Workers' Participation and Their Health and Safety Protection in China's Transitional Industrial Economy

MEEI-SHIA CHEN, PHD

Chinese workers have inherited from the Maoist era two institutions through which they may participate in workplace management-the trade union and the Staff and Workers' Representative Congress. This paper analyzes how workers have participated in the protection of their health and safety through these institutions, describing their functions, on paper, as stipulated by laws and regulations, and in practice, in a printingmachinery shareholding company, based on an indepth case study. The impacts of these two institutions have declined with industrial economic reform, and the power of the enterprise is shifting toward management. China is confronted with serious occupational health and safety problems. It is imperative to strengthen the mechanisms that engage workers in the prevention of these problems. Key words: workers' participation; workplace management; occupational health and safety; China; transitional industrial economy, economic reform; trade union; workers' congress.

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The concept of workers' participation at the workplace historically evolved with the emergence of industrializing capitalist societies as early as the Industrial Revolution, as workers struggled to gain control of the labor process and to democratize workplace management. Since then, workers have participated in decisions affecting their working conditions at various times in countries with capitalist systems, and later, in those with socialist systems.¹

There is a vast volume of scholarly literature on workers' participation at the workplace. Arguments in favor of workers' participation can be briefly summarized as follows: 1) it can improve workers' efficiency and productivity; 2) morally and ethically it satisfies human needs for creativity, achievement, social approval, social justice, and freedom from domination; and 3) it can extend democratic principles from the political sphere to industy.^{1,2} Unfortunately absent from these arguments is that workers' participation may have an important impact on the protection of workers' health and safety at the workplace, which is an integral part of the labor and human rights of a worker.

Since workers are directly involved in the labor process, they are the ones who are most familiar with health and safety hazards in the workplace, so their participation in identifying hazards and implementing hazard reduction and elimination is essential to the establishment of a safe workplace. But there are almost universally potential conflicts of interest between the workers and management over this, because management tends to equate taking protective measures with increases in the costs of production. Management, in general, is unlikely to invest resources in occupational health and safety (OHS) unless pressured by workers or effectively regulated by the state. To protect their own interest, it is essential for workers to participate in OHS management to ensure that resources are allocated to protect their health and safety.^{3,4} However, in the voluminous research on workers' participation, the issue of workers' health and safety is either not mentioned or mentioned only in passing.

It might reasonably be assumed that in OHS-related literature at least there would be adequate discussion of and research on the mechanisms through which workers can participate in the protection of their health and safety, but here it is just as disappointing. Most mainstream textbooks on OHS5-8 address only technical aspects of the problem. The workers' role does not enter into the discussion, research, interpretation, and prevention of OHS problems. In most research, workers are treated as passive victims.9,10 Most discussions of prevention of work-related disease and injury focus on technical measures such as the installation of engineering controls and devices, substitution of a non-hazardous substance for a hazardous one, job redesign, work organization changes, personal protective equipment; education, advice and screening and surveillance of workers' health; and government regulations and enforcement.¹¹⁻¹³ Rarely is workers' participation considered as a possibility in playing a role. The handful of researchers who do see workers' participation as important and believe that shop-floor workers are most

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Address correspondence and reprint requests to: Meei-shia Chen, Department of Public Health, College of Medicine, National Cheng Kung University, 1, Dashue Road, Tainan, Taiwan; e-mail: <mschen@mail.ncku.edu.tw>.

likely to be aware of their own endangered condition lament the paucity of research and discussion on workers' participation.^{3,14-19} They caution that increasingly the area of OHS is dominated by management or health professionals, sidelining workers from having any say in OHS matters.^{14,18} Nonetheless, even having recognized the importance of workers' participation, few have conducted empirical research to examine the mechanisms through which workers may participate in their health and safety protection at the workplace.

The research presented in this paper is my attempt to fill this gap by studying mechanisms through which workers participate in the protection of their health and safety in Chinese factories and the possible impacts of the industrial economic reform on these mechanisms. I first set the political and economic contexthow the economic reforms launched in China since the early 1980s affect workers' health and safety problems. This is followed by a brief description and discussion of the historical developments of the two relevant workplace institutions through which workers participate in the protection of their OHS-the trade unions and the Staff and Workers' Representative Congress (SWRC, zhigong daibiao dahui). Then I describe and discuss the Chinese workers' actual participation in OHS decisions in practice, based on an in-depth case study of a printing-machinery shareholding company, formerly state-owned. Finally, I analyze the possible impacts of China's industrial economic reform on the function and operation of the trade union and the SWRC as they relate to workers' OHS protection.

