

Paradoxical Autonomy in Japan's Platform Economy

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Crowdsourcing firms, their client firms and the government in Japan have advocated that crowd work provides opportunities for workers to enjoy autonomous working practices, enabling subpopulations such as women and the elderly who would otherwise be excluded from the labour market to find employment. This is far from the case. Instead, crowdsourcing is perhaps better considered a means, enabled by technological advances, by which to flexibilise the labour market. We have been witnessing a shift in the forms of domination and control imposed on labour from a direct, physical and onsite type of control to an indirect mechanism of domination that has rendered workers less visible while suppressing wages. This further implies that the paradoxical autonomy of crowd work is embedded in contemporary antagonism in Japanese employment relations.

Keywords: Platform, digital work, crowd work, Japan

Introduction

THE DIGITAL economy continues to play a widely acknowledged role in transforming employment relations. This includes the emergence of work based on information and communications technology (ICT) using online network platforms. Such an employment scheme, known as crowd work or platform work, utilises labour by connecting employers to workers with access to online platforms where they can carry out tasks as independent contractors. Commentary on this new form of employment directs most attention to the opportunities it creates for workers, which is especially evident in Japan, where female and elderly workers seek flexible work

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arrangements. This discourse focuses on how crowd work increases autonomy for workers by enabling them to choose where and when to work.

As this article shows, however, rather than generating opportunities, crowd work in Japan has instead contributed to creating a new group of vulnerable and impoverished non-regular workers within the Japanese labour market. Crowd workers find themselves having to work more cheaply, flexibly and efficiently than other non-regular workers to win contracts by marketing themselves as ultra-able workers. This is a new and indirect form of domination and control exercised by employers that has largely been masked through repeated references to workers' autonomy. We have therefore been witnessing a shift in the forms of domination and control imposed on labour from a direct, physical and onsite type of control to an indirect mechanism of domination that has rendered workers less visible while suppressing wages. Although these trends have not gone unnoticed, this article explores the concrete development of crowd work in the Japanese case. The article examines the implications of the development of crowd work for the flexibilisation of the Japanese labour market, shedding light on the way in which Japan's economy continues to liberalise.

The article first introduces the concept of crowd work and contextualises changes in employment relations in Japan, in which crowd work emerged. It then introduces an analytical framework characterised by the paradoxical nature of the autonomy that crowd work ostensibly grants to some labourers. This sets the stage for examining the transformation of Japanese employment relations and the way that crowd work has emerged as part of a more general trend towards the flexibilisation of employment relations in Japan.

Crowd Work

ICT-based work is not a new phenomenon. It has, however, increasingly come to be organised through online platforms, especially for crowd-working arrangements (Valenduc & Vendramin, 2016). Parker, van Alosty, and Coudary (2016) define a platform as a business which creates interactions between producers and consumers, providing an open participative infrastructure that facilitates the exchange of goods and services. The crowd work examined here focuses on online-based 'click workers', excluding platform work which provides physical services, such as Uber and Task Rabbit, as these physical platform services are yet to be developed in the Japanese market. Crowd work enables large numbers of workers to engage in paid but fragmented jobs through online platforms. While some emphasise the potential of crowd work to create job opportunities and an autonomous working style, others highlight the precarity, instability, low wages and long working hours associated with crowd work.

Crowd working, a form of crowdsourcing, has evolved as firms outsource tasks to workers who are connected online (Howe, 2006), and advocates of crowd work claim that it is able to resolve geographical challenges and other problems that lead to shortages of experts (Kittur et al., 2013). Crowd workers can, of course, experience considerable autonomy (Valenduc & Vendramin, 2016) when choosing work.

On the surface, crowdsourcing creates the appearance of increasing autonomy and choices for a broad range of workers, thereby creating opportunities for employers to tap into a global pool of talent.

The Development of Domination and Control in Japanese Employment Relations

To understand the emergence of crowd work in the context of Japan's labour market, we need first to contextualise some of the wider changes in its long-term employment system. In so doing, we can explore the origins of crowd working and trace its development over the past 10 years.

Some scholars have praised the Japanese style of management, rooted in its unique culture, which 'attache[s] an especially strong value to hierarchy, to group and organisational solidarity, and to a consensus' (Hazama, 1997; Morikawa, 1973; Tsuda, 1987, cited in Mour & Kawanishi, 2005). These scholars view Japanese-style management as a superior organisational form, a humanistic approach to human resource management (Kenny & Florida, 1988; Tomaney, 1994). These studies emphasise what they regard as a superior form of management which provides discretion to and empowers workers, implying the importance of worker autonomy to effective management.

