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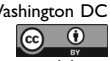

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The role of the state in influencing work conditions in China's internet industry: Policy, evidence, and implications for industrial relations

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Abstract

While there is growing scholarly interest in work conditions in China's internet industry, many studies have focused exclusively on corporate employment relations strategies. By contrast, the article demonstrates the Chinese government's significant role in shaping the collective work experience in business reality. Drawing on three months of field-work in China, the findings suggest that the state's quest for technology supremacy has resulted in internet companies that compete ferociously, which in turn causes extreme working hours and burnout. The censorship of online labour activism and the ambiguity in court decisions also lower the interest of tech workers in organising and defending their labour rights. This study opens up an evidence-based debate on industrial relations in contemporary China and calls for more discussions on the state's role in shaping worker well-being and protection.

Keywords

Industrial relations, contemporary China, internet industry, digital labour, online activism, labour policy, work conditions

In recent years, there has been growing scholarly concern with the work conditions in China's internet industry. Research points to several problematic management practices:

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long working hours, high work intensity and intense competition, to name a few (Li, 2019; Lin, 2020; Sun and Magasic, 2016; Xia and Kennedy, 2014). Scholars have noted the appearance of industrial relations tensions that accompanied the rapid growth of internet enterprises in China, but their research generally has been limited to investigations of employment relations in these companies, for example, the antagonism between software capital and grassroots programmers (Sun, 2017). Scant attention, however, has been paid to the state's influence on collective work conditions in business reality. This study seeks to initiate discussions that will fill that gap.

Some argue that the effects of state regulation have been ignored due to an inherent bias in industrial relations studies that build on the tradition of tripartite theory established by Dunlop in 1958. Hyman (2008), for example, argues that Dunlop and his followers of pluralistic industrialism place key explanatory emphasis on the economic and technological aspects of industrial relations because these factors 'create convergence toward a common model of regulation … in which employers and unions developed increasingly effective and non-conflictual bargaining relationships, making detailed state regulation unnecessary' (Hyman, 2008: 259). In practice, over the past half-century, a significant amount of research emerging from this school has focused on the negotiation between employers and unions, giving the appearance that industrial relations analysis can be detached from the political environment, especially in the prevailing market-oriented economy in the world nowadays.

This study, however, argues that government continues to play a significant role in shaping industrial relations by manipulating the business environment. It focuses on the political economy of China's internet industry and investigates how the state's power indirectly affects the collective work experience of internet workers. The empirical analysis draws on three months of fieldwork in Hangzhou, China's tech cluster, where the researcher met and conducted in-depth, semi-structured interviews with tech workers in a leading internet enterprise called Digitech (pseudonym). The analysis was enriched with interviews and informal conversations with Chinese tech journalists and investors, as well as personal observations while in the field.

This article builds on that of theorists who argue that markets in capitalist economies, including labour markets, are the result of the deployment of state power, therefore, they are politically constructed (see, e.g. Hall, 1986; Polanyi, 1944). Through this lens, China's internet industry is seen as more than merely a form of business activities; rather, like Kennedy (2020), this paper suggests that work in this 'industry should be understood as politically constructed activities that further the state goals of 'revitalising China' and pursuing 'China's technology dream' (*kejimeng*). This perception is essential to understanding why the Chinese government has favoured employers over workers in the internet industry and shown ambiguity in enforcing regulations related to internet enterprises' misbehaviours.

In what follows, this paper presents the research background and policy initiatives for developing China's internet industry, arguing that since the 1980s, Chinese officials have perceived information technology (IT) as a symbol of national strength. It then examines the implications of this perception for industrial relations and its indirect impact on the collective work experience in the internet industry. By use of this case study, this

article hopes to invite more evidence-based discussions on industrial relations in contemporary China.

Re-examining the state in China's industrial relations system

To some theorists, the state is seen as a critical actor in industrial relations because it establishes the basis of orderly operation of labour relations and labour legal protection (Hyman, 2008: 260). As Ravenswood and Kaine (2015: 548) summarise, the state has traditionally been seen as performing three main functions in industrial relations: setting the boundaries of labour law and minimum employment standards, arbitrating and thereby limiting the extent of industrial conflict, participating directly as an employer by establishing public sector industries. Recent studies also pay attention to the effort that governments make in (de-)regulating the market and fostering citizenship and voice at work (see Hyman, 2018). However, a major criticism of these studies is that the pluralist model of industrial relations is built on the Western socio-political context, in which the state is usually a *moderator* that seeks to balance the power between employers and workers. In these societies, the state acts as a guardian of public interests, and bargaining power is usually diffused among the three institutions (workers, employers and governments) in a way that none dominates the others. However, China is different; here, power is in the hands of and strictly controlled by the Party-state.

China's industrial relations system has been undergoing a dramatic change over the last two decades. With the deepening of marketisation and economic liberalisation, the role of China's Party-state presumably has become less influential in the market-oriented economy. Wei (2017: 114) even argues that the Chinese industrial relations system is gradually showing some signs of convergence with liberal economies such as Britain and the United States. Indeed, many researchers have conducted macro-analyses that explore how policies implemented during the transition have affected the power relations between the state, capital and labour in state-owned enterprises. Some of this work has shown that corporate privatisation has fundamentally changed the nature of state–worker relations and, as a result, the job security and living standards of many current and former state workers are increasingly under threat (Cooke, 2008). This literature has shed light on the conflict of interests between the state and labour during downsizing, which has been a key tension in China's industrial relations system during the transitional period. The role of the state, however, becomes less clear to academics who investigate industrial relations in 21st century China.

