

Conceptualising Socio-Economic Formations of Labour and Workers' Power in Global Production Networks

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Abstract

Despite the importance today of global production networks (GPNs) in linking the international division of labour between the Global North and the Global South, the workers in such networks receive relatively little attention from those interested in the sociology of work. This study applies Glucksmann's concept of "socio-economic formations of labour" to understand GPNs as an instituted economic process that helps perpetuate an uneven global capitalism, and reveals a specific configuration of macro- and micro-scale labour formations in China's garment sector. We argue that labour agency is a productive factor negotiating GPNs while under the constraints of capital and management. Taking a bottom-up perspective, socio-economic factors are found to give China's garment workers significant power in various forms which—to a certain extent—shapes the multi-layered structure of garment global production networks. Workers' power is conceptualized by sociological tools in order to substantiate the concept of abstract labour.

Key words

Global production networks, labour agency, workers' power, migrant labour, China

Introduction

There is an urgent need for sociology to address the gaps in our knowledge of global production networks (GPNs). Such networks connect labour worldwide to an international division of labour between the Global North and the Global South, contributing to global accumulation of capital and systemic exploitation of labour. GPNs form not only the fabric of production, but also the circulation and consumption of industrial outputs worldwide. Despite their significance, sociological studies of GPNs have been limited. Sociological studies of transnational production and labour that focus on specific times and places can make substantial contributions to filling this gap. Using Glucksmann's concept of 'socio-economic formations of labour' (Glucksmann, 2000, 2009, 2016) this study illuminates the linkages between GPNs and labour from a bottom-up perspective, assisted by tools of sociological analysis and an agency-centred approach to illustrating workers' power.

The study's objectives are to more fully comprehend how workers in the Global South are involved in the global accumulation of capital, the changing patterns of control and workers' resistance, and workers' individual and collective strategies in various social, cultural and institutional formations (see also Bair and Peters, 2006; Bair and Palpacuer, 2012; Kelly, 2013; Mezzadri, 2016). The study's premise is that GPNs should be conceptualised as a total social organisation of labour (Glucksmann, 2000, 2009) rather than treating individual countries, societies, firms or workers as units of analysis. In recent decades there have been several important contributions to the analysis of global production which have focused on global commodity chains, global value chains and global production networks (Anner et al., 2013; Barrientos et al., 2011; Henderson et al., 2013). These studies emphasise that social, political and

institutional factors play a significant role in determining the prevailing arrangements, adopting perspectives from development studies, political economy, and more recently labour process studies and labour geography. Against this background, the study aims to focus on the importance of labour and re-conceptualisations of workers' power, and their potential to shape GPNs. The study's context is China's garment sector, taking current socio-economic configurations of labour into account while also revisiting certain concepts and tools in the sociology of work.

We discern labour squarely as a dual process in GPNs—to distinguish labour power from workers' power. Drawing on labour process theories, labour power refers to the capacity to do work, and its mobilisation is management's prerogative (Smith, 2006; Thompson and Smith, 2009). Workers' power is the power of individual workers as agents who are empowered but also constrained by socio-economic factors. Labour agency encapsulates both labour power and workers' power, highlighting a productive factor in the shaping of GPN. Labour agency operates within the constraints imposed by capital and management but is also shaped by the active responses and reactions of workers themselves. Recent studies of labour process (Taylor et al., 2015; Thompson et al., 2015), labour geography (Coe and Hess 2013; Selwyn 2013) and development (Alford et al., 2017; Rossi, 2013) have contributed to understanding workers' power while analysing labour agency in GPNs. These studies have explored labour agency, behaviour and actions in terms of Katz's 'resilience, reworking and resistance' (Katz, 2004), organised labour or episodes of collective action. Scholars in the sociological field have also proposed various concepts of workers' power such as Wright's (2000) structural power and associational power, Silver's (2003) market bargaining power, Jenkins' (2002) social power and advocacy, and Chun's (2011) symbolic power. The often-cited sociological work of Wright (2000) sheds light on workers' structural power and associational power in capital-labour relations, and

how they shape labour politics.

