China and the mutually complementary commodification of education and labor.

Table 1. Foxconn Workers' Monthly Wage, 2010

	Tianjin	Wuhan	Hangzhou	Kunshan	Shenzhen
Food Consumption per capita (CNY)	450.42	469.14	581.15	534.96	552.02
Monthly living wage (CNY)	1,684.5	1,745.4	2,173.3	2,000.5	2.000
Local minimum wage (CNY)	920	900	1,100	960	1,100
Basic wage of a frontline worker at Foxconn (CNY)	940	950	1,250	1,110	1,200

Source: SACOM (2010).

HISTORY OF TECHNICAL SCHOOLS AND DUAL COMMODIFICATION

In the mechanism of dual commodification, the state plays an important role. Scrutinizing the history of technical schools, we can see how the commodification of labor began via the intervention of the state and how it became combined with the commodification of education as the state left this expanding commodification unchecked.

Tracing the history of technical schools, it is interesting that these schools rose from 1949 onward and entered their "golden age" in 1978. They gradually declined after they reached their peak in 1996. Ironically, the commodification of labor began in 1978 when economic reforms were being set in place by the state. This commodification had a negative impact on the development of technical schools, but the state actively connived in its expansion. Due to the state's connivance, education was also involved in the commodification. Promoted by the government, the commodification of labor and that of education worked together.

Commodification of Labor

From 1978 onward, the Chinese government carried out economic reforms. Its most important goal was to establish a market economy. It included two main changes, one of which is the establishment of special economic zones (SEZs). In the SEZs, local government implemented preferential policies to attract foreign capital and nurture a free market. Goods were no longer distributed according to the central plan but bought and sold on the market. They became commodities whose price is decided by the laws of supply and demand. The other change is that government loosened economic control over business enterprises. Many state-owned enterprises became private, and their social contract with workers became an economic contract. Furthermore, the limitations on labor mobility were loosened, and labor also became a commodity bought and sold

on the market. These two changes demonstrated that the commodification of labor in China was the state's intention. With the state's intervention, the demand for and supply of workers gradually came to depend on the requirements of the market.

When the commodification of labor started in 1978, technical schools were blossoming with the help of the state. Examining the history of technical schools, the following section shows how the commodification of labor affected the technical schools and how the commodification of labor and the commodification of education were combined and brought to work together with the connivance of the state.

Commodification of Education

Rise of Technical Schools. The emergence of technical schools was the policy of the state. After the establishment of the People's Republic of China in 1949, the Chinese government set up the First Five-Year Plan (1953–1957) to develop the domestic economy. One part of this plan entailed the training of skilled laborers in the service of industrialization. As China was lacking in training experience, the Chinese government introduced the technical school system from the Soviet Union (Ma, 2005). By 1953, there were 651 technical schools, located all over the country (Zhang, 1999). Some of them tried to foster cadres with management skills. The others made an attempt to train skilled workers. Most of these technical schools required three years' attendance, and they were funded by the government. After graduation, the students were directly assigned to factories according to the central plan. The mobility of labor was limited unless it was required by the state. Social contracts between state and workers secured full and lifetime employment. Moreover, during this period, cooperation between technical schools and state-owned enterprises was common. On the one side, students practiced their skills in the enterprises that they would enter in the future. On the other, workers came to technical schools to learn new skills and returned to their factories when they finished their studies. This collaboration, termed the "combination of learning and working" (*gong xue jie he*), provided large numbers of skilled laborers for agriculture and manufacturing, contributing to long-term economic growth. This effective method of training skilled laborers contributed to the boom in technical schools. By 1965, the number of technical schools amounted to 61,626 nationally (Zhang, 1999). The ratio of students in technical schools to students in high schools was 1:1.74 (Zhang, 1999).

Golden Age of Technical Schools. When the commodification of labor began in 1978, the establishment of a labor market needed large numbers of skilled workers. In order to supply sufficient skilled labor to serve the labor market, Deng Xiaoping pointed out in 1978 that the number of technical schools should be increased to suit the changing economic system. From then on, the state deliberately set in place many policies designed to promote the development of

technical schools. For example, the Ministry of Education and the State Labor Bureau enacted policies to increase the number of technical schools in 1980. According to the *Report on Reforming the Structure of Secondary Education* in 1980, large numbers of high schools were turned into technical schools (Hao & Ren, 1999). In addition, the government provided yearly subsidies for technical schools directly under the Ministry of Education, according to the *Proposal on Reforming the Structure of Secondary Education and Developing Technical Schools* in 1983 (He, 2009). Between 1980 and 1985, the number of students in technical schools increased from 18.7% to 35.9% of the total number of students at the level of the senior middle school (Hao & Ren, 1999; He, 2009). Funding for education increased from 0.603 to 1.421 billion CNY between 1987 and 1992, with an average yearly increase of 18.7%. Thanks to the *Technical Education Law of the People's Republic of China,* students in technical schools accounted for 56.7% of the total enrollment at the level of high schools in 1996 (He, 2009). Due to the state's efforts, the technical school system entered into its "golden age."