In contrast, more critical observers have tended to focus on the intensity of Japan's production system, including the efficiency of its plants and the strenuous physical and mental efforts of workers (Ōhki, 1998). This, in turn, is associated with a particular style of labour management, marked by competition in the context of systematic inspection and evaluation of performance. This labour management scheme rewards effort with preferential treatment in terms of training, education and intra-company human relations. As such, firms suppress 'workers' dissatisfaction and opposition by institutionalising corporate-labour management methods for individuals and groups of workers (Ōhki, 1998, pp. 226–228). In addition, workers must continuously demonstrate their usefulness to a firm through diligence, loyalty and flexibility (Dohse, Jugens, & Malsch, 1985). From the perspective of these scholars, Japanese labour relations in the 1980s and 1990s were not necessarily free of control, as hard work was imposed by the onsite monitoring and evaluation of workers. This study agrees with this view, that employment relations under the Japanese management style prior to the 2000s were characterised by workplace control.

Studies in the 1990s and 2000s began focusing on the transformation of employment relations in Japan in the post-bubble economy. We have witnessed an increasing number of non-regular workers (not including crowd workers) who have been facing employment insecurity and lower wages from the 1990s, including part-time, temporary, and short-term contract workers, whose employment status is inherently unstable and precarious. One concerning trend regarding the non-regular workforce is the increasing number of dispatch workers (temp agency workers) (Shibata, 2016; Suzuki, 2018). Some temp workers are zero-hour contract workers who are hired through temp agencies but paid only when they are sent out

to companies and therefore face a significant level of insecurity in terms of wages and work availability. The emergence of other non-regular workers from the 1980s seems to have reflected a new form of workplace control achieved by flexibilising and precaritising workers.

The aforementioned increase in the use of flexible workers and the large-scale dismissals of those workers following the global financial crisis of 2007–2008 drew social criticism from labour and the larger public. This direct form of exploitation and control—dismissals of non-regular workers—triggered debates over employment security (Shibata, 2016). This led in part to a change in employment regulations, generating a certain degree of protection for non-regular workers. In the meantime, the Japanese labour market has been facing acute labour shortages from the 2010s. This has forced the government and employers to be more conscious of the way they use non-regular workers as well as acknowledge the need to sustain flexible employment relations.

Under these circumstances, crowd work has proved useful for employers and the government insofar as it constitutes a new form of work in which a broader range of people can participate in contracted work whenever and wherever they want. While keeping employment relations flexible, the government can avoid criticism directed at the precaritisation of non-regular workers by locating crowd work as autonomous labour and differentiating crowd workers from other non-regular workers. At the same time, the business community benefits by utilising cheap crowd-worker labour under contracts that absolve them of legal responsibility for providing social benefits to those workers. The emergence of crowd work in Japan has represented a new addition to the shift towards the general flexibilisation/casualisation of employment relations.

Japan has witnessed a shift from direct control of workers characterised by intensified production systems and heightened competition to a form of control enabled by providing precarious employment at lower wages under employment insecurity and creating replaceable workers such as zero-hour contractors. Reflecting criticism of precarious employment conditions experienced by non-regular workers and labour shortage, labour market policies have changed slightly such that the government, at the surface level, provides a certain degree of protection and employment security to maintain the workforce and deflect criticism. It is in this context that we should understand the emergence of crowd workers, a new form of digital labourers who have been positioned in public discourse as autonomous workers.

Paradoxical Autonomy and Control

Scholarly interest in the influence of technological development, including factory automation and new production efficiency management, on worker autonomy emerged between the 1970s and the 1980s during the era of Taylorism. In the early 2000s, the emergence of mobile phones and mobile email devices added a

new theme to discussions of worker autonomy (Mazmanian, Orlikowski, & Yates, 2013). Some researchers have examined the negative consequences of technology on autonomy, in particular the possibility that it not only enhanced worker performance and motivation but also increased control of the workforce through automation (Braverman, 1974; Burawoy, 1979, cited in Mazmanian et al., 2013).