With great contributions, most of the studies on workers' power attribute it to the structure of production, features of the labour market, workers' positions within the economic system, unionisation and workers' organizing, campaign framing or strategic positioning. An analysis of the socio-economic factors of labour is still missing. In foregrounding labour, this study further analyses socio-economic factors influencing labour's agential power. It defines five types of workers' power based on age, education, gender, skill, work experience, locality and migration experience. This will facilitate a clearer understanding of the various forms of workers' power based on the socio-economic factors involved in working within a GPN.

Transnational Production and labour

Building on the concept of global commodity chains (Hopkins and Wallerstein, 1994) and global value chains (Gereffi 1994), Henderson and his colleagues developed the concept of global production networks, which emphasise the institutional and social embeddedness of production on a global scale (Henderson et al., 2002). They highlight the fact that as national economies have become increasingly tied into GPNs, the roles of developing and more-developed economies have progressively become more connected, but also more uneven. Beyond corporate power, a wider range of social actors such as nation states, local markets, global consumers, transnational activists, trade unions and NGOs have shaped GPNs. It is significant that in such studies, labour takes a more central role in the analysis. As Barrientos, Gereffi and Rossi (2011) rightly put it, the analysis of global value chains without labour has conceptual limitations. Scholars have recently begun to remedy this by investigating global capitalism together with transnational production and labour. This is evident in development studies, labour process theories, labour regime studies and studies of labour geography (see

Alford, Barrientos and Visser, 2017; Anner, Bair and Blasi, 2013; Author D; Mezzadri, 2016; Newsome et al., 2015; Selwyn, 2011, 2013; Thompson et al., 2015). As contributions from perspectives in the sociology of work have been less evident, this study was developed to apply such perspectives to the study of GPNs and labour. In doing so, it contributes to scholarly understandings of GPNs as an instituted economic process facilitating socio-economic formations of labour that perpetuate an uneven global capitalism. It reveals that a specific configuration of macro- and micro-scale labour formations in China contributes to the valorisation of capital through various modes of labour in production. These formations help to explain how various socio-economic modes of labour are connected and how workers' power is shaping the multi-layered GPNs in China's garment sector.

Socio-economic Formations of Labour in China's Garment Sector

Glucksmann's socio-economic formations of labour (Glucksmann, 2009; 2016) are particularly useful in studying China's garment sector because they provide a multi-dimensional framework for conceptualising the connections and divisions among the various labour formations involved. As Glucksmann articulates,

Three forms of interdependence and differentiation of labour can be distinguished:

(1) The technical division of tasks and skills and their allocation to different kinds of people (division of labour). This is the classical conception of the differentiation and complementarity of skills and tasks, including their hierarchization.

(2) Connections between or interdependencies of work across differing socioeconomic modes (total social organization of labour or TSOL) where labour is undertaken on different socio-economic bases (market and non-market, formal or informal, paid or unpaid and so on).

(3) Connections between or interdependencies of labour across the various stages of instituted economic processes (IEPL) which encompasses labour undertaken throughout the whole span of a process of production of goods or services' (Glucksmann, 2009: 880).

Glucksmann defines 'the combination and interaction between these three dimensions' as constituting the overall socio-economic formation of labour. Glucksmann's concept refers to the relationships and articulation of the various forms of differentiation and interdependence in GPNs (Glucksmann, 2009: 881). This is a rather general concept, and this study exploits its explanatory power by looking at the current configuration of labour in the GPNs in which China's garment sector is involved. Specifically, it focuses on the changes in the global apparel industry's labour configuration since the introduction of higher-technology work processes, and how the industry now operates under the influence of famous brands controlled by giant international retailers. In terms of the socio-economic formations of labour, GPNs involve a division of labour mandated by multiple modes of production, connecting formal employment, household economies and informal and casual labour, whether paid or unpaid (see also Hale and Wills, 2005; Kelly, 2009; 2013; Mezzadri, 2014).

Research Methods

The study employs a mixed-methods design, including surveys of workers, in-depth interviews and field observations over a period of three years (Author A, 2018). Between July 2012 and December 2015, with the assistance of two Peking University professors and their graduate students and local intellectuals based in Shanghai, a questionnaire survey of a total of 357 valid responses were collected, and 75 in-depth interviews were conducted. The research team conducted in-depth interviews with 20 workshop workers, 20 homeworkers, 15 factory workers, three corporate owners, eight managers, five fashion designers and four merchandisers

to obtain a deeper understanding of the workforce's composition, employment practices, and the spatial and social organisation of production in China's garment sector. In total, the 75 interviews covered 43 garment production units including manufacturers (mostly workshops and households), trading companies and fashion design companies in the Greater Shanghai region (GSR). Analyses of their responses suggest the idea of categorizing worker power into the five types used in this study.