MARKET REFORM AND ITS EFFECTS ON WORKERS' HEALTH AND SAFETY

Over the past two decades China has undergone a dramatic transformation from a socialist command system to a market economy. The industrial sector has been significantly restructured. Rural collective enterprises in villages and townships have flourished. Private enterprises and foreign-funded enterprises, which were nonexistent two decades ago, have mushroomed. These developments have challenged the state-owned sector, which has shrunk due to the collapse of many stateowned enterprises. From a rigidly planned economic system China has been transformed into a decentralized economy. In line with this, oversight of OHS conditions has become decentralized, highly deregulated outside the state sector and increasingly so within it.

In recent years China has become notorious internationally for weak OHS protection, with many fatal accidents reported by its own media and the international press. Some Western scholars have warned that China's rapid modernization drive is leading to an explosive growth of hazardous industries and unsafe workplaces and enormous challenges in occupational health problems.²⁰⁻²² It was estimated that some 34 million people (about 30% of the industrial workforce in China) are engaged in hazardous occupations.²³ In the 1990s there were, on average, 100,000 fatalities from industrial accidents each year²⁴; between January and July 2002, such fatalities stood at 65,350.²⁵ 11,700 cases of serious occupational diseases were officially reported in 2000, a jump of 14.5% from 1999.²⁶ The rates of industrial fatalities, injuries, and contraction of occupational diseases were so alarming that the Chinese government awoke to the fact that immediate stopgap measures had to be instituted. Two new laws, on the prevention and treatment of occupational diseases and on safe production, were promulgated in 2001.

The economic reforms have shaped an industrial structure that is difficult to monitor. Before the market reform, during the Maoist era, the state sector, followed by the urban collective sector, was dominant. There was no private sector, and the state-owned factories tended to be large, often employing several thousand workers. They were therefore easier to monitor. In contrast, after the market reforms many tens of thousands of smaller private and rural collective factories sprang up, making monitoring of OHS protection a daunting task. In addition, there is a booming sector of foreigninvested enterprises managed by Hong Kong, Taiwanese, and Korean firms, which are notorious in China for their lack of concern for workers' health and safety. In Guangdong Province, where these Asianinvested enterprises are concentrated, local Chinese newspapers carry stories of total disregard for human lives in the use of labor. Local governments eager to attract foreign investments tend to turn a blind eye to these problems.27

WORKPLACE INSTITUTIONS FOR PARTICIPATION

Chinese employees have inherited from the Maoist era two institutions that, when activated, may help to soften the assault on workers' health and safety: the workplace trade union (TU) and the Staff and Workers' Representative Congress (SWRC). These two institutions are legally entrusted, at least on paper, with functions that allow production-line and office workers an input into management practices, and by extension the protection of their own health and safety. With China's appalling OHS record, it may be hard to believe that China has institutions through which workers may be engaged in the protection of their own health and safety. But as I show in this paper, these two institutions do provide such participatory mechanisms, and if their potential functions can be fully realized, they may hold promise to facilitate an improvement in OHS conditions in China through the workers' own engagement.

The Chinese trade union is a quasi-governmental institution whose officials are often appointed from above. It often serves essentially as a branch of management in factories, taking care of the company's welfare measures. But it is stipulated by China's trade union law and labor law that the enterprise-level trade union branch is entitled, at least theoretically, to negotiate on an equal basis with employers. One of the items that is supposed to be included here is workers' health and safety protection, and the regulations note that this should not be set lower than national OHS standards. The trade union has the power to monitor OHS conditions in factories. The lowest level at which the trade union can have an input in monitoring OHS is through the trade union's small-group OHS inspection on the shop floor. A union representative in each factory workshop is supposed to fill such a role. Since the mid-1980s, the People's Republic of China has promulgated three laws, the object of which is to stipulate the union's and the union OHS inspector's power and responsibilities. These laws are 1) The Working Rules for the Trade Union Labor Health and Safety Protection Supervisory Inspectors; 2) The Working Rules for the Basic-level Trade Union Labor Health and Safety Protection Supervisory Inspection Committee; and 3) The Working Rules for the Basic-level Trade Union Labor Health and Safety Protection Inspectors.²⁸ In addition, according to the Trade Union Law, the union has the right to put forth proposals to remedy unsafe and hazardous conditions (Article 22), and if lives are endangered, it can propose that the workforce be withdrawn from the site (Article 24). The union is entrusted with the right and duty to participate in settling shop-floor labor disputes, including those concerning occupational accidents and diseases and related compensations. Its duties also include ensuring and monitoring the enterprise's provision of special health and safety protection for female workers. The union also regularly launches a "rational suggestions" (helihua jianyi) campaign, in which workers are invited to give suggestions about anything related to the workplace, including OHS problems. Those that are serious may become resolutions to be voted on at the enterprise's SWRC. Finally, the union organizes and convenes the congress, generally held twice per year, and serves to monitor the implementation of SWRC resolutions.