Control cannot be separated conceptually from autonomy, which has been studied by many scholars. For instance, in labour process theory, scholars have problematised control and examined how managers reduce the gap between workers' capabilities and what they actually do, and how managers exercise control over labour processes (Sewell, 2005). Taylor (1912) was sceptical of workers' ability to use know-how for the benefit of an organisation; he therefore emphasised the importance of rigorously controlling the workplace (cited in Swell, 2005). In contrast, others focus on controlling knowledge and the indeterminacy of knowledge. For instance, the post-Fordist literature has found that the form of control that characterises physical industrial work can be replaced by rewarding employment when workers 'direct their discretionary efforts' (Kenny & Florida, 1996; Piore & Sabel, 1984, cited in Sewell, 2005, p. 699) towards employers' and/or organisations' ends. In other words, in the contemporary workplace, worker autonomy is created by controlling consciousness and knowledge rather than by onsite physical control.

The onsite type of control over the body was, therefore, gradually replaced by control of knowledge and the managerial rhetoric of empowerment (Swell, 2005). Bauman (2002, cited in Swell, 2005) argues that although new knowledge workers can sell their knowledge to the highest bidder, they also find themselves involved in working practices that restrict their freedom or autonomy, as one form of exploitative employment relations replaces another. The present study adopts this understanding of workplace control and autonomy, accepting that employment relations have transformed from direct control over bodies to indirect control over consciousness and knowledge, continuing the use of labour practices that limit or exploit worker autonomy.

Studies in the area of business and management also explore ongoing contradictions between autonomy and control in the workplace. For instance, Houlihan (2002) points out that organisations seek to implement palliative policies which can distract workers from routinised and intensive work practices by encouraging positive thinking, 'matching employee lifestyles' and reducing boredom, while demanding strong commitment or dedication (p. 81). These palliative strategies indicate the paradoxical nature of the superficial autonomy and freedom granted to workers.

Fleming and Sturdy (2011) similarly claim that the development of a particular discourse that promotes free, authentic and diverse work practices distracts workers' attention from what in reality provides only limited discretion by highlighting the case of call-centre workers. They reveal the new management technique of emphasising freedom, the self and emancipation in the workplace to motivate workers and make them feel happy and free, albeit 'in an inherently alienating environment'

(p. 195). Autonomy is, therefore, paradoxical in the sense that workers might be persuaded to believe that they enjoy an autonomous work style, while often feeling controlled or trapped. Some workers, in particular knowledge professionals, tend to self-impose such restrictions and limit their own freedom, yet they accept the idea that new technologies enhance flexibility and generate new career or work opportunities (Mazmanian et al., 2013). The discourse surrounding crowd work in Japan resonates with this line of argument, in which the government and crowdsourcing companies emphasise the benefits of working autonomously and freely, while in fact workers are distracted by this palliative strategy, channelled into experiencing a paradoxical form of autonomy that is felt as freedom but leads to (sometimes unacknowledged) limitations.

Recent studies of technologies in the workplace also, directly or indirectly, raise the issue of control and autonomy. For instance, Moore demonstrates how new measurement technologies impact employment relations and workers' autonomy by monitoring workers' health and performance and judging their work capacity and performance (Moore, 2018). Lupton (2016) also shifts our attention to the construction of the 'quantified self' and how autonomy has been undermined by new measurement devices. She argues that technologies influence people's behaviours, social relationships, employment and life opportunities. Beer's (2016) study of metric power also touches on automation by demonstrating how extensive measurement regimes have begun affecting life as well as work, sleep and emotions. He argues that metric power has the capacity to determine possibilities; in other words, measurement technologies can limit potential.

Many studies exploring the relationship between technologies and forms of work examine the impact of new technology on autonomy and argue that there are contradictions surrounding such technologies, especially regarding the balance between worker autonomy or mechanisms of control in the workplace. As Mazmanian et al. (2013) suggest, many studies investigating technologies and autonomy find increasing tension between autonomy and control. These studies insightfully go beyond technological determinism by highlighting the limitations of technology as a means of enhancing worker autonomy and its function as a new means of control enabled by digital devices and quantification. This is an important point to keep in our mind when we discuss employment relations involving digital workers such as crowd workers and online-based client employers in the digital age.

This study integrates these critical views of technology and the paradoxical autonomy that digital work creates. The study seeks to conceptualise how autonomy and control in the online-based workplace have been enhanced. This conceptualisation enables us to understand how digital labour (crowd workers) find themselves paradoxically autonomous and controlled at the same time. This study also seeks to demonstrate how crowd work has been characterised by this tension between autonomy and control by examining a concrete case of crowd work in Japan. In the next section, we examine the process through which the Japanese labour market adapted itself to the crowdsourcing industry.