Meanwhile, researchers also are concerned about the role of the All-China Federation of Trade Unions (ACFTU) in promoting workers' rights and defending workers' interests (Chang and Brown, 2017; Chen, 2003; Taylor and Li, 2007; Wang and Elfstrom, 2016). However, they come to very different conclusions about its impact on China's industrial relations system. While some suggest that the ACFTU acts merely as 'a pliable instrument of the state whose priority is to serve the state's goals', others believe the ACFTU has 'become more representative of their membership and more independent of the state control' (see the review by Chen, 2003: 1007). In this connection, Taylor et al. (2003) propose a four-party model (state, employer, trade union and workers)

and suggest that the ACFTU and workers should be treated as two independent actors when investigating the industrial relations dynamic in China, as the union does not necessarily represent the interests of workers in reality. Later, Ma's (2011) six-party model of industrial relations (the Party-state, the ACFTU, employer organisations, grassroots unions, employers and employees) expands the scope of study to other grassroots labour organisations. However, a limitation of this literature is that such 'unionisation' is a communist legacy and usually exists only in particular segments of China's labour market, usually in blue-collar sectors such as construction or textile manufacturing. As the Chinese economy gradually transforms from the industrial economy to service and on to today's digital economy, the ACFTU has become less relevant and increasingly incapable of protecting workers' rights and settling workers disputes in the emerging economic sector, such as tech work in the internet industry.

During the period of economic transition, as Zhou (2013: 355) observed, workers have become increasingly precarious due to the massive growth of informal jobs in the labour market across all economic sectors, which is characterised by the prevalence of temporary work, casual work and freelancing. Consequently, there has been an intensification of labour conflicts in China, which has generated considerable pressure on governments at all levels (Fuchs et al., 2019). In response, the state has expanded its intervention in the industrial relations system, in order to regulate labour conflicts and maintain social stability. Some of these interventions have supported workers, including the China Labour Law of 1995 and the Labour Contract Law of 2008. The Labour Law outlines the legitimate rights and interests of employees in China, for example, workers shall not work for more than 8 h a day and no more than 44 h a week (Article 36), and the Contract Law regulates the nature of contracts and increases severance payments to fired workers. Researchers believe that such policy instruments can provide protection to some vulnerable workers, although there is noticeable evidence that some employers avoid or sidestep the compliance through different cost-minimising strategies (Gallagher et al., 2015; Wang et al., 2019). Zhou (2013: 367) gives a powerful example: Chinese tech enterprise Huawei laid off more than 8000 employees and rehired them under new contracts in order to pre-empt the impact of the Law in 2008. Despite the state's effort, labour activism against workplace exploitation remains common in China. The Hong Kong-based China Labour Bulletin (n.d.) regularly updates a map of strikes and other labour actions throughout China. The map documents more than 13,000 such actions since 2010, including 500 in 2021.

In this regard, a few researchers have attempted to re-examine the role of the state in the Chinese industrial relations system by looking at the governments' responses to labour activism. For example, Taylor et al. highlight four distinct roles the Chinese state play in labour relations: regulation, monitoring, damage control and mediation and arbitration (Taylor et al., 2003: 29–35). Recent research also argues that the Chinese government adopts a 'bifurcated strategy' to demobilise labour activism: on the one hand, the state enhances the protection of individual worker rights by legislation; on the other hand, it prioritises mediation over adjudication, which 'allows local state actors to work together to provide flexible and swift solutions to disputes' (Chen, 2016: 35). In addition, Fuchs et al. (2019) point out that in the current administration,

Chinese governments have become more aggressive in controlling and repressing labour activists, academics and civil society in China. This includes police crackdowns on labour non-governmental organisations in 2015 in the cities of Guangzhou and Fushan, and the mass arrest of labour activists and undercover researchers in 2017 (BBC, 2017).

Despite these and many other institutional efforts to quell dissent, a fierce online campaign broke out in March 2019 to protest against the exploitative work conditions in the Chinese internet industry. This event is often referred as to the 'anti-996' campaign by media and local writers. '996 scheduling', as its name suggests, requires employees to work from 9 am to 9 pm, six days a week. This protest suggests the 'carrot and stick' strategy of the Chinese government is ineffective to tech workers, therefore, a re-examination of the state in the internet industry seems to be necessary. Precisely, this study aims to address three research questions:

1. Why is the internet industry important to the Chinese government?
2. How do China's tech workers perceive and experience the state's influence on industrial relations?
3. How do these perceptions and experiences affect their collective actions in the internet industry?

Labour struggles in China's internet industry

While Chinese tech enterprises profited tremendously from China's pursuit of its technology dream, work in the tech sector remains highly competitive and exploitative. Moreover, the Chinese government often overlooks the sacrifices of tech workers. Although local journalists have occasionally reported on over-work and collapse at work in the internet industry, the work conditions and labour unrest in the Chinese internet industry have, thus far, not been the object of much academic research. Both research and research findings are fragmented because technology parks in China are spread across different provinces with significantly different socio-political conditions. A structural analysis has not yet been seen, and what is particularly missing in the discussion is how government initiatives are perceived and experienced by tech workers as individuals. Individual experiences combine to affect collective work experiences, perceptions and actions within the industry.

While official discourses often highlight the bright side of working in China's internet industry, many researchers are concerned about the actual experience of workers in the internet industry. Indeed, their research often documents the unfair and exploitative treatment of IT employees. Based on Xia's fieldwork in two internet companies in China, Xia and Kennedy (2014: 165) conclude that 'working conditions in the Chinese Internet industry are not good', because 'even though these workers devote themselves to their industries with such long working hours, they are not rewarded with salaries comparable with workers in state-owned enterprises or companies borne out of foreign investment'. They also discovered that state intervention directly causes difficult conditions for internet workers, for example, by censoring media content.

In addition, labour processes serve to construct the professional and social identity struggles of programmers in small tech companies in Shenzhen. Sun and Magasic (2016) show that while programmers in India and the West are usually well-educated and come from a middle-class background, Chinese code writers in small tech companies have fewer years of education, graduate mainly from lower-ranked universities, and work in an environment characterised by long and stressful hours. A more recent account is provided by Li (2019), who argues that industrial restructuring in China's internet industry since 2018 has fuelled increasing resentment and disappointment have accumulated in Chinese tech workers. These workers had been motivated by the 'big firm dream', believing that overtime work could provide them with good salaries and opportunities in the future, but they now believe they were 'betrayed' by their companies when business downturned.