The idea of the SWRC system originates from the "factory management committee," which, composed of office and production-line workers of the factory, was given the mission of managing the factories that were under Chinese Communist Party (CCP) control during the civil war between the CCP and the Nationalist Party before 1949. The CCP's main goal then was to maintain firm control of these factories by their staff and workers, rather than by former managers, many of whom might have been loyal to or affiliated with the Nationalist Party. After the establishment of the People's Republic of China, the state officially reintroduced the SWRC system on May 1, 1949, and SWRCs were then established in state-owned enterprises. Under the Chi-

nese socialist system, the SWRC symbolized the state's ideological commitment to workers as the masters of the state. Historically, the SWRC was expected to have the same interests as the management, as both are supposedly producing for a better socialist society. Nevertheless, the system was given greater power during two political periods when the socialist system was under serious challenges-during 1956 to 1957, when both Hungary and Poland were confronted with workers' uprisings; and in the early 1980s, when the workers' movement and strikes led by Solidarity were shaking state power in Poland. In the 1980s, when China was undergoing economic and industrial reform, the state gave much greater autonomy and power to the managers of enterprises. To provide a leverage against this greater managerial power, the state acted to strengthen the SWRC system and, in 1986, promulgated a regulation on the SWRC system in state-owned enterprises. Similar regulations regarding factories of other types of ownership were also legalized later in 1990s.²⁹⁻³²

According to Article 3 of the 1986 SWRC regulation, the SWRC is the basic form through which the enterprise could carry out democratic management and is the power institution through which workers exercise their right to democratic management. Based on the SWRC regulations (e.g., Article 52 of the 1988 Enterprise Law), the SWRC has five responsibilities and rights:

1. To hear and examine the enterprise's major strategic directions, long-term plans, annual plans, basic construction plans, important technologic improvement plans, workers' training plans, budget plans, and the use and distribution of enterprise funds; and to make suggestions and proposals relevant to these directions and plans;

2. To examine, agree to, or veto the enterprise's wage reform and bonus distribution proposals, *workers' health and safety protection measures*, reward and penalty systems, and other important systems and regulations;

3. To examine and decide on proposals regarding the use of the workers' welfare funds, housing distribution, and other important matters concerning workers' living and welfare;

4. To evaluate and monitor the performances of administrative officials, and make suggestions about reward, punishments, and dismissal of them;

5. To elect the enterprise manager based on the governmental supervisory bureaucracy and to report the election results to this bureaucracy for approval.

The OHS measures to be examined by the SWRC include the safety technology improvement plan, health protective measures, the use of funds for safety technology and measures, the purchase and use of health and safety protection supplies, working hours and holidays, and rewards and penalties related to OHS. The SWRC has several special committees, responsible for various aspects of the enterprise, including production, wage reform plans, rational suggestions, welfare, evaluation of leading officials, assessment of meeting motions, and OHS. The major responsibilities of the OHS committee include examining OHS-related SWRC meeting motions; consulting and resolving OHS problems between congresses and reporting the results to the congress; implementing the SWRC resolutions related to OHS; reporting to the SWRC the results of the OHS inspections and the monitoring of OHS work in the past year; and proposing to the SWRC the OHS-related work plan for the next year. This committee also has the duty to mobilize shop-floor and office workers to make motions (yi an) about OHS problems and improvement. It is supposed to direct the motions that can be resolved by relevant sections of the enterprise to the heads of the relevant sections and is then responsible for following up the status of the implementation of such motions. It will also bring to the congress the motions of which the solution involves more sections and greater resources.³³ Inasmuch as the union is the workplace organization that convenes the SWRC and serves as its secretariat between congresses, the relationships between the trade union and the SWRC and its representatives are in practice intertwined. In fact, the research team members' visits to various factories in China revealed that in some the two organs have been collapsed into one.