Crowd Work in Japan

Crowd work in Japan has grown significantly over the last 10 years. The number of crowd workers in Japan has reached five million, comprising 5 per cent of the population (Nihon Keizai Shinbun, 2018). Ministry of Internal Affairs and Communications (MIC) estimates that roughly 1.5 million people work as crowd workers (Ministry of Internal Affairs and Communications [MIC], 2018). This is roughly 8 per cent of the 20 million non-regular Japanese workers (Ministry of Health, Labour and Welfare [MHLW], 2017). As platform-based jobs increase, a growing number of individual workers will not join firms as long-term or permanent employees, instead, using their free time to work and applying their skills on an 'on-demand' basis (MIC, 2016). The MIC reports that crowd work in particular has become a safety net for female and elderly workers (2016). For its part in the debate outlined above, the Japanese government tends to portray crowd work as a means of creating opportunities for Japanese workers.

This section illustrates the types of jobs and forms of employment relations crowdsourcing has provided by examining several crowdsourcing firms in Japan.

Types of Crowd Work in Japan

Many crowdsourcing businesses follow roughly one of three models of employment: project-based, competition-based and task-based models of employment (Small and Medium Enterprise Agency, 2014). The project-based model often requires expertise and higher skill levels, such as those needed for systems engineering and website design. Crowd workers apply for advertised projects with their work plans, costs, the projected time need to complete the work and other relevant information to appeal to their potential clients (employers) (Lancers, 2017). Employers can choose the best crowd workers from among the many applications they receive. Project-based jobs typically occupy on average between a few days and a few months, and payments under this model vary between a few thousand and a few million yen, paid on completion of a project (CrowdWorks, 2017; MIC, 2014).

The competition-based model is similar to the project-based model, although in this case the duration of work is typically much shorter, varying between a few minutes and a few hours, and also suffers problems associated with late payments (and sometimes non- or underpayments) (MIC, 2014; Rengo, 2016). For instance, in some cases, crowd workers apply for projects after planning how they would carry out the required tasks and sharing their ideas and estimates with clients who advertised those jobs without ever hearing back from the would-be clients. In such cases, the workers worry that the clients to whom they applied for work might have used their ideas without paying for them. This is, therefore, an obvious risk faced by crowd workers, who can be paid only after completing their assigned jobs. As Huws (2014) points out, digital workers are alienated from their own labour because they are employed to do such fragmented tasks that they often do not know to which final products/commodities their work has contributed.

The task-based model of crowd work tends to include smaller, often lower-skilled, jobs or tasks, including administrative tasks, designing simple websites, writing short advertising articles, inputting data and clicking website links (Lancers, 2017). The fragmented way in which these tasks are distributed, and the scale of the competition for jobs, are such that they have been noted for creating a ‘race to the bottom’ as crowd workers seek to reduce their cost estimates to competitive levels (Uluru, 2015). Thus, remuneration for task-based jobs in Japan ranges between USD 0.04 and 2.3 (USD) per task. In addition, 22 per cent of crowd workers who engage in task-based work have experienced delays in payment, with roughly 15 per cent of these experiencing no payment or underpayment (Rengo, 2016). This problem is exacerbated by the lack of regulatory control of platform work under the minimum wage system.

Satisfied Employers

From an employer’s perspective, crowdsourcing creates opportunities to reduce costs and avoid burdensome responsibilities. The government seeks to highlight the putative freedom and autonomy of crowd work by publicising survey results. In a survey conducted by the MIC, more than half of the employers who responded (55.7 per cent) claimed that crowd service improved productivity and efficiency. 48.9 per cent reported that it reduced commuting time (MIC, 2015). In addition, 64.9 per cent of small- and medium-sized enterprises (SMEs) responded that crowdsourcing is useful for its ‘just-in-time’ employment scheme, and 57.3 per cent viewed crowdsourcing as filling a gap in the workforce (Small and Medium Enterprise Agency, 2014). This clearly evinces the government’s effort to creating a positive image of crowdsourcing for employers and highlights the high degree of flexibility crowdsourcing can create.

Work-life Balance

In addition to praising crowd work for enhancing efficiency, many employers (30 per cent) also welcomed crowd working on the grounds that it improves work-life balance for their employees. Another 38.7 per cent of employers who reported that they were considering incorporating crowd work into their business models reported perceiving it as a potential benefit for employees (MIC, 2015).