This study mainly relies upon the in-depth interviews to understand and identify the types of workers' power in GPNs. However, to grasp the socio-economic background of the workers in the 43 units, at the stage of data collection, we simultaneously used a questionnaire survey to solicit the respondents' age, education, gender, marital status, place of origin, family income, work experience and skill, their attitudes toward their work, and labour dispute resolution methods, if any. A total of 357 valid responses were collected in the 43 garment production units. Among the respondents, 223 were employed in workshops while 134 were factory workers¹. Sampling followed two major approaches. In most cases, researchers waited at workplace entrances and asked departing workers to fill out the questionnaires. However, some workers were surveyed on the job with the factory managers' assistance. Workshop workers were sampled during visits to exurban villages near Shanghai where family workshops are clustered. The sampling method implies that these respondents cannot represent the population, even of the 43 production units included.

The interviews and surveys confirmed that—at least around Shanghai—most of the workers in the garment sector are migrants who left their hometowns for better employment opportunities. 83% of the respondents held non-local agricultural residence registrations². Most were from the rural areas of neighbouring provinces. Anhui Province was the most represented, with about 40% of the factory workers and more than 54% of the workshop respondents coming from villages in

Anhui.

The factory respondents in this study were mostly aged between 17 and 55, averaging 30. Respondents aged 21-25 were the largest age group, followed by 17-20 and then 41-59. 56.9% of those willing to respond to the survey were men, but about 75% of the participants in the interviews were women. Notably, the employers preferred to hire female workers if this option was given. Most of the workers surveyed received some formal education and were literate enough to fill in a questionnaire without the assistance of the researcher. Among all the respondents, 63% claimed to have completed at least junior secondary school, and about one-fifth said they had graduated from senior secondary school or a post-secondary vocational college.

Utilizing mixed-methods in the field helps to outline inductively the socio-economic formations of labour in the industry, and labour agency on different layers of the production process. Most importantly, the workers' responses and reactions suggest which garment workers are most inclined to take individual or collective action based on which socio-economic factors, and when and where such actions are most likely to take place in this specific industry and region. Their responses allow for a sociological analysis of the workers' power and how their consent and grievances develop along the GPNs in China's garment sector. This sociological analysis of the workers' power is driven by socio-economic factors: Age, gender, skill, work experience, migration between urban and rural areas, mobility between formal and informal work, and the impact of living arrangements were all studied to understand the workers' roles and their power in shaping the GPN (see also Plankey-Videla, 2012).

Workers' power in China's Garment Industry

Global capitalism, its externalisation, dynamics and transformations, could hardly be

discerned without taking the socio-economic formations of labour in China into consideration (Hederson, Appelbaum and Ho 2013). The severe global competition among global retailers and brands in the garment sector have greatly changed the operation of capital and management in general, and the configuration of GPNs and labour in particular. Indeed, today's global apparel industry and the industry's GPNs are shaped by the role of China. China's garment sector is highly incorporated into global markets, attracting massive foreign investments and growing rapidly over the past thirty years. As of 2013, China produced 27.1 billion pieces of clothing for its domestic markets and for export.³ This means approximately 3.5 pieces per person worldwide. Such achievement in the scale of production can be largely credited to the women workers who contribute their labour power and are deemed the most appropriate and skilful laborers in this labour market. The race for the use of female labour power has led to a shortage of supply of women workers in the garment industry, which is increasingly refilled by men. The high demand of global markets shapes Greater Shanghai as one of China's most important garment producing regions, contributing about a third of China's annual volume of garment production (Author A, 2018). However, since the global financial crisis in 2008, garment manufacturers have begun moving production to smaller cities, towns, or even villages in order to lower their costs of labour and fixed assets. Most enterprises in the region have moved their production lines to second-tier industrial towns while the marketing and sales operations have remained in Shanghai.