These internetwork struggles have remained unsolved over the years and in 2019, as the technology boom in China was slowing down, the dissatisfaction researched the boiling point. Declining salaries, the slashing of bonuses and benefits, and even mass layoffs in some tech companies (Bloomberg, 2019) eventually ignited a massive online campaign in China. On 26 March 2019, a new user '996icu' created a project on *Github.com*, a Microsoft-owned open-code-hosting forum commonly visited by programmers around the world. As the project website stated in simplified Chinese, 996icu means 'the 996 schedule of work risks workers to the ICU (Intensive Care Unit)', with an endnote, 'Developers' lives matter'. Within a month, this project went viral on *Github.com*, with thousands of workers flooding to the website to join the discussion, mostly making complaints about their job conditions.

The controversial 996 issue was also widely discussed on Chinese social media platforms, including WeChat and Weibo (the Chinese version of Twitter). This attracted considerable journalistic attention, including the Chinese state media. It is very rare, if not unique in contemporary China, for the state media *People's Daily* to show their support for labour activism and to criticise the extreme work culture of the country's tech industry (Lin, 2020: 55). In May 2019, the controversy met the state's pushback as more offline actions started to take place. These included sending open letters to local governments to demand their actions regarding 996 scheduling, and sending Chinese tech guru Jack Ma copies of the labour law to shame his support for the 996 management practice. The Chinese government quickly filtered 996-related discussions online on both sides; they blocked 996icu's account and removed Jack Ma's provocative view. The 996 work practice, however, is still considered to be entirely normal in Digitech and the Chinese internet industry today.

Although these scholarly works and journalistic reports on 996icu provide a better understanding of Chinese tech workers, in reality, some important questions related to the structural features of the internet industry remain unclear: scholars have not clearly mapped workers perceptions of competition within the industry, nor have they offered clear explanations of collective actions or changes in government positions. The discussions in this article intend to contribute to an empirical explanation of phenomena in China's internet industry from the practitioners' perspective.

Research design and methods

In order to answer the three research questions, complementary research methods are used. First, primary and secondary sources are used to support the argument that since the 1980s, the Chinese government perceived that global success of an internet industry would yield both economic and symbolic value. Hence, it devoted more resources to the industry's development as a political project than might have been justified on the basis of jobs creation alone.

The second and third questions are discussed in the context of a case study of Digitech. A case study approach was useful to indicate particular industry issues experienced by the workers, which will be discussed in the research findings. In-depth knowledge of Digitech was gained during three months of fieldwork in China, including a two-month visit to a giant internet enterprise located in the city of Hangzhou for interviews and workplace observations, and about one month spent in Shanghai for mandatory quarantine, two COVID-19 tests and other paperwork.

Digitech was chosen for three reasons: First, it is one of the largest enterprises and employers in the industry, with over 20,000 workers. Also, its business includes online retailing, e-finance, communication and entertainment, all of which are central to government policy initiatives. Second, Digitech is one of the biggest corporate taxpayers in China, a consideration that deepens the government's interest in its activities. Third, it is one of the pioneers of the 996 still-dominant work schedule. As such, Digitech is an excellent example of the collective work experience as well as the relationship between the state and an internet business in China.

Because the political processes in authoritarian regimes often remain hidden, interviews are a key method to obtain some clarity about reality (Shih, 2015). In this study, the researcher conducted 19 semi-structured interviews with Digitech workers (codes: W1–W19), in order to understand the state influence on the internet business from the workers' perspective. In addition, he interviewed two venture capital investors (codes: V1 and V2) and four tech journalists (codes: J1–J4) who provided a more comprehensive description of the industrial structure and policies and also enabled triangulation of the data collected from the workers. While some workers were reluctant to talk about issues related to collective action, the tech journalists were relatively comfortable as they expressed their ideas on these topics. The interview themes focused on their work experiences in the internet industry, their interpretation of the state's policy, and their opinion of the 996 scheduling and collective actions. Each interview lasted from one to one and a half hours and was audio-recorded with the interviewees' consent.

In the next section, it documents the influence of the government on the trajectory of the Chinese internet industry. It provides a historical explanation for why the Chinese government treated the internet industry differently: this industry supported both economic and symbolic objectives, which is portrayed as China's technology dream in the official policy discourse today.

Developing the Chinese internet industry: A four-decade China revitalisation project

The state project of building the internet industry can be traced back to the official discourse on the process of 'informationalisation' in the 1980s (see Law Info China, 2009).

Following this path, IT was believed by Chinese leaders that it is the foundation of Chinese competitiveness in the 21st century, just as it was elsewhere at the end of the 20th century, when China witnessed the impact of the internet and information and computer technology (ICT) employed on a mass scale in Europe and the US. (See Dai, 2003 for the historical review of ICTs in China's development strategy.) However, the technological level of China's IT industry was perceived to be significantly lagging behind at that time. In his in-depth investigation of China's tech industry, Kessler (2007: 212) recited his interviewee's description of the tech industry in this early period: 'There was no Chinese programming industry, […] the Chinese, the level of the people, the technical level was backward. You had people working on way out-of-date PCs'.

Nonetheless, the Chinese government was determined to develop IT for economic and social transformation. This can be seen in policy documents such as the five-year plan for 2001–2005, which stresses that the government 'needs to selectively stimulate development of new and high-tech industries such as information technology' (The National People's Congress, 2010). In 2001, the Internet Society of China (ISC) was established, a state-employer association under the leadership of the Ministry of Industrial and Information Technology. It started with 70 member institutions, including the major Chinese internet service providers, internet companies and universities, to serve 10 political purposes, including advising government's internet policy direction, establishing human resources programme for internet enterprise, and monitoring compliance of internet enterprises with Chinese laws (see Internet Society of China, 2011). A government official was appointed as the head of ISC, which enabled the Party-state to steer the development direction of China's internet industry by compelling its members to comply with so-called self-enforcing regulations, instead of relying only on legislation.