These survey findings should be viewed in the context of Japan’s labour market, which is widely thought to suffer from problems caused by long working hours, as evidenced by elevated rates of premature death and suicide. As such, a kind of moral panic has emerged across much of Japan, generating pressure on Japanese firms to address the poor work-life balance afflicting Japanese workers. The introduction of crowd working, therefore, represents a somewhat superficial means by which to *appear to be* tackling the problem of excessive work hours in a way that costs employers little or nothing (and indeed yields a number of benefits). By highlighting the results of its own survey, the government seeks to create the impression that crowd work improves work-life balance and thereby benefits both employers

and employees as it emphasises the fictitious freedom it purportedly offers employees.

Cost Reduction

The pursuit of reduced staffing costs reflects one of the most important motives driving the increase in crowdsourcing among hiring firms. The aforementioned survey finds that 36.3 per cent of potential employers view reduced costs as a reason to engage in crowdsourcing (MIC, 2015). Crowdsourcing firms clearly highlight their ability to reduce staffing costs for client firms as well as costs associated with providing office space, equipment and worker benefits and insurance (MIC, 2016). This feature has attracted both private firms and public sector authorities, including government ministries and local government administrations, to consider crowdsourcing to access labour. The government demonstrates the cost efficiency of crowdsourcing and just-in-time availability of crowd workers by using the services for itself.

Employment Opportunities

Crowd work, therefore, provides employment opportunities for workers who tend to be less privileged than regular male workers in the traditional labour market. More female workers (about 40 per cent), and people in their 50s (45 per cent) and 60s (40 per cent), than males (33 per cent) use crowd work as their primary jobs (Rengo, 2016). Although many crowd workers are dissatisfied with their income, crowd work is gaining increasing popularity. Indeed, a survey conducted by the MIC (2016) reveals that over 42 per cent of respondents would like to choose when to work and 36 per cent would like to choose where to work. Elderly workers over 50 years of age choose crowd work for self-improvement or extra disposable income (CrowdWorks, 2016). Female workers, in particular, have tended to engage in unpaid household work, and it is therefore unsurprising that 17 per cent of female crowd workers cite the ability to take care of housework and family affairs as a reason for engaging in crowd work (Rengo, 2016).

These survey results indicate that employers are satisfied with this new form of labour as many have embraced the use of flexible contracted digital workers. The crowd workers themselves are satisfied with their work but only to a certain degree. This is partly because the government has succeeded in advocating for the benefits of crowd work by pointing out the high level of satisfaction indicated by its surveys and the opportunities that crowd work creates. This study seeks to go beyond such technological determinism, in which 'technology is conceived as an actor that results in certain phenomena with societal characteristics' (Fuchs, 2014, p. 328), and on the basis of which the government and employers tend to highlight only the benefits and advantages of digital work. The present study takes the position that evaluating the nature of crowd work is not, however, entirely straightforward, concurring that crowd work has 'no inbuilt effects or determinations' but is rather 'embedded in antagonism' (Fuchs, 2014, p. 328) that marks labour relations in Japan. The next section examines how employees view crowd work and how the

crowdsourcing sector has influenced employment relations in Japan, which itself has been witnessing many transformations and an increase in precarious work since the 1990s.

Paradoxical Autonomy of Crowd Work

By examining crowd workers' experiences more closely, it is argued in this section that crowd work has increased worker vulnerability. The paper also argues that crowd work has been embraced as a means of enhancing the flexibilisation of labour by the government and employers in such a way that employers can avoid being held responsible for flexibilisation by employing crowd workers because the arrangement grants workers greater autonomy. It further examines the way in which crowdsourcing businesses in Japan operate, with a particular focus on the associated risks and concerns. It draws on survey results issued by the government (the MIC), Rengo (the Japan Trade Union Confederation), crowdsourcing firms and a citizens' group. It also analyses online review sites where crowd workers evaluate crowdsourcing firms and their work experiences, government reports, research institutes and online information published by crowdsourcing companies.

Low Pay for Task-based Crowd Jobs

Perhaps the greatest cost to workers involved with crowd work is that of low pay for low-skilled participants. There are no data available indicating the average wages of crowd workers. Income from crowd work varies, depending largely on whether it is a worker's main job. In cases where it is the main job, monthly income is typically around USD 664 (73,268 yen), whereas it is roughly USD 274 (30,249 yen) for those working as crowd workers alongside other work. While CrowdWorks advertises that common crowd jobs such as data inputting provide USD 9.2 (1,000 yen) per hour, many tasks advertised offer extremely low remuneration. Remuneration for the task-based crowd job of a 5-minute interpretation or translation is merely USD 1.4 (150 yen) and sometimes lower (Lancers, 2017).