In order to maintain its global market share, China's garment sector has had to accept constant economic and technological change. Global market competition is now especially severe. There is an increased use of technology in the sector's work processes and greater seasonal variation in orders. In response, a multi-layered production network has been formed, connecting various kinds of labour with different skills and tasks, working on multiple scales and

geographically dispersed. The network's layers are constituted by and constitutive of a hierarchy of production and labour. In the GSR, manufacturing orders received by garment firms go through several layers, including trading companies, first- and second-tier factories, the factories' subsidiaries, and perhaps household workshops and home workers. This type of four-tier production system can be found in most GPNs. Global brands such as Wal-Mart, H&M and Uniqlo usually have substantial power in shaping GPNs. They have long value chains, while smaller importers and domestic producers operate with shorter chains. The large, tier-one manufacturers usually have up to three tiers below them and many production units forming horizontal value chains on each tier. In other words, the structure of a GPN is rather like a pyramid: the higher the level, the fewer manufacturing units are involved. It seems cumbersome, but this complex production system is surprisingly effective in meeting just-in-time global demand and coping with rapid design and style changes. It nevertheless embodies multiple tensions and contradictions along the multi-layers of GPN.

The globalisation of production has often served to undermine workers' power. In what follows, we will provide careful examination of the various layers of the GPNs in China's garment sector that help illustrate how Glucksmann's concept of socio-economic formations of labour (Glucksmann, 2009; 2016)—comprising various modes of production and social reproduction such as workers in factories, in workshops and even at home—could be helpful in facilitating an understanding of the multiple sources of worker power along the GPNs. Instead of trapping workers through segmentation and imposing precariousness, the research findings suggest that some of the tensions inherent in China's garment production networks actually enhance workers' power to defend and enhance their rights and interests. Built on Glucksmann's concept of socio-economic formations of labour, we further examine workers' differing socio-demographics in detail that enables us to assess Smith's concept of the double

indeterminacy arising from effort power and mobility power (Smith, 2006). The first indeterminacy arises because hiring labour does not guarantee an automatic outcome or product for the employer. Their willingness to work remains uncertain and maintaining output is a management imperative. The second indeterminacy reflects the individual worker's freedom to sell his or her labour to the highest bidder, resulting in a certain degree of mobility power. These uncertainties give workers a certain sense of agency and power (Thompson and Smith, 2009).

While acknowledging the imbalance of power between management and labour and the existence of power asymmetries in GPNs (Harvey and Geras, 2018), this study studies carefully how various forms of worker power at different work positions can shape a GPN overall. Taking power as a relational concept, workers' power is defined not only as a worker's ability to compete for their material interests, but also as the worker's control of the labour process through individual or collective action in their daily work, and in times of crisis.

On the individual level, a worker's agential power depends on factors such as age, education, gender, skill, locality, work experience, mobility between rural and urban areas and the worker's living arrangements. Table 1 presents a taxonomy of workers in different segments of a typical GPN. The classifications come from the fieldwork data.

Table 1 Here

Largely neglected in previous studies is the fact that China's garment workers, though seldom engaged in large-scale strikes (Chan, 2015) can exert some control over labour processes in the different layers of the garment sector. The five types of staff and workers described in the table wield a range of types of workers' power shaped by socio-economic factors. The five types are categorised based on their level of control over the labour process and the forms of worker association to which they have access.

Type 1 Regular staff members: The power of bargaining and mobility

Global competition and ‘race to the bottom’ labour strategies of transnational retailers and brands shape the pyramidal structure of GPNs on the one hand, but Chinese labour and its specific socio-economic formation contributes to a nuanced and specific picture of GPNs on the other. The first-tier garment firms in China are made up of regular staff who are mainly garment merchandisers, lower- to middle-range managers and fashion designers. Seventeen staff members of this type were interviewed in this study. The fashion designers and garment merchandisers mostly claimed to have graduated from university, either overseas or local. Many with urban residence registration are now highly sought after in the Greater Shanghai job market where global fashion brands regularly come to source high-quality products. Due to their knowledge and ability in fabric design and production techniques and through their access to global brands, they have more market bargaining power in negotiating with the global sourcing teams for higher prices. We met a group of merchandisers in Shanghai who complained about the pressing orders and prices of production provided by global brands. As Jun, a merchandiser, explained:

[Th]is company can now produce innovative fabrics which require sophisticated computerized pattern-making, knitting and processing. Instead of exploiting the local manufacturers and workers as before, such intermediaries more often negotiate now with the global brands. If the price cannot satisfy the factories and the skilled workers, they are unwilling to take an order.