In this regard, internet enterprises and their corporate behaviour have never been free from state monitoring and control. This 'arms-length' approach is believed to be important to attract foreign companies and investment into China's IT and tech industry, in order to bring in foreign technologies and nurture its business environment. These foreign investments are proven to be crucial to the success of Chinese tech companies, as most of the leading players in China's tech industry have strong capital relations bonds with various foreign investment banks and shareholders today. As the Chinese economy continued to open up, the influx of foreign firms and investment into the IT and tech sectors has transformed the labour market by promoting competition for talent, which led to dramatic wage increases and a high rate of turnover (Kessler, 2007: 214). Despite more young people were graduated with IT-related degrees in China during this period of growth, as observed by Kessler (2007: 210–211), there was a shortage of talent, especially tech engineers, mainly due to the harsh reality that these companies avoid older workers (aged 35 years or above), who are associated with being inefficient.

Two additional policies were introduced in 2015. First, China's Premier, Li Keqiang, introduced the 'Internet Plus' policy, which aimed at promoting the integration of Big Data, cloud computing, mobile internet, and the 'Internet of Things' as 'a new engine for economic growth'. According to the official *XinHua* news channel (XinHua Net, 2017), the policy is intended to encourage economic transition and to enable China to become an 'innovative' (*chuangxin*) country by promoting the use of automation and Big Data across all business sectors in China.

Then, in May 2015, the central government launched 'Made in China 2025' to boost its 'hi-tech industries', especially focusing on the production of industrial robotics and intelligent machines, with the aim of dominating global hi-tech manufacturing and exports in the near future (DW, 2015). Businesses in 10 selected hi-tech industries, such as 5G communication technology, robotics and artificial intelligence (AI), received considerably government support in order to speed up the country's technological transformation. China's goal is nothing less than to become the world leader in technology development. The Chinese government also believes that the new industrial policy will 'upgrade' the labour market in China by bringing in more talent into the technology sector (Ministry of Education, 2017).

It is estimated that in 2019, 20 million people worked in the internet industry in China, including 4.55 million people in state-owned enterprises in the Information Transmission, Software and IT sector (National Bureau of Statistics of China, 2020). Similar to the West, researchers estimate that China's internet workforce is predominated by men, and women account for only 15% (Sun, 2021).

In particular, the Chinese government has revealed its ambition to transform the national economy by allocating an enormous amount of funds for R&D in AI and related technologies. China Telecom (2018) expected these investments to be up to 2.5% of its gross domestic product by 2020, and they were being made while the government was also recruiting talent from overseas through the Thousand Talents Plan. In 2017, as President Xi Jinping reiterated his dream for China to become a science and technology superpower (XinHua Net, 2017), the State Council issued the 'New Generation AI Development Plan', formalising and enshrining the investments in policy and signalling its prioritisation of policy support for AI development. This plan is also sometimes referred to as 'China's technology dream', and sets the benchmark for the AI industry in China with the government's expectation that the industry's level of development will be comparable to that of the most advanced countries and would contribute an economic value of 150 billion CNY (23.3 billion USD) by 2020.

As commentators (Fannin, 2019, chapters 1 and 2) argue, with these government initiatives, the huge domestic market, the huge labour pool of qualified university graduates, and a culture of hard work among Chinese tech workers, China clearly has become a major player in the global race for technological supremacy, and especially so when it comes to AI research and development (see also the review by Liu, 2021). According to a report by Tsinghua University (2018: 2), 60% of global AI investment from 2013 to 2018 was invested in China, making it the largest market for AI start-ups in the world. Meanwhile, tech workers also benefitted from the policy initiatives and the rapid development of the industry. For instance, in 2019,

the average annual income for an employee working in government-related enterprises in this sector was about 161,000 CNY (25,000 USD), which is significantly higher than the national average of 90,500 CNY (14,060 USD) (National Bureau of Statistics of China, 2020). However, despite its rapid development over the last few years, knowledge about the industrial relations of the internet industry does not go much deeper than statistics (e.g. employment figures), and in-depth understanding of how the policy shapes the actual working environment of tech workers, and how practitioners make sense of the government initiatives, remains insufficient.

Intense competition in the Chinese internet industry

This study finds that the substantial investment by the Chinese government – including 270 billion CNY (42 billion USD) in Shanghai in the next three years and 5.56 billion CNY (0.86 billion USD) in Guangzhou for 16 new infrastructure projects (China Briefing, 2020) – has succeeded at fuelling the growth of internet enterprises in China. The state also fenced off new competitors, which allowed several selected Chinese enterprises to maintain their strategic advantages in their respective technology domains. Facebook, YouTube, and Google are well-known examples of this technology protectionism, as government prohibitions against all of them are enforced by China's internet 'Great Firewall'. Because internet markets are politically constructed, government involvement has reduced the disruptive social consequences of marketising the economy. But this politics-dominated market has generated disruptive consequences of its own, as explained by V1, a venture capital investor in the tech industry for eight years, on what he believes to be the government's logic in developing the internet industry:

> Although there is no competition law in China, […] these companies won't become the monopoly. There will always be two to three major competitors in one particular domain. Take e-commerce as an example, you have Alibaba, JD.com and PinDouDou, […] so that these companies have to keep innovating, designing new products, keeping up the pace.

Interviews support the contention that this intense competition in the domestic internet market is one of the root causes of burnout of tech workers and labour dissatisfaction in China as a result. In order to survive the highly competitive business environment, internet enterprises believe they have no choice but to demand ever-greater productivity from their workers, which has led to high work intensity and extremely long working hours. From this viewpoint, the 996 work schedule is an indirect consequence of the Chinese governments' policy initiatives.