A divergence in pay rates between skilled and unskilled crowd workers seems to affect the level of workers' satisfaction with pay. For instance, 66.3 per cent of low-skilled crowd workers who carry out simple tasks such as inputting data and minor account adjusting are dissatisfied with their pay, whereas only 33 per cent of those workers are satisfied (Rengo, 2016). The level of satisfaction with pay, therefore, tends to vary according to the type of work involved, with the level of satisfaction rising for those doing computer systems development and programming, whereas it is much lower for those conducting task-based crowd jobs (Rengo, 2016).

Crowd workers who have registered with Lancers mention, 'Lancers may be the place for people with certain skills, they may be able to earn enough. Unless you have some skills, there are hardly any tasks that you can do and it is extremely difficult to earn sufficient side income' (Zaitaku Worker, 2018a, author's translation).

These considerations strongly suggest that crowd workers who conduct simple tasks, representing a plurality of crowd workers (roughly 40 per cent), are paid

poorly for their 'autonomous' work. Although they provide just-in-time work, they receive low remuneration and report a correspondingly low level of satisfaction. The level of satisfaction rises for crowd workers who utilise such work as a supplementary job. Moreover, low pay is accepted as adequate by many female and elderly workers who find few work opportunities in the general labour market. Female workers with family responsibilities to meet might believe that it is better to have some income than nothing. This makes crowd working relatively attractive and gives them a sense of freedom even though, as we will see, it might be better considered a fictitious form of freedom. This highlights the contradictions involved in an idealised conception of crowd work. The era of technological hegemony creates fragmented work tasks, for which the majority of crowd workers are paid subminimum wages. Despite this, importantly, technological hegemony has generated some sense of satisfaction among crowd workers.

Uncertain Pay for All Crowd Workers

Almost all crowd workers worry about uncertainty over being paid. Crowdsourcing firms generally charge client firms a fee for requested tasks/projects that is retained while the work is carried and released to the worker only after a task/project is complete. While a client firm that cancels a contract incurs a penalty, it nevertheless retains a significant amount of this penalty, ensuring that workers lose when work is cancelled. Indeed, this is one of the main ways in which crowd workers suffer non-payment or underpayment.

All crowd workers are paid at the point of completion of tasks. This method of payment also implies that some crowd workers are required to go without pay for relatively long periods of time. This problem is compounded, moreover, by the fact that nearly 50 per cent of project-based crowd workers including systems engineers and developers experience late payments for work completed (Rengo, 2016). As such, many crowd workers experience anxiety that is associated with both the need to be highly competitive to win bids and the uncertainty regarding payments for work completed.

Crowd workers generally receive much lower levels of pay than most other workers, including other non-regular workers (cited in Ministry of Economy, Trade and Industry [METI], 2016). Payment for many tasks is, therefore, significantly below minimum wage, which is not enforced for crowd workers. In addition, crowd workers receive no welfare benefits. This means lower pay for crowd workers than for other non-regular workers because employers can avoid providing crowd workers with legal welfare benefits that they provide to other non-regular workers. This suggests that not only low-skilled crowd workers but also high-skilled crowd workers can struggle with payment issues and low remuneration.

Monitoring and Control

Many crowdsourcing companies assign evaluation scores to crowd workers, enabling client employers to differentiate workers on the basis of these scores

(MIC, 2014). In the case of Lancers, this includes a certification system that rewards crowd workers who receive higher scores and monthly rankings of the workers (Lancers, 2017). In the case of CrowdWorks, workers' portfolio pages include similarly skilled crowd workers, enabling employers to surf through workers' pages to compare those with similar skill sets, thereby intensifying competition.

Adding to these pressures, crowd workers must contend with deadlines (Rengo, 2016). This clearly, therefore, calls into question the notion that crowd work is autonomous work. In addition, CrowdWorks uses a time-card system, which logs a worker's status and enables employers to check who's working and available and identify the projects on which they are working. Such a level of monitoring further belies the notion that crowd workers are free and autonomous. Instead, they can be monitored constantly as they work on online platforms rather than in offices.