Up to 1996, technical schools played an important role in the whole education system (Tao, Li, & Yang, 2002: 121).

The education system comprises primary, secondary, and tertiary education. Children go to primary school when they are five years old. After they graduate from primary school, most students spend three years in middle school. When they are 14 or 15 years old, they enter the high school or technical school. If they go to technical school, they will receive the training of a skilled laborer and enter the labor market after their graduation. Otherwise, they go to high school and take the university entrance exam three years later. If students get the opportunity to enter university, they will continue their studies. Otherwise they will enter college or the labor market.

Decline of technical schools. In 1996, the technical school reached its peak. This success resulted from the state's support. First of all, the government assigned the students jobs after their graduation. These students did not need to worry about their future. This unified job assignment system attracted large numbers of students, which sustained the operation of the schools. Second, the government provided large subsidies to the technical schools. Tuition fees in technical schools were much lower than those in high schools, and students were able to attain generous scholarships (Zhao, 2006). Because of these two factors, technical schools grew vigorously. Nevertheless, the intervention of the state led to some tension with the commodification of labor, although the emergence of the latter resulted from the former. First of all, increasing the numbers of technical schools produced an excess of skilled laborers. With the process of economic reform and the expansion of commodification, the structure of industries had been changed, and numerous state-owned enterprises went bankrupt. This led to the shrinking of job opportunities for skilled workers. In face of this tension—the oversupply of skilled laborers and the deficiency in job opportunities—the government did not stop or slow down the

process of commodification. Instead, it involved education in the new wave of commodification. In this "intentional" commodification, the state gave up the unified assignment strategy and fostered competition in the labor market. Furthermore, it cut grants for technical schools and turned them into private institutions (Meng, 2004). In 1999, the *Solution to Deepen Education Reform and Promote Competence-Oriented Education,* enacted by the Party Central Committee and the State Council, stopped education subsidies for technical schools and completed the privatization of technical schools (Meng, 2004). Moreover, the *Proposals on Fully Promoting the Equality of Technical Education,* enacted by the Ministry of Education in 2006, encouraged technical schools to cooperate with enterprises (Meng, 2004). Through the cooperation of technical schools and enterprises, the commodification of labor and the commodification of education were combined.

Combination of the Commodification of Labor and the Commodification of Education

When the government encouraged technical schools to cooperate with enterprises, the commodification of labor and the commodification of education began to work together. In the dual commodification, the "combination of learning and working" (*gong xue jie he*) plays an important role (see Figure 1). Before the dual commodification, reciprocity existed between technical schools and state-owned enterprises (SOEs). Through the "combination of learning and working," students

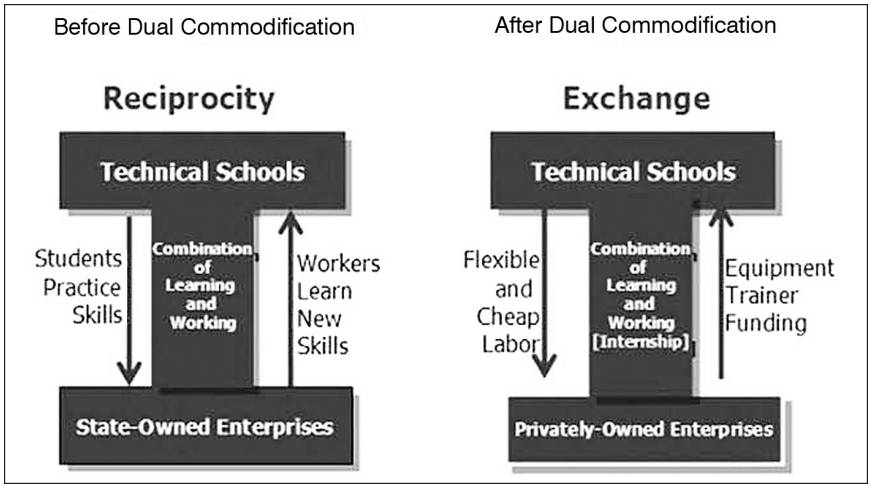

Figure 1. Combination of the commodification of labor and the commodification of education.