I have described the functions, responsibilities, and rights of the trade union and SWRC, as stipulated by the PRC's laws and regulations and promoted by the All-China Federation of Trade Unions. How do the trade union and the SWRC operate in practice? In the following section, I describe the actual workings of these two institutions in a state-owned-enterpriseturned shareholding company (hereafter referred to as Company A). This analysis is based on an in-depth case study of this company conducted in August 2002. Like other institutions inherited from an earlier era, both the trade union and the SWRC are experiencing changes as Chinese industry undergoes dramatic restructuring.³⁴ Therefore, subsequently, I further analyze the changes that Company A and these two participatory institutions have been experiencing and their possible impacts on workers' participation in protecting their health and safety.

AN IN-DEPTH CASE STUDY OF COMPANY A

Company A is one of the biggest offset press manufacturers in China. It is located in one of the biggest cities in China. The study was conducted in Company A's headquarter and its two branch factories (hereafter referred as Factory 1 and Factory 2). Company A was established in 1952. It was state-owned until 1994, when it became a shareholding enterprise with a larger holding (62.5%) from the state, a smaller share (25%) from a Hong Kong private investor, and an even smaller share (12.5%) from the sale of stock. Company A has about 3,000 employees. Factory 1 has about 800 employees and Factory 2, about 700 employees.

The data for the study, conducted by a research team of six researchers from Beijing, Australia, and Taiwan (the latter is the author) and a few research assistants, were collected from three sources. First, semistructured and open-ended in-depth interviews with individuals holding various kinds of positions in Company A and focus groups were conducted. The contents of the interview were focussed on the company's OHS system, the function and mission of the trade union and the SWRC and their relationships with workers' health and safety protection, and the impact of the reform on the trade union and the SWRC as related to OHS. The interviewees included 32 persons from management, shop-floor directors, technical personnel, trade union and SWRC representatives, and rank-and-file workers. The management officials interviewed included the directors of departments of human resources, personnel, management and planning, production and planning, political work (*zheng gong*), and technical assistance; the party secretary and the deputy party secretary; and trade union chairpersons.

Second, the materials on Company A's history and the meeting minutes and records of the company's SWRC and trade union from 1980 to the present were collected. Third, a survey of about 100 workers, including production-line and office workers and lower- and middle-level management staff, was conducted in each of the two branch factories. These workers were selected with a stratified proportional sampling approach from each office or shop floor, representing production-line and office workers of each factory. The questionnaire focussed on workers' perceptions of and attitudes toward the issues of workers' participation and their health and safety protection.

The Trade Union in Practice in Company A

The structure of the TU, the TU OHS committee, and the SWRC at different levels of Company A is shown in Figure 1. The lowest level of company A is called ban zu. Its head is called ban zhu zhang. Above ban zu are the shop floor or office level, the factory level, and the company headquarter at the highest level. Company A headquarter has a trade union with a full-time chairperson and a full-time paid staff. Under Company A, Factories 1 and 2 each also have a trade union, with one full-time chairperson and one full-time paid staff. The chairperson position of the trade union at the shop floor or office level is a joint appointment. This chairperson is full-time with his or her own job at the shop floor or office but has additional trade union responsibilities. In Factory 1 or Factory 2, this chairperson is often the vice director of the shop floor (che



Figure 1—The Structure of the trade union, occupational health and safety committees, and Staff and Workers' Representative Congress in Company A.

jian fu zu ren) or the office. At the lowest level (*ban zu*) is the TU small group (*gong hui xiao zu*), usually with about 20 people. This TU small group has a group leader (*gong hui xiao zu zhang*) who is usually an ordinary worker with a full-time job but is given additional TU responsibilities.

At each level, the TU has several working committees responsible for organizing, propaganda, living matters, labor dispute resolution, production competition, democratic management, female workers, and OHS. For the latter, the lowest level has an OHS person, called an quan yuan-literally meaning "safety person." Note that, in Chinese context, the word "safety" here contains both safety and health dimensions of the working condition. This OHS person is usually the section's group leader (ban zu zhang). Above this lowest level, there exists an OHS committee at each level (see Figure 1). The OHS committee usually has five to ten union members who have worked in the factory for many years and thus are experienced in OHSrelated matters. The OHS committee is responsible for the collection of the information about OHS problems. When the problems can be resolved, the committee informs the relevant sections of the natures of these problems and ensures that they are resolved. For those that cannot be resolved, it reports to upper-level TU members for further discussions or inclusion in the SWRC agenda. This information-collection and problem-resolution process was called "information feedbacks" (xin xi fan kui) by some TU small-group leaders whom we interviewed. The OHS committee also joins the factory-level monthly OHS inspection of the workplace. The results of the inspection are recorded in a notebook, which is given to the management office responsible for OHS matters for further actions. It should be noted that Company A's OHS inspection group is composed of not only TU OHS committee members but also OHS personnel from management and a few leading representatives responsible for the OHS aspect of production.