Crowd workers face yet another form of control in that they receive remuneration only after clients confirm that their tasks are complete. This is where workers often encounter troubles with their clients. Unless a client confirms its approval of a crowd worker's performance, that worker is not assured of receiving payment. In cases involving multiple revisions or follow-up work that fails to satisfy clients, when clients refuse to accept revised versions of a job, crowd workers suffer non-payment or underpayment for their work (Freelance-fans, 2017).

This employment structure represents a new form of control and domination enabled by crowd working. The industry has yet to establish an adequate level of regulation of client firms, in whose hands the fates of crowd workers rest. Crowd workers are continuously expected to prove their availability, efficiency and performance quality, something enabled by the technological development of crowdsourcing. Crowd workers' putative autonomy is actually paradoxical insofar as their lives are controlled by the productive relationship in which crowdsourcing and client firms dictate the terms of their contracts, and they experience heavy work pressure as a result of their flexible working practices.

Growing Uncertainty over Crowd Work

The majority of crowd workers (90 per cent), including highly skilled knowledge workers, express concern over their work (Rengo, 2016). A majority, 51.8 per cent, of surveyed crowd workers are worried about whether their opportunities to work will remain available (Rengo, 2016). This is particularly notable among low-skilled workers who engage in micro-tasks and who view themselves as easily replaceable.

Many low-skilled crowd workers also find their work unrewarding. For instance, a low-skilled crowd worker mentioned, 'I am not a volunteer and since I don't receive adequate pay I don't find crowd work interesting or worth doing' (Zaitaku Worker, 2018b, author's translation). Many comment that they cannot find the right jobs or that it generally takes a long time to find appropriate jobs. The procedure involved in finding jobs and obtaining remuneration is also said to be cumbersome. These concerns reflect the unreliable nature of online work, and workers are not convinced they can find rewarding jobs and hence they do not necessarily feel autonomous.

Indeed, more than 20 per cent of crowd workers expressed concern over whether their clients would honour their contracts or would ever pay them. For instance, some high-skilled crowd workers complained on the online site that their 'clients suddenly cancelled their contracts half-way through their tasks' or 'right after a contract was finalized' (CrowdWorks, 2018). One worker said, 'I heard that my project was not selected. I asked for feedback, but I only found out that the client firm was no longer there. That client stole my work without payment' (CrowdWorks, 2018, author's translation).

In these cases, clients did not honour contracts or stole ideas before they had finalised contracts and, in those cases, there were no payments to crowd workers. Some highly skilled crowd workers therefore consider crowd work unrewarding and are increasingly aware of the risks involved in working for crowdsourcing clients.

As a result of the multiple uncertainties surrounding both high- and low-skilled crowd workers, these workers typically report high levels of anxiety regarding job security, the availability of work, task performance and task deadlines. Workers' minds and bodies are not the private property of capital, but they are unfree, compelled by the 'silent compulsion of economic relations' (Marx, 1867, cited in Fuchs, 2017, p. 14). Yet crowd work is idealised by the Japanese government, employers and sometimes by workers themselves for freedom and autonomy. In contrast, the reality of crowd work is such that workers are increasingly 'unfree', in that they are compelled to work harder and be more efficient to win contracts.

Gender Pay Gap

Some claim that platform-based work reproduces gender inequality (Barzilay & Ben-David, 2017). Nearly 50 per cent of female crowd workers engage in task-based work which requires low skills, including writing, data input, simple administrative tasks and organising pay slips, whereas 33 per cent of male workers engage in these tasks (Rengo, 2016). These are typical tasks for female workers, who engage in unpaid household/care work but can use their spare time crowd-working to earn income. These simple tasks provide very low pay, and this reflects the greater dissatisfaction over pay rates among female crowd workers. Rengo (2016) reports that nearly 52 per cent of female crowd workers are not satisfied with their pay. On the other hand, male workers tend to engage in high-skilled projects such as systems engineering, which pay higher fees, leading to a higher level of satisfaction among male workers (Rengo, 2016). This results in gender-based wage disparity in the crowdsourcing sector that is similar to that in the traditional labour market. In addition, opportunities that crowd work generates chain female workers to low-paid tasks because in Japan they are largely responsible for household work, further widening the gender pay gap.

Pitfalls of Deregulated Labour

Troubles between crowd workers and their employers are often reported. Many crowd workers have experienced delayed payments (20 per cent), underpayment or

no pay at all (17 per cent) and unreasonably low pay (16 per cent) (Rengo, 2016). Roughly 53 per cent of survey respondents, therefore, experienced pay-related problems. According to the online site where crowd workers evaluate crowdsourcing companies, 43 per cent of crowd workers who obtained work through the platform Shufti, which connects housewives with clients, experienced troubles with those client employers. This may imply that client employers seek housewives in crowd-sourcing because they are not primary household income earners and therefore will work for lower pay.