practiced their skills in SOEs, which helped them become more experienced. Meanwhile, workers in SOEs could improve their skills by learning new skills in technical schools. Technical schools' funding and SOEs' funding both came from the state. Neither the schools nor the state-owned enterprises gained profit from students or workers. In the dual commodification, the "combination of learning and working" (*gong xue jie he*) received a new name—"internship." This "internship" has been written into certain regulations. According to the *Proposals on Fully Promoting the Equality of Technical Education*,

> it is necessary to establish the internship system that students are required to work in enterprises as interns in order to strengthen their productive and social practice. Enterprises should receive students from technical schools, and technical schools should guarantee that students work in the enterprises at least for half a year during their three years study.

Through this "internship," technical schools sent their students to enterprises in exchange for equipment, trainers, and funding to help the schools get out of their financial crisis. Meanwhile, enterprises received flexible and cheap labor in order to make profits. Ironically, the original goal of the "combination of learning and working"—to improve the students' skills in order to make them more competitive—was ignored by both sides. In contrast, students were sent to labor-intensive enterprises where they performed unskilled labor and became less competitive, while their schools gained more funding. Furthermore, the length of the "internship" was usually extended to a year or even much longer, which violated the law. In sum, under the government's advocacy of the "combination of learning and working," these students' labor and education became commodities bought and sold by enterprises and technical schools. In order to analyze the mechanism involved in the dual commodification in detail, the next section will focus on the collusion between technical schools and Foxconn to show how the dual commodification worked together via the "internship."

Collusion between Technical Schools and Foxconn

Student-worker: Cheap and flexible labor. In answer to the question of why they use so many student-workers, one of the Foxconn managers replied as follows:

> We have recruited student-workers for many years. In the busy seasons (from May to December), technical schools send their students to our company. In the slack production season of summer and winter, we don't need so many workers. Luckily, students have vacation in these two seasons. When summer and winter come, they go back to their homes. It is convenient and flexible to use student-workers. It could cut cost.

It appears that flexibility and low cost are important reasons why Foxconn recruits student-workers. Why are the student-workers flexible and cheap? The

answer lies in student-workers' ambiguous legal status. According to the *Opinion on Several Problems of Implementing Labor Law*, it is not considered "employment" when students work in their spare time. This *Opinion* holds that the relation between students and company is not a labor relation, and that these students are not required to sign a labor contract with the company. Furthermore, some lawyers have argued:

> According to the law, the only standard to distinguish whether it is an internship or not is the status of student. That is to say, it is considered an internship instead of employment that students work in the company even though they are in a work-study program. During the internship, students are not protected by the labor law. Generally, they are still full-time students legally even though they are working in the companies under arrangement of the school or by themselves. Their relation with the company is not a labor relation. That is why they are not protected by Labor Law. Students' disputes with companies are not treated as labor disputes. If they are hurt at work, they could treat it as a civil dispute.

According to this explanation, student-workers are legally considered to be students rather than workers during their internships. Their relation with Foxconn is not a labor relation, and their rights are not protected by labor law. Due to the lack of protection, students constitute the cheapest and most flexible form of labor to serve in the labor market. Given students' flexible labor and the labor market's urgent need for cheap labor in the busy season, Foxconn largely uses student interns on its assembly line. On the one hand, Foxconn can obtain young, cheap, and stable labor via internships during the busy seasons. On the other hand, it can easily ask schools to end the students' internships and send the student-workers back to their schools at any time. It is not required to pay economic compensation or insurance for these student-workers. This helps Foxconn cut costs considerably.

Why have these technical schools chosen Foxconn? Why have they sent their students to Foxconn rather than to other companies? How have technical schools cooperated with Foxconn? Have they persuaded their students to accept this type of internship, or have they forced the students to do so? To answer these questions, the following section will scrutinize Foxconn's recruitment system.