Another important duty of the TU is the negotiation of the collective contract with the management. The collective contract of Company A contains ten chapters, addressing issues such as labor relations, wages, working hours/leisure/holidays, welfare and medical insurance, OHS, labor dispute coordination, and the implementation of the contract. The chapter on OHS constitutes seven articles. They are:

1) The company must establish an OHS committee and safety production responsibility system and develop OHS rules and procedures according to the state and local government laws and regulations, and the workers must strictly follow the company's OHS system, rules, and procedures.

2) The company must provide working environment and health and safety measures that meet national standards; if the national standards are not met, the company must redesign and rebuild the system, and before such a system is constructed, must design temporary protective measures in order to ensure workers' health and safety.

3) The company must regularly provide workers with necessary protective supplies that meet national standards; the company must provide the workers who are engaged in toxic and harmful work activities with regular physical examinations and necessary rests and treatments.

4) The company must closely cooperate with the trade union in promoting workers' health and safety education and raise workers' OHS consciousness and in providing the workers of toxic, harmful, and other special job types with necessary special training.

5) The company must provide special health and safety protection for female workers during the four special periods of menstruation, pregnancy, child delivery, and breast-feeding and must conduct physical examinations and necessary treatment of female health problems.

6) If serious industrial accidents or deaths occur, the company must immediately notify the trade union to help handle the problem and report to the relevant governmental organizations and upper-level trade union.

7) The company must support the trade union to establish a TU OHS committee and the trade union must support the company to enforce the OHS management and coordinate with the company management office to conduct the OHS inspections, prevent overheat during the summer, and maintain warmth during the winter, and promote the monitoring of the OHS by the workers.

The TU democratic management committee is primarily responsible for mobilizing workers, collecting from them "rational suggestions," and organizing and convening the SWRCs, held twice per year in Company A. The committee members usually distribute the forms to workers and encourage them to write down their suggestions. Some of these suggestions concern OHS, such as the light on the shop floor is not bright enough and thus may cause safety problems or some machines are not operating safely. This committee has used various incentives in order to get workers more involved-by giving out gifts to those with suggestions judged to be constructive, for example. Once the suggestions have been collected, the committee will classify them into those that are resolvable by the relevant sections and those that need to be further discussed in the congress.

The SWRC meetings are held at least twice per year, at the beginning and middle of the year, in Company A. The congresses at the factory level are also held twice per year. The TU, its democratic management committee in particular, is responsible for organizing the SWRC preparatory meetings, developing meeting materials, and convening the congress. The TU also monitors the implementation of the SWRC resolutions. Company A, like other state enterprises in China and as stipulated by the state, allocates funds to the TU for its annual expenses for the above-mentioned and other TU activities. The amount of TU funds must be equal to 2% of the employees' total wages according to the state law.

SWRC in Practice in Company A

The basic structure of the SWRC in Company A is shown in Figure 1. Worker representatives, accounting for approximately 10% of the total number of employees, are elected at the lowest level. Factory 2, as an example, has about 80 worker representatives. At the shop-floor or office level, these representatives are divided into six groups (daibiao zu), according to the nature of the shop floor or office. Each group has about 13-15 representatives. The chairperson of the representatives group is often the shop-floor or officelevel TU chairperson. All representatives form the congress delegation (daibiao tuan), participating in the formal congress. The chairing committee (zhuxi tuan) of the congress is composed of the factory manager, the party secretary, a factory-level chairperson, and two worker representatives. Out of all representatives, about 20 are elected to attend the company-level congress. It should be noted here that, in a deviation from what is suggested by the national regulations concerning SWRC, Company A's SWRC does not have working committees. It is the TU that has working committees, as described previously.

Candidates for worker representatives are recommended either by the TU or by workers. Based on our interviews, the characteristics of the representatives include the following: he/she 1) has won the trust of most co-workers; 2) works hard and usually does the hard work before most co-workers; 3) has the guts to speak out, to make suggestions, and to represent other workers' interests; and 4) thinks, analyzes, and speaks clearly. Many of the representatives are also the "advanced employees" (*xian jin zhi gong*), an honorary title given by the company to workers with excellent performance at the workplace.