Fashion design is another booming industry in Shanghai’s garment sector. Mei, a Chinese fashion designer whom we interviewed at her company spoke about the difficulty of forcing her design team to work long hours and of cutting their pay. Because of frequently shifting fashion styles, shortening production cycles and the push for low order prices, many of the educated,

talented and tech-savvy designers aspire to one day work independently and launch their own labels. The rise of e-commerce platforms also creates a production space for them to look for flexible jobs. While becoming more flexible and casual, these urban and educated workers enjoy both bargaining power and mobility power. They change their job frequently in order to have better payment or improvement of working conditions. Their education, marketing knowledge and experience, technological and design skills, and their locality and place of origin all contribute to the workers' power in negotiating their labour power at the top tier of the GPN.

The frontline and middle range managers we met at the first-tier firms are usually local women with some migrants of both sexes who have stayed in the urban areas for a decade. They take up frontline management positions as line leaders or workshop managers. Bias and discrimination against rural migrants are still found as Shanghainese company owners usually place more trust in local workers and rely on them to control migrant workers on the production lines. Compared to merchandisers and fashion designers, these frontline managers enjoy more structural power as supervisors who can exert control over the labour process in supervising the frontline workers. Teasing themselves as a “sandwich class” between the boss and the migrant workers, they are actually protected by a contract and social insurance scheme into which they pay regularly every month. Hence, education, professional skill, locality and social status are the socio-economic factors constituting their bargaining and mobility power. This is gradually influencing how GPNs are formed and change, especially in the first layer, as educated urban staff can easily move from one firm to another and bargain for better wages and benefits.

Type 2 Regular employees: The power of constrained bargaining but high mobility

Moving down the pyramid to the first- and second-tier garment manufacturing firms, much of the work is done by salaried employees living in company dormitories. Fifteen such

employees were interviewed, the majority of whom are aged 21 to 25. They are migrant workers, and more than half of them lived in a factory complex dormitory. A dormitory labour regime is a unique form of Glucksmann's socio-economic formation of labour that shapes the GPNs (Glucksmann, 2009; 2016). In such regimes, work life and leisure time are tightly organised and incorporated into the production system. Eating, sleeping and working are entirely connected and interdependently organised into the total social organization of labour on which the first- or second-tier enterprises rely heavily. Dormitory labour regimes effectively organise large-scale production, while at the same time connect production with daily social reproduction in a single space. This conveniently serves the just-in-time production of the global industry driven by the eventual retailers' consumption cycles. However, collective living also helps to re-negotiate the workings of the GPNs through shortening travel time, lengthening working time and providing for flexible work schedules which are keys to success in the extremely competitive global garment trade (Smith, 2003; Author A, 2016).

Most such workers, particularly those doing frontline tasks like cutting, sewing, ironing and packaging are migrant workers who were born in inland provinces and have come to Shanghai to seek their fortunes. The companies rely on young and preferably female workers who can occasionally work the extremely long hours required to meet the industry's seasonal production and consumption cycle. Due to their age, gender, willingness to work at the factory and willingness to live in a collective dormitory, they have significant bargaining power, especially in times of labour shortage. These regular workers generally enjoy some legal protection and regular payments compared to the first type, but they have little control over the labour process since they are mostly machine operators focusing on one or two sewing processes where limited skill is required. While such workers have less bargaining power than staff members, they enjoy much greater mobility power. Ying, a young female worker commented

that, 'If we are unhappy for any reason we can easily leave and find another job. Labour turnover is high in supplier factories, as there is severe competition between the firms in the region to secure young workers like us.' [Being] young and of female gender plays to a workers' advantage, daring to confront management should they find the working conditions unreasonable.