Recruitment: Employment agency and technical school. In order to meet its expanding demand for unskilled labor, Foxconn recruits new workers by four means—job fairs, a recruitment center, employment agencies, and technical schools. It is through job fairs that Foxconn recruits employees such as engineers, managers, and administrators. Most of them enjoy high salaries and decent positions. The other three means of recruitment are used to recruit ordinary workers. Foxconn's recruitment center is open to receive individual applications every day. Thousands of applicants go there to register. After that, they wait for an interview. The whole procedure is short and easy, and most applicants successfully pass the interview and go directly to the workshop. The final two

recruitment strategies are largely used to bring in student-workers. Recruiting student-workers via an employment agency is an efficient way for Foxconn to absorb cheap and flexible labor. Liu, a member of the staff of an employment agency in Kunshan, explained how he helped Foxconn find a partner technical school:

> I have a friend who is a teacher in Shandong Technical School. When I was entrusted by Foxconn with recruitment, I went to my friend's school to ask whether they would like to send their students to Foxconn during their internship. They approved of sending students to Foxconn since they lacked funding. For helping Foxconn find workers, I was paid 30 CNY(5 dollars) for every student. I didn't receive money from these students, but the teachers did. I think they charge these students in the name of an "internship fee." Now, it is different. Foxconn directly cooperates with the technical schools.

Another owner of an employment agency is more straightforward:

> All of the employment agencies here are closely connected with the enterprises. If they [enterprises] want to recruit workers, they will first tell me how many workers they need. Then we will seek cheap labor for them and share the profit with personnel managers. If you want to gain more profit, you'd better bribe these personnel managers. It is worth doing so because it will help you make a good profit.

Apart from dealing with these employment agencies, Foxconn directly built up long-term relationships with some technical schools. According to an investigation in Chongqing, Foxconn has signed employment agreements with 200 technical schools. With the help of these employment agreements, technical schools have sent large numbers of students to Foxconn. Chongqing Electronic Technical School, one of the schools having an employment agreement with Foxconn, has received 100 billion CNY from Foxconn to update its equipment. Aside from this, this school will build replicas of Foxconn's SMT and PCBA production lines in order to enable the students to work in the school itself. This collusion, termed the "combination of learning and working" (*gong xue jie he*), has made students involved in helping Foxconn to make profits.

Aside from their middleman role, technical schools also charge students what is called an "internship fee." Most of the students interviewed said that they paid an "internship fee" to technical schools although they had already paid tuition ees at the beginning of the semester. "I paid 800 CNY to school before I came to Foxconn. I came here by train. The ticket was only 200 CNY. I think the school might pocket 600 CNY," said XiaoLiang, one of the student-workers in Foxconn Nanjing. In the same way, Xiaohui was charged by the school in the name of an "internship." He had been charged 3,000 CNY for tuition fees during his half year in school. Before he was sent to Foxconn, he paid another 5,600 CNY. Of this sum, 4,000 CNY were for his internship in Foxconn and 1,600 CNY were for lodgings. In these accounts, technical schools function as

profit-making institutions. They not only gain funding from Foxconn but also profit from their students.

In *The Great Transformation*, Polanyi (1957) notes that "Labor is only another name for a human activity which goes with life itself, which in turn is not produced for sale but for entirely different reasons, nor can that activity be detached from the rest of life, be stored and mobilized." According to Polanyi, labor is a fictitious commodity and can not be sold or bought on the market because it is a part of life and can't be separated from the human being itself. Education, like labor, is also a part of human reproduction. It is not just "information" that can be bought and sold on the market. Instead, it is connected to human morality, values, and intellectual development, and it closely relates to the students' socialization as citizens. When education becomes a commodity bought and sold on the market, it is reduced to "information," which destroys the formation of students' morality and values, namely, their socialization. In the combination between technical schools and enterprises, the commodification of labor and the commodification of education have worked together to turn schools into profit-driven organizations in the name of "internships." In order to raise money, they not only charge students an "internship fee" but they also exchange students' labor for funds. When students' practice, which is a part of their education, becomes a commodity, it helps Foxconn buy students' labor via training programs. With the help of "internships," learning and working are intertwined, while the commodification of education and that of labor work together. Nevertheless, education and labor are both parts of the human being itself—education is connected to students' minds, and labor is closely related to their bodies. When students' education and labor are combined and exchanged between technical schools and enterprises, students' minds and bodies are both damaged. In the next section, I will show how the "internship" has impacted students and how they have responded to the collusion of technical schools and Foxconn. I will demonstrate how "internships" have led to their deskilling, their atomization, and damage to their social relationships.