There are two major components of the congress: the manager's report and the discussion of and voting on resolutions. The manager's report addresses various aspects of the previous year's work, including production review, welfare distribution, wage reform, OHS, production plans, new investment plans, and others. Before the congress is convened, several preparatory meetings take place. First, the chairpersons of the representative groups meet to discuss the manager's report draft, on the cover page of which the words, "for discussion purpose only" are printed. Each chairperson then brings this report and other resolutions to his or her respective group for further discussions. Suggestions for revision are made and brought up to another meeting of the chairpersons. During this process, each representative is responsible for collecting opinions and suggestions from those whom he or she represents and for explaining the contents brought down by their respective chairperson from chairpersons' meetings. If there are still more disagreements, more preparatory meetings are held until general consensus is reached. Usually the formal congress is held only when consensus on major issues has been reached. This means that the primary purpose of the formal congress is a formality-to achieve official approval. Once the reports, resolutions, and other rules and regulations have been approved by the SWRC, they are given executive power for implementation. All the above-described meetings, discussions, and mobilizations are organized by the TU, as also mentioned in previous sections.

Many OHS-related resolutions discussed and approved by Company A's SWRC can be found from our in-depth interviews and the SWRC minutes. I give three examples here.

First, after Factory 2 was moved to a suburban area three years ago, the water the workers drank was of poor quality and tasted bad. The workers were worried that drinking the water would be harmful to their health. The worker representatives then discussed and proposed that Company A resolve this problem and included this resolution in the congress agenda. After the approval of this resolution, company A installed in Factory 2 a system with the capacity to produce the factory's own drinking water.

Second, on one Sunday two years previously, a worker had carelessly thrown his cigarette butt in the shop floor, causing a fire. Although this accident did not result in deaths, injuries, or serious damage, the workers were so alarmed that worker representatives decided to propose to the company to strictly monitor smoking on the shop floor or in the office. After discussions in the SWRC preparatory meetings, a strict penalty rule was proposed and approved by the congress. This rule stipulated that employees smoke in a designated room, constructed after this incident. Furthermore, SWRC approved a severe penalty rule: if employees were caught smoking in the non-designated area of the shop floor, for the first offense, they would be fined 500 yuan (about 62 U.S. dollars) and for the second, they would be fired.

Third, the SWRC meeting minutes show that in the early 1980s, when occupational accident rates were high, resolutions were often made to set the goal of zero rates of injuries and deaths and a very low rate of accidents and to design strategies and preventive measures.

In Company A, worker representatives are also given the power to evaluate the performances of the leading administrative officials. During the 1980s, this power was more fully utilized. Worker representatives often made critical comments about leading officials. Some of them were related to OHS. For example, in 1983, one evaluation read like this:

The dust-absorption equipment in the paint shop costs several tens of thousands yuan. But so far this newly-installed equipment is not functioning; the absorption power is too weak. No officials pay any attention to this problem. An investigation should be made about the responsibility for this problem. Some said that *Lao Yu* (note: the Chinese way of calling the person with the last name of Yu) was solely responsible for getting this equipment installed. Did he get some commission or other benefits out of this?

The above description of function and operation of the TU and SWRC on paper in Chinese enterprises and in practice in Company A demonstrates that these two institutions indeed provide mechanisms through which workers participate in at least some aspects of the protection of their health and safety. However, it should be pointed out here that, as indicated previously in this paper and elsewhere,³⁵ the state-owned enterprises have more comprehensive TU and SWRC systems than non-state-owned ones, as they inherited these systems from Mao's era, when OHS problems were taken more seriously by the Chinese government.35 Company A was a state-owned enterprise before it was restructured in 1994 into a shareholding company, and even with this restructuring, the state still has a much larger share. Therefore, much of the TU and SWRC system in Company A is a legacy of state socialism in Mao's era and in fact, we found from our research in Company A that part of the reason this system is still sustained even after restructuring is that all the leading officials have been working in the company since the 1960s or 1970s and have been used to operating the enterprise like a typical state enterprise before economic reform. Howeverand unfortunately, this TU and SWRC system does not exist in many enterprises that have other ownership structures, or, as most observers and workers often characterize such systems, it may appear in these enterprises but only as a formality.³⁶ In fact, even in state-owned enterprises, the prospects for the TU and SWRC are not all that optimistic. As industrial economic reforms evolve and the power of management expands, and as many of the state enterprises are running in the red, the TU and SWRC system may be difficult to sustain. In the following section, I discuss how Company A's TU and SWRC have undergone changes during the economic transition and after restructuring in 1994.