> The reasons for our long working hours, firstly, it is due to competition. […] If there are two similar products, one is launched before the other, it will have advantages. Every company wants their product to be released sooner than their competitors, so we have to work for long hours to speed up the development. (W5, senior programmer)

> We have long working hours because we are still developing our market […] I believe Microsoft has long working hours before its products dominated the market. When our company becomes the next Microsoft, then we can enjoy a slower pace of work. (W6, senior programmer)

Others mentioned how competition causes burnout at work.

> In the internet industry, we spend more time with our colleagues than our families. This is no exaggeration. We spend thirteen to fourteen hours on work every single day, and maybe ten hours at home, including sleeping. It is very difficult for us to balance our job with family duties. (W5, senior programmer)

Regulating work in the internet industry

As the researcher observed during his visit to the office, the interviewees on average spend at least 10 h at their office per day, five to six working days every week. Both their contracts and their paycheques indicated that they worked no more than 8 h per day and 44 h per week, the legal maximum, all interviewees agreed that this work arrangement is normalised in the internet industry. This work model is a flagrant violation of 'China Labour Law' article 36 (see Law Info China, 2012 for the 'Labor Law of the People's Republic of China [Revised]'). All interviewees were aware of the Law, and some (V1, V2, W2, W5, W14 and W16) suggested that internet companies have strategies to bypass the Law. This can be done, for example, by using a project-based management method. This method contracts a worker to complete a well-defined and measurable project by a certain date and specifies the number of hours that will be paid for the delivery of a completed project. Beyond this, employees are free to structure their time 'however they choose', but the project can be completed on time only if a 996 schedule is chosen. On other occasions, managers have claimed that workers love their company and their jobs, and their sense of passion inspires them to work more hours than they are paid for.

As more journalistic attention is attracted to the extremely long working hours in the internet industry, tech gurus such as Jack Ma (founder of Alibaba) and Ren Zhengfei (chief executive officer of Huawei) have doubled down on their support of exploitative management practices in their organisations. For example, Ma recently said that 'overtime working is a huge blessing' because 'many companies and many people don't have the opportunity to work 996' (CNN Business, 2019). Ren mentioned that his employees must be 'aggressive as a wolf' and 'non-stoppable before their tasks are finished' (NY Times, 2018). Interviewees were well aware of Jack Ma's and Ren Zhengfei's inflammatory statements and confirmed that recruiters had made time expectations clear at the time they were hired. In Digitech, W8 'was told that I need to work overtime at the recruitment fair. The recruiting officer said I won't be paid for the overtime, and it is up to me to decide whether or not I find this practice is acceptable. If not, I should not take the job offer'.

Surprisingly, despite the 996 controversy stirring in society since 2019, both the central and local governments seem to be ambiguous in enforcing the Law and regulating working hours in the internet enterprises. This is reflected by the ruling of court cases on

996-related disputes in China. As Wang and Cooke (2017) argued, the Chinese legal system is based on the civil law system, therefore, the law itself is relatively abstract and there is a level of dependence on judicial interpretation when handling labour disputes. In this connection, the interplay between the court, workers and the ACFTU on ruling to some degree can show the authority's manifestation of the politico-legal attitudes towards the 996 practices.

As this article goes to press, the number of court cases related to 996 disputes continues to be unknown. News related to 996, including the anti-996 campaign platform, was selectively filtered and blocked by search engines in China, so the exact number remains unknown to the public. Information sourced from the Chinese internet suggests there are at least three court cases related to the 996 disputes in China (Sohu.com, 2019). The contradictory rulings by the district courts in these cases, one for the employee and two against, suggest that the legislative framework in China is not in a position that can stand firmly to defend workers against the inhumane and unlawful working hours. Wang and Cooke (2021) found a similar level of arbitrariness in court rulings in labour disputes between Chinese platforms and their workers.

Interviewees interpreted the court arbitrariness in a variety of ways. Some believed it should be the employer who takes the blame (W3, W4 and W11), but others highlighted the complicated interests between the state, employers and workers.

> I don't think the government will actively engage in these issues (of labour dissatisfaction). It is because the government is relying on tech companies to pay their taxes. If overtime work can create more value to the company, which means the company can create more revenue, and they consequently will pay more tax. (W8, asset manager)

For instance, according to the official news outlet, the Alibaba Group paid more than 250 billion CNY (38.9 billion USD) tax in 2018, which is more than the total tax collected in Hangzhou (Xinhua Net, 2019). Another important source of income, senior programmer W6 believed that

> governments today, including the Chinese or others overseas, do not want to interfere internet companies. Overtime work is one way to help internet companies in their country to win the global race of technology development. All of them want to be ahead of others.

Some also believed that the urgent need for technological advancement compels government flexibility as it regulates internet company practices. Freelance tech journalist J1 gave an example based on one of her previous investigative reports.

> The Chinese government will let those tech enterprises do whatever they want unless something very wrong happened. […] There was a case that a tech enterprise accessed medical reports from citizens in some provinces of China [for building its data base]. This is not legal nor illegal, because there is no regulation on this issue.

However, despite tech workers appearing to enjoy much flexibility in software R&D at work, the state still has a firm grip on the industry, especially for online content. As W17 described her experience in developing online games, 'all in a sudden, the government will change the (video game) regulation and we must comply. There is no discussion before the implementation and we have to re-develop projects again. Sometimes, we find it hard to follow'. This echoes Xia and Kennedy's (2014) finding that state intervention on content has directly exacerbated conditions for internet workers.

Unionising internet workers for collective action: An impossible mission?