IMPACT OF THE DUAL COMMODIFICATION AND STUDENTS' RESPONSE

Deskilling and Alienation

How did the students who were interviewed understand the "internship"? Did they think it was helpful in improving their skills through practice? Were they happy to be sent to Foxconn? When Bai was asked whether the "internship" was helpful for his future, he answered, "No. This is not useful. It doesn't relate to my major. I have doubts about this internship because I found my knowledge learned in school was of no use in Foxconn. Is it a waste of time working here or learning at school?" Mentioning "internship," Wang revealed the same attitude

as Bai's: "We didn't practice our theory in our working because our tasks at Foxconn didn't relate to what we learned at school. In short, you can work in Foxconn no matter what your major is." Cheng expressed his worries about the internship, "In Foxconn, we learned nothing. We did simple actions repeatedly, just like a robot." He said, "We might be being cheated by the school!" Some students openly showed their dissatisfaction. According to my investigation, most student-workers were second or third year students in technical schools. All of them were minors whose ages ranged from 16 to 18. They were largely from Henan, Anhui, Hubei, and Sichuan. Their majors varied, including not only natural science and business but also humanities. Further, they were not assigned to positions related to their majors. Xiaoling, whose major was business management, was sent to the assembly line to control the machines; Xiaohui, who was studying digital control, was assigned to mobile phone shell processing. Xiaotang, who was crazy about operating the lathe, was to his disappointment assigned to the production of buttons for Apple computers. Likewise, Xiaoyu, who had been studying automobile maintenance for years, was asked to label computer fans on the assembly line. These stories all demonstrate that an "internship" in Foxconn has not been an opportunity for students to increase their skill or help them become more competitive. On the contrary, their deskilling in the production process has resulted in their alienation.

Foxconn uses Taylorism—it breaks workers' every action into simple segments which can be easily analyzed and standardized to make production more efficient—and Fordism to organize its production process. As Founder Terry Gou said, its production philosophy is "dismantling, simplifying, and standardizing the entire business process according to the norm in order to gain more profit with least resources." Terry Gou considers that every process should be divided. He requires a control system to be designed as a "camera" to guarantee that every worker can engage in production without any professional knowledge or special training. Industrial engineering (IE) is the basis for Foxconn's management. It is necessary to measure, conceptualize, and design workers' operations in order to standardize these operations. Therefore, each worker is integrated into the factory regime simply as a "machine part." Workers do not need to think. They just implement managers' orders and repeat a simple operation mechanically. A large number of student workers repeatedly described their work like this: "We are machines"; "We are faster than a machine"; or "Work is so dull, boring, and monotonous." Huang, a student-worker, described her work like this:

> I, as a "machine part" in the workshop, was located in the chair and bound with a static line. When a mobile phone board was delivered from the furnace, I held out my hands and seized the board, then shook my head. My eyes moved from right to left and up to down continually. When I found that a machine part was put in the wrong place, I shouted, "AOI." Then another "machine part" would come and ask what was wrong with the mobile phone board.

Another student-worker, Yang, said, "What we were required to do was to repeat this simple action four or five thousand times. It was dull and boring, but we had no choice." He continued, "Yes, every time you see a worker with dull eyes, vacuous look, and little smile, he or she is definitely working in Foxconn." Indeed, Taylorism and Fordism are useful in improving productivity and bringing workers under control. But thanks to these efficient management practices, student-workers' alienation has been intensified, and their labor value has been reduced. Student-workers have become interchangeable parts.

Fragmented Social Lives

Aside from students' deskilling and alienation, the relations between student-workers were fragmented. Students were sent to the assembly line at random, and they worked with strangers. Each worker was strictly confined to his seat, and workers were not allowed to move and talk with each other. Furthermore, workers in different workshops were forbidden to communicate with each other during work time. Wang, who came to work for Foxconn in 2006, described how managers separated student-workers from their classmates:

> We have trained 120 students. Twenty of them are from the same school. We recruited them at the same time but trained them five times. Every time we trained different students in order to obstruct their communication and break up their solidarity. Furthermore, the purpose of sending them to the assembly line at random is to prevent students from gathering. Even though they were acquainted with each other, this strategy is useful to make them scatter. Personally, I think the reason that workers committed suicide rather than protest related to this arrangement. Foxconn always distributes these student-workers to different departments. If you put them in the same department, these students would be able to build their solidarity. However, if they are distributed to different departments, they will not be able to organize to fight against the company.