The Trade Union and SWRC in Transition

In general, our in-depth case study reveals that, as the social status of the workers declines and the power structure of companies shifts toward management, the impacts of the TU and SWRC are weakening. The following excerpts from our in-depth interviews can best characterize this change: Only if the company can survive financially, would the workers be able to keep their jobs; would they be able to labor; would the company be able to improve working condition, to decrease labor intensity, and to protect workers' health and safety. (Company A full-time chairperson)

If the boat was shaking, then people on the boat would become sea sick . . . if the company has enough rice, every employee would have rice to eat. . . . The company has to lay off workers if it deems to be necessary. (Factory 4 office worker, workers' representative)

If individual workers had health or other problems such as being laid off, the TU or SWRC should not be expected to resolve their problems because those problems are part of the social problems, not the company's problems. The best approach to protect workers' interests is to improve the company's productivity and financial standing. (Factory 1 worker representative)

We are a shareholding company. According to the Enterprise Law, the board of directors has the determinant power. The SWRC is not a "power institution" . . . it was one, but only before our company was restructured into a shareholding one. It is now only a democratic management institution. (Director, Management and Planning Department, Company A)

Based on our in-depth interviews and the review of the SWRC meeting minutes from 1980 to the present, we found that the 1980s were the golden period for the TU and SWRC in Company A. During this period, the workers were able to participate more extensively in the management of the company through the TU and SWRC. Workers were eager to make suggestions in the SWRC preparatory meetings. Many of the problems raised by worker representatives were resolved. According to a former TU chairperson of the company whom we interviewed, she felt that the SWRC "was greatly empowered" during the 1980s and that, in fact, one leading official, due to the worker representatives' very negative evaluation, was even dismissed by the SWRC. In a great contrast, during the 1990s, many fewer "rational suggestions" were made. While in the 1980s, workers made many more suggestions regarding workers' welfare and health, in the 1990s, the fewer suggestions are mostly related to the means to improve the company's productivity. Workers' representatives made critical assessments of the leading officials in the 1980s, such as the above-mentioned one criticizing the official who had the dust-absorption equipment installed. The SWRC meeting minutes show that, during the 1990s, particularly after the enterprise became a shareholding company in 1994, no such critical assessments appeared. Nowadays, the worker representatives are given a simple form with questions in Likert scale (very good, good, ok, poor, very poor) to check to assess some middle-level leading officials. These forms are

then returned to the personnel office. The workers we interviewed indicated that nothing was done about them. Some workers pointed out that the managers' power has been expanded and workers' jobs are under the management's control. Therefore, most workers' representatives dare not risk offending them.

Unsurprisingly, the power of the TU has also been weakened. As one former TU chairperson lamented, "when the workers have problems, the TU can only 'appeal' to the company... it does not have the power to directly resolve the problem for the workers." In fact, the number of full-time personnel in the TU in Company A greatly decreased from the 1980s to 1990s-in Factory 1, from more than ten to three; and in Factory 2, from more than ten to only two. With such scarce human resources, the TU reduced its activities and services. Furthermore, since TU's funds come from the company, TU personnel tend to believe that the survival and stability of the company have the highest priority. Therefore, they often play mediating roles between management and workers by persuading the workers to follow company policy. For example, to help the company to improve productivity and quality, in a situation when the workers were reluctant to cooperate, the TU organized "consultation meetings" among workers' representatives to persuade them to participate and cooperate with company managers to achieve the company's production and quality targets, as factory TU chairperson told us in the interview.

The restructuring of the OHS aspect of Company A's administration is even more dramatic. First, the department of OHS has been merged with the department of production and planning and is now called department of production and technological safety. Second, as in the case of the TU personnel reduction, the number of OHS personnel has also been decreased. In Company A headquarters, the total OHS personnel was reduced from 13 to two, and in Factory 2, from four to one from the 1980s to the present. The OHS person of the newly-merged department of production and technological safety in Factory 2 complained to us while being interviewed that the old OHS department used to have an OHS person who was primarily responsible for making health and safety rounds at the shop floors every day, but now because she is the only OHS person, she does not have enough time and energy to do so.