Lastly, a few interviewees mentioned the importance of the union in fighting against their employers to lower the working hours, but others believed it is 'so difficult for union members to investigate the phenomenon because it is not written in black and white on the contract' (W8) or 'the company can always find a way to dodge the regulation' (W4). None were able to recall any measures the ACFTU had adopted to support tech workers, and they believed tech companies to be 'too powerful to touch' (W8) or the 'situation is too sophisticated' (W4). There is also a sense of distrust of the ACFTU. When the interviewer asked if there is any possibility for the Unions to organise workers fighting against the illegal workplace exploitation, VC2 replied, 'the Unions are supposed to help poor people [such as rural migrant workers]. [Because tech workers are relatively well-paid,] this is not its priority'.

When the interviewees were asked if there is any possibility of collective actions against the tech industry's exploitative management practices, some of them became very cautious (e.g. CV1 asked the researcher to stop recording, W6 asked 'is this a topic we can talk about?' and W19 stated, 'I do not want to comment on politics'). Some internalised the long working hours and saw them as being necessary for tech work, and a few of them jumped to the conclusion that there is nothing workers can do 'because this is the way it is' (W18). Others suggested measures such as asking colleagues in the same team to work slowly together or to transfer to another business groups as a team, but these methods do not have any meaningful effect on industrial relations. Software developer W18 believed unionising workers to fight for their rights is impossible, because her employer can just lay off every 'troublemaker' and can easily hire others 'who are cheaper, younger, easy to manage and willing to work overtime, want to work for this company'. This is particularly the case since the growth of the internet economy began to slow down: 'everyone needs to keep their rice bowl'.

None of the interviewees thought about labour unionising themselves. This is partly because of the internet censorship on 996 news, which W7 interpreted as 'the red line of the government'. In addition, the court rulings related to 996 disputes make tech workers in internet companies feel that they have no legal ground to act collectively against their employers. User analyst W12 is among those who shared his opinion less defensively, saying that the biggest challenge for unionising

workers actually comes from the government. When asked if he saw any possibility for collective actions, he replied,

> you asked me if there will be one hundred people to form a union? To negotiate with the employer for shorter working hours? This is IMPOSSIBLE! It is not just an issue concerning one hundred people; it is about everyone in the industry. If it is a matter of the ten million people working in the internet industry, you will see it is impossible under the current political environment in China. It means instability, and the government will not allow it.

Researchers investigating industrial relations in China argue that collective actions by Chinese workers are difficult, because these activities are usually limited by the only legitimate organisation – the ACFTU, which is under the Party's control and often subordinates worker interests to those of the state (Taylor and Li, 2007). Instead of protecting workers' collective rights such as associational power, Chen (2016) has argued that the Chinese government has been focusing on the protection of individual rights by, for example, establishing the minimum wage policy and the Labour Contract Law in 2008. In this connection, the ACFTU has played a role in promoting personal labour rights and providing legal advice to individual workers in employer–employee disputes. These measures, however, have not yet been seen in the 996-related disputes. While the 996 work pattern is such a common experience for tech workers (according to the interviewees and news reports), why have there been no industrial actions (e.g. strikes) in the internet industry, given that both their individual and collective rights have been infringed?

This study found two explanations of this phenomenon related to the political economy of China's internet industry. First, it is related to tech workers' professional identity. The political discourses promoted by the state see workers in the tech industry as 'dream makers' (*zhuimengzhe*) who want to build a better future for China. During the fieldwork, when the interviewees talked about what do they like about their job, or whether they think their job is a profession, a common theme of their answers was that they believe their job is empowering China's technology dream and the future economy of China. This suggests that their work is motivated not only by monetary rewards but also by intrinsic values, such as a sense of patriotism. Also, some interviewees told the researcher that they feel a sense of satisfaction when they finish their project, and the unfavourable working conditions they have to bear are the unavoidable sacrifices as they engineer China's technology dream. This is very different from industrial actions by factory workers, whose participants were motivated primarily by salary and were highly alienated from the products they made (see, e.g. Chan et al., 2020).

> I think this is the career of my life. What I am doing is empowering the service industry in China. (W3, project manager who is developing an AI e-commerce system)

> Over the last four years, I have been working overtime because my product is not stable. […]We want to [use this software to] help all the business owners in China. (W12, technician)

However, this does not mean the author wants to moralise tech workers in the internet industry. In fact, the workers are motivated to tolerate the bitterness of their jobs by both their (perceived) salaries and their professional pride. Because the Chinese government has been heavily investing in the tech industry for pursuing China's dream, other sectors in the economy are considered to be lagging behind in the economic transition. Tech workers, who are usually specialised in software-related skills and knowledge, believe they cannot find better jobs in other professions. This is particularly the case when the Chinese economy has been slowing down since the outbreak of COVID-19. Investor V2 shared his view about why people would stay in the internet industry given the unfavourable work conditions.

> The wages in the internet industry are better than in other professions, so people are willing to stay in this field. After all, what is the second-best option? Just like Foxconn's factories, many say the exploitation in Foxconn is so unbearable, but still Foxconn workers want to work for more hours so that they can earn more money. […] If you are working in this industry, you have no other options. This is the reality.

Moreover, while V2 did not dismiss the fact that the working conditions in China's internet industry are tough, he seemed to see this phenomenon as a virtue for investment, 'because without this hardship and commitment, there is no way a business can survive the fierce competition in China's internet industry'.

Last but not least, while salaries for factory workers are highly standardised (usually the legal minimum wages in the local province), tech worker salaries in China vary dramatically, even for workers in the same position. For instance, Digitech has adopted a productivity-based salary system, where tech workers are compensated according to their evaluation based on the key performance indicator (KPI). The KPI is a set of multiple personal business objectives that Digitech's workers need to achieve each year. Those who outperform their KPI are rewarded with a lucrative bonus and shares on top of their basic salary. Some interviewees (W1 and W14) even told the researcher that the top 10% of the workers might have received a bonus of seven times their monthly salary plus other employee benefits. Such highly individualised work benefits are not favourable to forge the solidarity tech workers would need for effective collective action.