Due to this strategy, student-workers' social relationships have been undermined, and they have come to feel deeply lonely and helpless. Yang described his social isolation at Foxconn: "I had few good friends in Foxconn. I didn't know where I should go when I took rest. I felt lonely because I had no friends to hang out or chat with. All of us were sent to the assembly line at random. In addition to the alternation of day and night shifts, we had no time to communicate. Because of that, it was difficult for us to build up profound friendships." Atomization, the result of the way Foxconn is managed, plunged these workers into despair.

In addition, the dormitory labor regime intensified student-workers' atomization. Assigned to a dormitory at random, these students had few opportunities to meet. Lack of communication resulted in their estrangement from each other:

> My four classmates and I entered into Foxconn at the same time. At the beginning of training, we chatted and went shopping together. It was easy

> for girls to communicate. We shared our experience when we were free. However, we were assigned to different plants and dormitories. Only Hong and I stayed in the same plant, but we were not in the same assembly line or dormitory. She worked on the night shift, while I worked on the day shift. We seldom met each other from then on. In short, all of us were separated after training. We no longer had time to chat and stroll. Double-shift work and different dormitories gave no opportunities for us to communicate.
>
> There were eight persons in our dormitory, but we worked on different shifts and in different workshops. Although three of us worked on the same shift, we went to different workshops soon and had no time to chat. Because of the high turnover, people who lived in our dormitories didn't even know each other before they left Foxconn. Most of the time, we were too tired to chat after work.

Fragmented social relations have turned these student-workers into atoms that have no connection with each other. Working and living in Foxconn, they have had to face strangers every day.

Industrial Injury

Given that student-workers' legal status is that of students rather than workers, no labor contract exists between these student-workers and Foxconn. Students signed employment agreements with the company. The biggest difference between labor contracts and employment agreements is that under employment agreements companies don't need to pay for students' insurance during their internships. Without industrial injury and medical insurance, student-workers have had to claim for compensation via civil procedures when they have been injured at work. However, civil law is far inferior to labor law in protecting employees, and the civil procedure is longer and more complex. Therefore, it is difficult for students to receive compensation.

In addition, officially, students are not allowed to work for more than 8 hours a day during their internships, but student-workers in Foxconn worked for 10 hours on average. They also worked on Saturday, leading to a heavy burden being placed upon them, which damaged their minds and bodies. "My eyes are not comfortable, and I feel sick every day. You see, my hand was hurt by machines even though I was wearing gloves. Furthermore, my work wouldn't be finished if I was wearing gloves. Due to heavy work, I had to take these gloves off. I was too busy to eat or go to the restroom." Here, Xiao was describing the pressure when I asked her whether her work was heavy or not. Her classmates also showed how heavy work impacted on her health. Xiao said "When I came to Shenzhen, I was 70 kg. However, during these two months, I have lost 10 kg, because I was too tired. My shoulder was stiff due to long-term sitting." Enterprises are not allowed to assign students to positions that put their health at risk, according to *The Notification on Promoting Internship of Technical Schools in*

Response to Lack of Skilled Workers in Enterprises. However, many students in the present study were assigned to workshops where the working conditions harmed their health:

> In our employment agreement, there is a clause asking whether noise or radiation exists in our workplace. Foxconn's answer is no. However, my workshop is too noisy. The noise grates on my ears everyday and drives me crazy. Furthermore, they assigned my classmates to the workshop filled with radiation. They didn't give us a choice but just asked us to sign the agreement.

All of these accounts show that student-workers' ambiguous legal status helped Foxconn avoid extra costs. However, the lack of a labor contract meant that these student-workers had little protection under labor law. Extended internships, extra working hours, and severe working conditions damaged their minds and bodies.

Protest

The combination of dual commodification—the commodification of both education and labor—led to student-workers' deskilling, alienation, and fragmented social relations. It damaged their minds and bodies, making use of student-workers' ambiguous legal status. How did these worker-students deal with their problems? How did they respond to the changes happening in their life?

Since the beginning of 2010, 17 workers in Shenzhen Foxconn have tried to end their lives. Thirteen died, while four survived their injuries. Asked for the reasons for her suicide attempt, one survivor explained that she felt meaningless, helpless, and desperate. All of these feelings resulted from the production process and factory dormitory regime. In contrast to their colleagues who committed suicide, student-workers mobilized to protest against Foxconn and their schools when they encountered the same hardships. Why did these student workers choose protest rather than suicide? To answer this question, I examine the way in which these student workers mobilized and legitimized their struggles.