Another restructuring related to OHS that occurred after 1994 is the company's contracting out of the painting work. This work caused more pollution, and workers involved in painting were more likely to get various occupational diseases. The more stringent state laws and regulations on pollution control and workers' health and safety protection have made the more dangerous or polluting aspects of manufacturing less profitable. However, although the painting work has been contracted out, it is still being done on site by a con-

TABLE 1. Workers' Assessments of the Impact of					
Occupational Health and Safety Inspections in					
Factories 1 and 2					

Level of Impact	Factory 1		Factory 2	
	No. of Workers	%	No. of Workers	%
Great impact Some impact OK No impact Completely no	29 52 11 1	30.9 55.3 11.7 1.1	31 55 7 1	33.0 58.5 7.4 1.1
impact (1	1.1	0	0.0
Total	94	100.0	94	100.0

TABLE 2. Workers' Assessments of the Level of the Trade Union's Implementation of the SWRC's OHS-related Resolutions

Level of Implementation	Factory 1		Factory 2	
	No. of Workers	%	No. of Workers	%
Very good Good OK Not good	3 24 59 5	3.3 26.4 64.8 5.5	5 19 50 7	6.2 23.5 61.7 8.6
Total	91	100.0	81	100.0

tractor, with its own workers and management system. This was done, of course, not out of concern for the workers' health or workplace and environmental pollution. It was done mainly for cost-effectiveness considerations. The research team visited the site and found that the equipment and protective measures were more poorly maintained than on Company A's other shop floors. With painting work contracted out, the pollution and occupational diseases may thus not directly affect Company A's workers any more, but they are still occurring on the same site among different workers. In fact, the pollution and occupational disease problems may become more serious, because the contractor is a private business and is likely to be more concerned about its profit rates and less concerned about its workers' health and safety. All the above-described restructuring-the merging of the OHS department with other departments, the reduction of the OHS personnel, and the contracting out of the paint shop-was carried out without discussions in the SWRC, as these decisions were considered within the power of the board of directors and management.

The above-described changes in the impacts of the TU and SWRC and OHS protection reveal a general trend of the weakening of these two institutions' power and subsequently the decreased opportunity and possibility for workers to participate in the protection of their health and safety after the golden era of the 1980s. It should be pointed out, however, that the deterioration of the participatory mechanisms occurred slowly, taking many years. Further, this deterioration is particularly serious in some aspects, such as those discussed in previous sections, and less serious in other aspects. For example, we found that the company, with the TU's and SWRC's involvement, is still carrying out OHS inspections regularly and correcting identified OHS problems. To understand how Company A's workers assess the performances of the TU and SWRC, we conducted initial analyses of the surveys of the workers in Company A's Factories 1 and 2 (see Tables 1 and 2). A majority of workers in both Factort 1 (86.2%) and Factory 2 (91.5%) reported that OHS inspections had

great or some impact (see Table 1). This reflects both factories' significant efforts in maintaining the OHS inspection function. In contrast, a much smaller percentage of the workers—29.7% in both Factories 1 and 2—perceived the degree of the trade union's implementation of the SWRC's OHS-related resolutions to be good or very good (see Table 2). The workers' lower level of satisfaction with the implementation of the SWRC's OHS-related resolutions reveals either the declined function and weakening impact of the TU and SWRC or the workers' decreased confidence in these institutions' capacity for carrying out OHSrelated resolutions.

CONCLUSION

As the industrial economic reform evolves and industrial restructuring accelerates, China is confronting serious OHS problems. To meet these challenges successfully, the state, OHS professionals, employers, and workers would need to make great efforts. As the workers are the ones who are most likely to be affected by the OHS problems, they should also be the first to be given the opportunity and responsibility to take part in the protection of their own health and safety in their workplaces. I have discussed a single system existing in China, composed of the TU and SWRC, through which Chinese workers have participated in protecting their own health and safety. My research illustrates that, after decades of historical development, this system still seems to present a potential means for Chinese workers to meet OHS challenges. However, this system, as promising as it may be as an effective mechanism though which Chinese workers participate to protect their health and safety, is also undergoing changes-and in fact, may be losing its impact while China is going through great economic transformation. This depressing prospect thus calls for more research and greater attention to various aspects of the current status of these two institutions and the means through which they can be sustained and their potential can be realized.

Chinese workers are not the only ones confronting serious OHS problems. Tens of thousands of workers in many other parts of the world face similar problems. An International Labor Organization report revealed recently that work-related accidents and illnesses annually take about 2 million lives and cost the global economy an estimated 1.25 trillion U.S. dollars.³⁷ As such, all countries in the world need to deal with the challenge of preventing and controlling OHS problems. The participatory mechanisms developed with the wisdom of the Chinese people presents a possible approach from which other countries may learn to protect their own workers' health and safety. Finally, international collaborations between China and other countries are greatly needed, not only for exchanging their relevant experiences in workers' participatory mechanisms but also for working in solidarity to ensure that such valuable systems are sustained.

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