Conclusion

In conclusion, this study has provided an empirical account of the exploitative management practices in the internet industry and argued that this should be seen as the indirect consequence of the government's ambition in pursuing China's technology dream. It also argued that the pluralist ideal of industrial relations is not directly applicable to the authoritative regime, which both the state and employers have strong ambition and can put their common interests before workers, for example, by exploiting productivity from them for profit, taxation, and China's technology dream.

This research re-examined the role of the state by studying how tech workers experience and interpret government's policy and argued that the state remains a significant factor in shaping industrial relations. In 2021, commentators observed that the Chinese central government was increasingly tightening their control over the domestic internet business. For instance, Alibaba was fined 18 billion CNY (2.75 billion USD) for its 'anti-monopoly violations', and the food delivery platform Meituan received a penalty of 3.4 billion CNY (0.53 billion USD) for its market abuse. The impact these measures will bring to industrial relations in the internet industry is uncertain and surely worthy of future research.

This article, moreover, should not be read merely as an intellectual critique of Chinese authorities. Indeed, the key message of this paper is that policymakers should recognise their power and responsibility for improving the work conditions of people, and labour unrest can only be resolved by solving the root causes of problems – in this case, relaxing the competition in the internet industry, enforcing labour policy, and providing more social/digital space for labour affair discussion. While China has become one of the most powerful players in internet technology development, the researcher believes more policy efforts could be made to ensure the benefits of technology are used to improve the job quality and well-being of Chinese people.

Finally, to some commentators (Lin, 2020), the anti-996 campaign blazed a new path for labour activism in China and the world. The decentralised model of campaign, together with the sophisticated use of the internet had successfully mobilised workers across different workplaces, aroused public attention and received support from overseas. On top of these, this campaign is important as it promotes the idea of labour rights in China. Past research shows that labour activism in China was mostly related to the protection of contractual rights, usually when employers failed to fulfil their responsibility as written in their contract (see China Labour Bulletin, 2020). In the discussion of the 996 scheduling, however, the idea of labour rights is seen as *human rights* by workers and has led to, for example, the demand for information freedom from the government, and the many discussions of decent workplaces and dignity at work. Despite the fact that the state has blocked the campaign, this event should mark a milestone for the road to the construction of labour rights in China.

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References

BBC (2017) Undercover activist detained at Ivanka Trump shoe supplier. Available at: https://www.bbc.com/news/world-asia-china-40102602 (accessed 14 December 2021).

Bloomberg (2019) China internet plays adjust to a post-growth world. Available at: https://www.bloomberg.com/opinion/articles/2019-09-19/investors-accept-china-internet-slowdown-if-costs-controlled (accessed 31 January 2021).

Chan J, Selden M and Ngai P (2020) *Dying for an iPhone*. Chicago: Haymarket Books.

Chang K and Brown W (2017) The transition to collective labour relations. In: William B and Kai C (eds) *The Emerging Industrial Relations of China*. Cambridge: Cambridge University Press, pp.21–45.

Chen F (2003) Between the state and labour: The conflict of Chinese trade unions' double identity in market reform. *The China Quarterly* 176: 1006–1028.

Chen F (2016) China's road to the construction of labor rights. *Journal of Sociology* 52(1): 24–38.

China Briefing (2020) How can foreign technology investors benefit from China's new infrastructure plan? Available at: https://www.china-briefing.com/news/how-foreign-technology-investors-benefit-from-chinas-new-infrastructure-plan/ (accessed 15 July 2020).

China Labour Bulletin (n.d.) CLB strike map. Available at: http://maps.clb.org.hk/strikes/en (accessed 29 June 2021).

China Labour Bulletin (2020) Workers' rights and labour relations in China. Available at: https://clb.org.hk/content/workers'-rights-and-labour-relations-china (accessed 14 December 2021).

China Telecom (2018) Everything you need to know about China's "internet plus" future. Available at: https://www.ctamericas.com/chinas-internet-plus-future/ (accessed 31 January 2020).

CNN Business (2019) Jack Ma endorses China's controversial '996' work culture. Available at: https://edition.cnn.com/2019/04/15/business/jack-ma-996-china/index.html (accessed 31 January 2021).

Cooke FL (2008) The changing dynamics of employment relations in China: An evaluation of the rising level of labour disputes. *Journal of Industrial Relations* 50(1): 111–138.

Dai X (2003) ICTs in China's development strategy. In: Hughes CR and Gurdun W (eds) *China and the Internet: Politics of the Digital Leap Forwards*. New York: Routledge, pp.8–29.

Dunlop J (1958) *Industrial Relations System*. New York: Henry Holt and Company.

DW (2015) 'Made in China 2025' – The next stage of China's economic rise? Available at: https://www.dw.com/en/made-in-china-2025-the-next-stage-of-chinas-economic-rise/a-18490377 (accessed 31 January 2021).

Fannin R (2019) *Tech Titans of China: How China's Tech Sector is challenging the world by innovating faster, working harder, and going global*. Boston: Nicholas Brealey Publishing.

Fuchs D, Tse P and Feng X (2019) Labour research under coercive authoritarianism: Comparative reflections on fieldwork challenges in China. *Economic and Industrial Democracy* 40(1): 132–155.

Gallagher M, Giles J, Park A, et al. (2015) China's 2008 labor contract law: Implementation and implications for China's workers. *Human Relations* 68(2): 197–235.

Hall PA (1986) *Governing the Economy*. Oxford: Oxford University Press.

Hyman R (2008) The state in industrial relations. In: Blyton P, Bacon N, Fiorito J and Heery E (eds) *The Sage Handbook of Industrial Relations*. London: Sage, pp.258–283.

Hyman R (2018) What future for industrial relations in Europe. *Employee Relations* 40(4): 569–579.