On September 16, 2010, students of Taiyuan Rail Technical School clashed with Foxconn. They reported that their majors were irrelevant to Foxconn's production and that they had been forced to intern there. "We learned nothing and didn't want to stay there. However, our school threatened that we wouldn't receive a diploma if we refused to stay in Foxconn. It was unjust and unfair. It was immoral." These student interns wanted to change their employment agreements, but Foxconn and the school refused their demands. Indignantly, they stopped work and approached the gate of the plant. However, they met with obstruction from janitors. Tearing up their employment agreements and breaking chairs, these students disregarded the janitors' obstruction and continued to move on. Failing to hinder them, the janitors started to beat the students. Taiyuan Foxconn was in chaos. In order to prevent this chaos from becoming worse, teachers promised to bring these students back to school. However, when

hungry students went to the dining hall to have lunch, the Foxconn janitors' arrogance provoked their indignation again. They broke chairs and smashed bowls in the dining hall, posting their pictures and their appeal on the Web:

> Work in Foxconn was irrelevant to our majors. Sending us to school, our parents hoped we would learn skills rather than waste time in Foxconn. They had paid a tuition fee! Why should we stay here without any improvement of our skills? This internship violated the purpose of education. It was not helpful for our skills and professional knowledge! Furthermore, radiation did harm to our health. We told our schools that we didn't want to stay in the high radiation. However, the schools forced us to stay here. Teachers said that we wouldn't receive our diplomas if we left Foxconn. Depriving [us of] our right to choose, this behavior disrespected human rights! The schools are irresponsible and immoral! It is illegal! Help us! Please help us!

This appeal received thousands of hits. Netizens criticized the cooperation of technical schools and Foxconn, asking for the cancellation of this "internship." They expressed their opinions with sympathy: "Is it internship or slavery? Support students!" "Well done, students! Smash Foxconn!" "Against the double oppression!" Gaining the support of public opinion, student-workers successfully saved themselves from the "enforced internship." Finally, the employment agreement was cancelled, and the students were sent back to their schools.

Likewise, students in Zhengzhou Communication Technical School yelled and threw bottles out of dormitory windows to express their dissatisfaction. This protest was also provoked by the "enforced internship": "Our major is motor repair. Why should we go to an electronics company? It is irrelevant to our major," one student said.

> The school said that it was an "internship" [*shixi*]. Actually, they sold our labor [*da gong*]! It wasted our time and youth. I spent many years on my major. Why should I go to an electronics company? Working in Foxconn was not helpful. Yes, you can get 1,000 CNY during the internship. But I'm a student! I'm studying! Why should I sell my labor now? There will be a lot of time for me to earn money after graduation.

Other students also demonstrated their indignation. "We had paid thousands of yuan to our school. Why must we intern before we gain knowledge? Furthermore, this work couldn't improve our skills. Doesn't it waste time? Treating students as cheap labor, the school is irresponsible! Parents worked hard to pay tuition. Doesn't the school need to solicit our parents' opinions? The school is not permitted to send us to Foxconn!" "Teachers said that we must drop out if we don't want to go to Foxconn." "They said that we would be expelled from school if we didn't work in Foxconn. It is immoral!" During the protest, some students made video recordings with their cellphones and uploaded them to the Web. These videos attracted attention from the media. After watching the

videos, one journalist interviewed some students, and the program was broadcast on TV. "Help me!" Students' poor faces appeared on the screen. Television viewers, especially parents, strongly condemned this "enforced internship." "I can't believe that this school sold children's labor rather than take charge of their education." "Internship should be based on the principle of voluntariness. This school had no right to force students to work in Foxconn." Under the pressure of public opinion, Zhengzhou Communication Technical School gave up its "internship" project.

Comparing these two protests, we can see some similarities. First of all, these protests were rooted in technical schools' "moral crisis," and the target was the collusion between technical schools and Foxconn. In the Confucian tradition, merchandise is inferior to education, and education should not become a commodity for sale because it relates to humans' morality and values. Schools have a responsibility for students' socialization, in areas including knowledge, skill, morality, and values. Therefore, when "enforced internship" ironically led to student workers' alienation, fragmented social relations, and especially deskilling, schools did not fulfill their responsibility according to the moral norms. This led to their crisis of legitimacy, their "moral crisis," provoking students' feelings of "injustice." Second, these students used expressions from moral discourse such as "irresponsible," "immoral," and "don't have rights," to moralize their feeling of "injustice" in order to form their solidarity. Furthermore, they used this discourse to legitimize their struggles and mobilize other citizens' moral identities. By showing themselves as "victims," they provoked citizens' sympathy and gained more support. In addition, the media played an important role in the mobilization of both protests. In the first case, students posted their appeal on the Web and generated pressure from netizens. Likewise, students in the second case uploaded their videos and attracted attention via television programs. In both cases, they called for "help" via popular media. Mass media, both the Internet and television, played an important role in communication and information dissemination. By using these resources, student workers demonstrated their feeling as well as the schools' "irresponsible" behavior. Emphasizing their schools' "moral crisis" and their position as victims via the media, the student-workers mobilized other citizens to come together. Without this, the students could not have allied with other citizens to gain success.