Such workers are, however, replaceable and mostly paid on piecework, and thus they have little structural power apart from their mobility. Company relocation is a major problem for workers on this level. Occasionally, labour conflicts or strikes are triggered by the relocation or sudden closure of a factory. This usually generates resistance because the employers try to leave with some wages unpaid. For instance, dozens of garment workers from a second-tier company in Shanghai protested at the district labour bureau in January 2013 to fight for their wage arrears. More than forty workers—mostly from Guizhou province—organised themselves and protested fiercely at the workplace and the district labour bureau when the company decided to move to an inland region after the Chinese New Year. More importantly, it is labour shortages and the rush to complete seasonal production orders that help enhance such workers' power despite the structural constraints. The workers' youth, female gender, willingness to work long hours and their sense of belonging all contribute to their ability to act in unison (Author A, 2018). As a result, the operation of the GPNs is continuously negotiated by this type of dormitory-dwelling labour and occasionally disrupted.

Type 3 Workers under subcontract: The power of association and frequent mobility

On the third tier most workers work on subcontracts, often in small workshops or at home. Home-based production is a component of the production system that is almost as important as the Type 2 workers (Author D). The severe competition in the global apparel industry constrains

the number of factories on the one hand, and thus generates the need for supplementary home-based production units, including household workshops or individual homeworkers. Many villages near Shanghai are well known for the prevalence of subcontracted labour and household workshops. 223 workers we surveyed are working either in workshops or home-based production units.

An interesting phenomenon is that many experienced factory workers have left the factories and founded small workshops or home-based units. Each workshop usually operates in a household setting, employing less than ten workers. It is commonly supposed that workers in household workshops are vulnerable to exploitation and that they have few labour rights. However, the interviews showed that workshop workers with skill and experience prefer subcontracted work as it gives them more scope and power to bargain about their wages. They are usually skilled migrants, unmarried, and who have worked in factories for many years since they were young (Siu, 2017). Such workers usually form work teams to take up subcontracted orders from the firms, working directly inside the factories or setting up household workshops.

In a factory located in a small town of GSR, some of the workers were observed to be directly supervised by labour contractors who recruited them to work there temporarily. That created double management in the factory—the factory had its own management system, but the labour contractors supervised the subset of subcontracted workers. That might help shift any disputes from the management to the contractors, but there were still quarrels over quality control, pay scales and working time. When conflicts occur, the workers usually take individual action or opt to leave, demonstrating their mobility power. Dan, a manager in a factory complained that,

We don't have a formal relationship with the workers who work under labour contractors even though they are in my company. If they are not happy, they leave without notice.

Workers in my company compare themselves to each other on work assignments, payment and working hours. It's [a] headache to me.

This has a clear impact on production at the middle-to-low end of the value chain, as localised migrant workers, especially skilled workers, move frequently between factories and home workshops. They also demonstrate their associational power by forming their own subcontracting teams to better control the work process and share the profits of production. We found more than 30 subcontracting teams in our sample. One Anhui team member said, 'I have more skill, and I am old enough to not work in a factory. While I can work as long as fourteen hours a day, I can't work night shifts anymore. My health doesn't allow me to do so.... I also enjoy talking with my teammates, and we have a bit more freedom in choosing to work or not to work. We can control our own work schedule and work pace.' While freedom may be illusory—working under the constraints of double management—these workers nevertheless enjoy relative autonomy compared to regular factory workers in terms of job mobility and management control.

Type 4 Workers in cooperative teams: The power of autonomy and strong association

In the workshops and household workshops, the workers sometimes organise collectively on their own. There is little state or trade union support for any of China's garment workers (Chan, 2015), so some skilled workers, especially workers local to the region, form their own neighbourhood teams to bolster their associational power. They share the profits equally with almost no management costs. These cooperative teams get subcontracted orders and produce clothing for the nearby factories. If their workshops lack sufficient subcontracted orders, the workers can enter factories or larger workshops as a team to undertake production tasks. Lin, a worker in a township workshop said,

When the workshops have no production orders, we go elsewhere to look for jobs. We go as a team to support each other and have a better bargaining price. Sometimes we have daily pay, but usually, we have to wait until the completion of the order. Our lives are no good, you know, but we have more freedom and mobility.