Internet Society of China (2011) Introduction. Available at: https://www.isc.org.cn/xhgk/xhjj/ (accessed 31 June 2021).

Kennedy A (2020) Whither China's technology dream? *East Asia Forum* 12(4): 33–34.

Kessler D (2007) Nationalism, theft, and management strategies in the information industry of mainland China. In: Lee CK (ed) *Working in China: Ethnographies of Labor and Workplace Transformation*. Abingdon, Oxon: Routledge, pp.209–228.

Law Info China (2009) The adjustment and development plan for the IT industry. Available at: http://www.gov.cn/zwgk/2009-04/15/content_1282430.htm (accessed 31 January 2021).

Law Info China (2012) Labor law of the People's Republic of China [revised]. Available at: http://www.lawinfochina.com/Display.aspx?LookType=3&Lib=law&Cgid=9587&Id=705&SearchKeyword=&SearchCKeyword=&paycode=#menu3 (accessed 31 January 2021).

Li X (2019) The 996.ICU movement in China: Changing employment relations and labour agency in the tech industry. Available at: https://madeinchinajournal.com/2019/06/18/the-996-icu-movement-in-china-changing-employment-relations-and-labour-agency-in-the-tech-industry/ (accessed 31 January 2021).

Lin K (2020) Tech worker organising in China: A new model for workers battling a repressive state. *New Labor Forum* 29(2): 52–59.

Liu HY (2021) Tech Titans of China: How China's Tech Sector Is Challenging the World by Innovating Faster, Working Harder & Going Global by Rebecca A. Fannin. *China Review* 21(1): 235–237.

Ma Z (2011) Industrial relations in China: A review based on a six-party model. *International Labour Review* 150(1–2): 145–162.

Ministry of Education (2017) A blueprint for talents development in the manufacturing industry: An introduction. Available at: http://www.moe.gov.cn/jyb_xwfb/xw_fbh/moe_2069/xwfbh_2017n/xwfb_170214/170214_sfcl/201702/t20170214_296156.html (accessed 31 January 2021).

National Bureau of Statistics of China (2020) China statistical yearbook. Available at: http://www.stats.gov.cn/tjsj/ndsj/2020/indexeh.htm (accessed 16 October 2021).

National People's Congress (2010) Report on the outline of the tenth five-year plan for national economic and social development (2001). Available at: http://www.npc.gov.cn/zgrdw/englishnpc/Special_11_5/2010-03/03/content_1690620.htm (accessed 31 January 2021).

NY Times (2018) Huawei's 'wolf culture' helped it grow, and got it into trouble. Available at: https://www.nytimes.com/2018/12/18/technology/huawei-workers-iran-sanctions.html (accessed 31 January 2020).

Polanyi K (1944) *The Great Transformation: The Political and Economic Origins of our Times*. New York: Farrar and Rinehart.

Ravenswood K and Kaine S (2015) The role of government in influencing labour conditions through the procurement of services: Some political challenges. *Journal of Industrial Relations* 57(4): 544–562.

Shih V (2015) Research in authoritarian regimes: Transparency tradeoffs and solutions. *Qualitative & Multi-Method Research* 13: 20–22.

Sohu.com (2019) At least three court cases were filed due to the 996 scheduling of work with only one ruling favour the employee. Available at: https://www.sohu.com/a/308228073_100245187 (accessed 31 January 2021).

Sun P (2017) Programming practices of Chinese code farmers. *China Perspectives* 2017(4): 19–27.

Sun P (2021) Straddling between technology and gender boundaries: the identity negotiation of female programmers in China. *Information, Communication & Society* 24(1): 19–34. https://doi.org/10.1080/1369118X.2019.1623905

Sun P and Magasic M (2016) Knowledge workers, identities, and communication practices: Understanding code farmers in China. *tripleC* 14(1): 312–332.

Taylor B and Li Q (2007) Is the ACFTU a trade union and does it matter? *Journal of Industrial Relations* 49(5): 701–715.

Taylor B, Chang K and Li Q (2003) *Industrial Relations in China*. Cheltenham: Edward Elgar Publishing.
Tsinghua University (2018) China's AI development report 2018. Available at: http://www.199it.com/archives/748996.html (accessed 31 June 2021).
Wang T and Cooke F (2017) Striking the balance in industrial relations in China? An analysis of court decisions of 897 strike cases (2008–2015). *Journal of Industrial Relations* 59(1): 22–43.
Wang T and Cooke FL (2021) Internet Platform Employment in China: Legal Challenges and Implications for Gig Workers through the Lens of Court Decisions. *Relations Industrielles / Industrial Relations* 76(3): 541–564.
Wang K and Elfstrom M (2016) Worker unrest and institutional change: Perceptions of local trade union leaders in China. *China information* 31(1): 84–106.
Wang F, Gen B, Cheng Y, et al. (2019) China's employment contract law: Does it deliver employment security? *The Economic and Labour Relations Review* 30(1): 99–119.
Wei T (2017) The changing role of government towards labour. In: Brown W and Kai C (eds) *The Emerging Industrial Relations of China*. Cambridge: Cambridge University Press, pp.112–140.
Xia B and Kennedy H (2014) The role of Chinese internet industry workers in creating alternative online spaces. In: Marolt P and Herold D (eds) *China Online: Locating Society in Online Spaces*. London and New York: Routledge, pp.125–140.
Xinhua Net (2017) Xi Jinping emphasised to implement the new development concepts and build a modern economic system. Available at: http://www.xinhuanet.com//politics/2017-10/18/c_1121820551.htm?baike (accessed 31 January 2021).
Xinhua Net (2019) Alibaba paid tax 258.1 billion and lowered the burden for SME for 25 billion. Available at: http://www.xinhuanet.com/tech/2019-04/03/c_1124322396.htm (accessed 31 January 2021).
Zhou Y (2013) The state of precarious work in China. *American Behavioral Scientist* 57(3): 354–372.

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