CONCLUSION

By outlining the history of technical schools in China, this article demonstrates the mechanism of the mutually complementary commodification of education and labor. Emphasizing institutional factors, this article argues that the state plays a dominant role in the combination of commodifications. First of all, the commodification of labor began under the aegis of the state. The state deployed neoliberal developmental strategies to nurture a free labor market. Labor became a

commodity bought and sold on the market. However, the expansion of the commodification of labor resulted in some tensions. On the one hand, the establishment of a labor market needs a large number of skilled workers. To nurture the free labor market, the government enacted many policies to develop technical schools. On the other hand, the commodification of labor and the economic reform resulted in the bankruptcy of numerous state-owned enterprises. This led to the shrinking of job opportunities. In face of the tension between the oversupply of skilled laborers and the insufficiency of job opportunities, the Chinese government initiated the commodification of education rather than slowing down the process. Its measures included giving up the unified job assignment, cutting grants, and turning the technical schools into private institutions. When the government enacted policies to encourage technical schools to cooperate with enterprises in order to climb out of their financial crisis, the commodification of labor and the commodification of education began to work together. Thanks to the government's push, these two forms of commodification were combined via the "combination of learning and working" (*gong xue jie he*)—"internship." In *The Great Transformation*, Polanyi (1957: 140) says, "The road to the free market was opened and kept open by an enormous increase in continuous, centrally organized and controlled interventionism," Indeed, the mutually complementary commodification of labor and education was shaped by strong Chinese governmental intervention. Interpreting the "combination of learning and working" in a neoliberal manner, the state closely controlled the dual commodification.

This dual commodification led to student interns' deskilling, alienation, fragmented social lives, and industrial injury via the "internship." Their overall experience provoked their feeling of "injustice." It led to the "moral crisis" of the technical schools. First of all, education is a fictitious commodity that cannot be produced and sold in the market. Education is a part of life. It is closely connected with human socialization. According to moral norms, the schools are responsible for nurturing students' personalities as well as imparting knowledge and skill to them. When technical schools sold their students' labor to Foxconn and no longer took charge of the students' socialization, they fell into a crisis of moral legitimacy. That is to say, the commodification of labor was a prerequisite for the technical schools' crisis of moral legitimacy. Second, this "moral crisis" is closely connected with the production process in Foxconn. Due to the "combination of learning and working," the commodification of education was intertwined with the commodification of labor. On account of the commodification of labor, student interns had to do work that was irrelevant to their majors and not helpful in promoting their skills. What is worse, their deskilling was strengthened by the production process. Deskilling, contrary to parent and student expectations, undermined the technical schools' moral legitimacy. In other words, the combined commodification caused technical schools to be caught up in a crisis of moral legitimacy.

Based on the technical schools' crisis of moral legitimacy, student interns moralized their feeling of "injustice" to mobilize and legitimize their struggles. They used moral discourse and presented themselves as victims to gain citizens' sympathy and support. With the help of media, they publicized their feelings and formed a moral identity. According to Silver, workers can have associational power and structural power. Neither form of power was possessed by workers in Foxconn. Global production chains have undermined workers' structural power, and the lack of associational rights has deprived them of their associational power. Thus, examining the mobilization, discourse, and strategy of the student workers' protest, we could discuss "moral power" in a further study. In contrast to Chun's "symbolic power," these student interns took advantage of the technical schools' "moral crisis" rather than use the "politics of shame" to exert pressure on Foxconn. This may have some implications for the study of workers' power in the future.

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Direct reprint requests to:

Yihui Su
Department of Sociology
Room 493, Block 3
Chang-chun-xin-yuan
Haidian District, 100871
Peking University
Beijing, People's Republic of China
e-mail: shadowblue@163.com