Driven by the sociological factors of locality, skill and work experience, these teams are autonomous associations of garment workers who voluntarily cooperate for their mutual benefit. They have a certain amount of power which they exercise through informal networks of producers who work collectively in workshops. There are, however, many risks in such contract work. For instance, an Anhui team manufactured jackets at US\$1.70 per piece, but the factory could refuse to pay if there were any defects found in a piece. The team leader, Dong complained that, 'Some of the faults are not necessarily the workers' fault. They may be due to the fabric, cutting or other [reasons]', before going on to note that, 'if the factory owners insist that we redo the work, quarrels or arguments are hard to prevent'.

The managers interviewed expressed negative attitudes towards these work teams, since they greatly strengthened the workers' bargaining power. Team representatives may approach management daily to renegotiate pay. If they cannot come to an agreement, the cooperative production team members slow the pace of production or even leave collectively. Cooperative teams offer flexibility that helps firms to cope with frequent style changes, pressing orders and the increasing demand for good-quality clothing. Skilled, middle-aged women have demonstrated the power that their flexibility and solidarity give them in shaping the work organization at the low end of the value chain.

Type 5 Home-based workers: The power of individual autonomy and constrained control over the work process

A boom in home-based production scattered in towns and villages near Shanghai was observed which is shaping the very bottom of garment sector's value chain. In a small town or village, workers can choose to work individually at home with a sewing machine. Of twenty home-based workers interviewed in this study, many were migrants from other parts of China who had rented a village house and turned their home into a production space. As Hui, a home worker said, 'We take small orders from a nearby plant or a subcontractor who would send us pieces of clothing by van. The van goes around the villages daily.' In these instances, the subcontractor usually sends payment to the homeworkers once every two to three months.

As an intertwined unit of production and consumption, the home as a social organization of labour (Glucksman, 2009) is not only a place for social reproduction, but is at the same time tightly organised into the manufacturing chain. Home workers usually work very long hours, interleaved with domestic chores and sometimes care for an elderly family member or children. The middle-aged women typically involved have children to care for, and their husbands typically work either in a factory or on a construction site in the surrounding area. 'I wake up very early to prepare my kids for school, and I sleep late after waiting for and feeding my husband when he returns...late', Tian said. A few women like Tian commented on the freedom they enjoyed by working at home, but they recognised that there is a price to pay. By taking up the double burden of wage labour and domestic labour, the women shift the boundaries between work and family. Home and workplace are not just blurred but overlap as a key formation of the 'bottom' of GPNs in the garment sector.

Home-based workers are usually more vulnerable than regular workers as they have little legal or social protection: no labour contract, no guaranteed minimum wage, and no social insurance. Without proper protection, workers in the informal sector have little means to challenge poor working conditions or any infringement upon their rights and interests. However,

home-based workers usually have well-rounded skills and can produce whole garments involving a variety of sewing processes. Many factories and household workshops prefer whole-garment production from home-based workers in order to meet orders quickly. These skills give such women autonomous control of their work, and they enable them to negotiate better piece rates when the production order is rushed.

Confined to home-based production by the double burden of work and home care, individual home-based workers usually lack mobility power. This study nevertheless found exceptional cases in which skilled women were able to protect themselves through exerting their bargaining power with higher-level contractors. There have also been cases of such workers combining to fight against the local government for more protection (see Pangsapa, 2007).

The city of Zhili is famous in the industry for children's garments and is responsible for 90% of China's output of children's clothes. Home-based workers there fought against the local government when it tried to tax household production. In response to heavy taxation, home-based workers triggered a riot. Angered workshop and home-based workers assembled on the streets, burning cars and government buildings to demand cancellation of the newly imposed taxes. The riot eventually forced the local government to stop taxing the migrant workers (Author A, 2018).

Thus, middle-aged women workers—because of their all-around skill, their work experience and their deep roots in the local community—enjoy some degree of autonomy and control over their work processes and managing their work schedules. Their situation is in many ways the opposite of powerlessness. Instead, their age, skill, work experience, locality and independence give these workers a certain degree of autonomy, some power in negotiating prices and working time, and thus they help to shape the bottom level of the manufacturing production networks.