Many companies have integrated crowd service into their staffing strategies to reduce office costs and protect their core employees. It is not hard to imagine that this sometimes creates inappropriate pay rates for crowd workers. Employers can avoid providing employee benefits/insurance, which employers are supposed to provide to both regular and non-crowdsourced non-regular workers. This practice indicates a concrete step towards further flexibilisation of labour. This generates anxieties over remuneration and employment security among the majority of crowd workers.

As we have seen, the major crowdsourcing platforms in Japan have created a new form of work that is characterised by de-skilling, anxiety, insecurity and a system of payment that creates cash-flow shortfalls for workers. As such, it is difficult to uphold the claim, made by its advocates, that crowd work is a means by which workers are able to enhance their autonomy and creativity. It should be noted that those working on a piecemeal basis are not alone in their dissatisfaction with crowd work. Crowd workers who engage in systems engineering and computer programming complain about the challenge of time management caused by the pressure they experience meeting deadlines and carrying heavy workloads. Many crowd workers (roughly 40 per cent) see themselves as working outside of the protection of the Labour Standards Act (Rengo, 2016). This, therefore, enables employers who hire crowd workers to exploit the absence of regulations.

Conclusion

Crowdsourcing firms, their clients and the government advocate that crowd work provides opportunities for workers to enjoy autonomous working practices, enabling subpopulations such as women and the elderly who would otherwise be excluded from the labour market to find employment. As this article has sought to show, this is far from the case. Instead, crowdsourcing is perhaps better considered a means, enabled by technological advances, by which to flexibilise the labour market. Many crowd workers find this new working practice, digital labour, satisfying in some ways, but many also have experienced problems with clients over late, low or absent payments or cancelled jobs. Crowd workers are not adequately protected. The chief benefit of crowd work is that it enables firms to mask the intensification of exploitation behind superficial notions of autonomy and freedom, thereby concealing the additional precarity that it introduces to the Japanese labour market. Some degree of autonomy is felt by many workers, but they also sense that they

are controlled, which manifests in the paradoxical autonomy of crowd work. This further implies that crowd work is embedded in contemporary antagonisms in Japanese employment relations.

Crowdsourcing is, therefore, associated with low pay, the absence of welfare entitlements, precarious access to work, heightened competition, uncertainty over pay, performance and deadlines, and deterioration in the work-life balance. It also contributes to a widening gender pay gap, locking women into low-paid, low-skilled jobs. Crowd work has a tendency to be associated with zero-hour contracts, in which work is not guaranteed and payment is unreliable. As such, crowdsourcing has produced within Japan a new group of precarious workers that exists alongside an already-expanding (non-crowdsourced) non-regular section of the workforce. These crowd workers are controlled differently from previous workers insofar as their work is not all that autonomous—they face strict deadlines, online evaluation mechanisms and continuous employment insecurity since many workers find it hard to find the right jobs or earn adequate remuneration. This is a new form of control imposed on digital labour.

Challenged by these working conditions, crowd workers face a range of obstacles. The online, invisible and individualised nature of their working lives makes it difficult to organise to voice collective dissent. This explains why acts of outright resistance against the development of crowd work are yet to occur, although few government regulations protect them. We may witness the emergence of greater demand for public regulation of working hours and wages. As other non-regular workers' criticisms against the lack of governmental protection problematise the flexibilisation of labour, crowd workers may find opportunities to impact the government's policies regarding this new form of digital labour.

The emergence of a new layer of precarious crowd workers in the Japanese labour market is not, however, a unique phenomenon. It is shared by many advanced economies, each of which has begun to witness a growing trend towards crowdsourcing as a core recruiting strategy for cost-focused firms. In the case of Japan's already-dualised and gendered labour market, businesses expand but the labour market from which they draw crowdsourced workers is characterised by exploitative employment practices, especially for non-regular and female crowd workers. This compounds the already rising levels of wage inequality, while perhaps going some way towards resolving problems associated with Japan's ageing population. As such, we might expect the number of crowd workers to continue to grow, necessitating further research focused on the experience of crowd workers, their role within the Japanese economy, and their potential for exercising agency through resistance and the resultant public policy responses.

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