Conclusions

Bringing the sociology of work to bear upon a study of China's garment industry motivates a number of remarks concerning GPNs and the workers. First, instead of simply applying Glucksmann's concept of "socio-economic formations of labour", this study has gone deeper into specific macro- and micro-scale labour formations in China within a global context. As China has been incorporated into global apparel production networks, this has led to a significant restructuring of China's garment sector. The current structure renders the sector more vulnerable to global recession, as it has become highly dependent on export markets. The volume of orders fluctuates wildly, and an overall reduction has greatly affected the gross profits of the producers around Shanghai. Furthermore, unit labour costs increase sharply when garment enterprises experience a labour shortage during peak production periods. A complex production network has formed, linking multiple modes of production and social reproduction to deal with the sector's difficulties.

As garment production in China has expanded, this study has observed complicated networks linking a few very large and modern plants in Shanghai with thousands of home workshops scattered in surrounding villages. The factories are heavily reliant on the workshops, so they now form a continuum, a classic example of the total social organization of labour, which is taking what Kabeer and Mahmud have termed 'comparative advantage of women's disadvantage' (Kabeer and Mahmud, 2004: 134).

The concept of socio-economic formations of labour does, however, help to articulate the connections between and the interdependencies of the complex of giant factories, village workshops and individual household work units in China's garment sector. This study's findings further contribute to enriching labour process debates by pointing out that there is no necessarily

linear development from a workshop system to a factory system as Das proposed (Das, 2012). In China, multiple modes of production and social reproduction are exploited in parallel.

The research findings elucidate how socio-economic factors help to delineate various forms of worker power and further confirm that worker power in various forms helps to shape the production networks in this industry. Drawing on a micro-analytic approach in studying the sociology of work, this study has reconceptualised labour agency by taking labour not only as an abstract idea, but in terms of workers' age, education, gender, locality, migration history, skills and experience. It has shown that these factors provide workers various forms of power despite the constraints of the production network, factory management and the labour market. Workers use their various forms of power—though limited and constrained—to not only uphold their material interests but also to control the labour process and maintain their freedom and mobility. Socio-economic factors empower workers to cope with the flexibility of work and to give them more control over the production process. Workers throughout the GPNs can take advantage of competition among customers, fluctuations in order volume and labour shortages to fight for better wages, better work schedules, advance payment or even tax exemption. They can shift between factories as well as taking organised or less-organised collective action without the aid of any trade union or large-scale labour campaign. Significantly, it is the middle-aged, experienced female workers rather than the men who initiate most actions against structural barriers, dealing skillfully with corporate and institutional power. Recognising these five types of power leads us to look at the workers themselves more squarely and acknowledge the power they exercise at various stages of the GPNs in China's garment sector. Further research on workers' power and global production networks could enhance understanding and expand this area of scholarship in the sociology of work globally.

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Table 1 Five Types of Workers in China's Garment Industry

Type of worker	Skill level	Place of origin	Gender and stage of life	Division of labour	Types of worker power	Level of control over the labour process
Regular Staff Merchandisers, designers & managers	Professional and skilled	Mostly urban local	Young to middle-aged men and women	Managerial positions	Power of bargaining and mobility	High control Strong bargaining and mobility power
Regular employees	Skilled and unskilled	Mostly migrant	Unmarried Mostly young women, but some men	Operators focusing on one process; a few line leaders	Constrained bargaining power but high mobility	Little control Some bargaining power but high mobility power
Workers under subcontract (factory or household workers)	Skilled and unskilled	Mostly migrant and some local	Young and middle-aged women and men	Operators focusing on one process	Power of association and frequently mobility power as well	Under workshop control High bargaining power but low mobility power
Workers in cooperative production teams (household workshop workers)	Skilled and well-rounded	Localised migrants and some locals	Married, middle-aged women and some men	Operators covering all sewing processes	Power of autonomy and strong association	Autonomous from company control More bargaining and mobility power
Individual home-based	Skilled	Localised migrants	Married, middle-aged	Operators covering all	Power of individual	Autonomous from company

workers	ed women sewing and some processes men	autonomy and control constrained control over work process	Low mobility power but high bargaining power
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Source: Summarised from the fieldwork data

¹ Factory workers are defined as people who are directly employed by registered garment production enterprises with more than 50 employees. Those working in family workshops or unregistered workshops are termed workshop workers. Each workshop usually employs less than ten workers.

² Social scientists regard China's system of residence registration as a major barrier to social equality in China.

³ See the China textile industry development report for 2013–4 published by the China Textile and Apparel Press in Beijing.

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