

ORIGINAL ARTICLE

Fragmented Control of Platform Game Work in China

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Abstract

This article adopts a labour process theory approach to analysing distinct circuits of labour control in platform video game work in China, a novel manifestation of the platform economy rooted in the special formation of Chinese gaming infrastructure as well as in precarious labour regimes. Platform game work encompasses a broad range of online video game services such as live game streaming, paid boosting, and game companion, matching customers' demands to workers who provide entertainment or assist play. Platform game work has drawn an estimated seven million young workers into precarious employment during the past decade. The article outlines three interwoven features defining the fragmented control of platform game work: the crucial function of extra-platform intermediaries in regulating labour processes; the deployment of relationship labour in order matching and community management; and the mutual reinforcement of platform diversity and fast-moving platform architecture. These three features co-create a decentralised yet resilient structure organised by a network of platform and non-platform, human and machine agencies. Positioning platform game work in the broad spectrum of gig work, the article illuminates new modes of labour control and workers' embedded agency, adding to the nascent literature on diverse labour regimes and subjectivities in the platform economy.

Keywords: Digital labour; game worker; labour control; platform work; relationship labour

JEL codes: J18; J41; J83

Introduction

Debate on the platform economy has been somewhat skewed towards predominantly male, location-based forms such as delivery and ride-hailing work. Inspired by emerging academic efforts to identify diverse labour regimes and subjectivities within the platform economy (Gray, & Suri 2019; Milkman et al., 2020; Rand, 2019; Schor et al., 2020; Ticona & Mateescu, 2018), this article examines the work of paid game service workers in the Chinese platform gaming industry and investigates the implications for labour process theory. Platform game work in China presents a novel manifestation of the platform economy, one that is both rooted in the special formation of Chinese gaming infrastructure and is also a new form of precarious labour regime.

Platform game work encompasses a broad range of online video game services, such as live game streaming, paid boosting, and game companion work that matches customers'

service demands with workers who provide entertainment or assist play. With the precipitous rise of eSports, platform game work has developed into the defining feature of the Chinese video game industry during the past decade, attracting an estimated seven million young gamers to become digital labourers.

Through the prism of platform game work, this article illuminates the unique hybrid and decentralised labour processes of China's newly emerged gig game sector, challenging more common platform economy narratives based on algorithmic control by a single platform. Platform game work shares characteristics of game development work as well as mainstream gig work but is overlooked by both realms of study. A thorough investigation of platform game work foregrounds new perspectives in the labour process analysis of video games, which hitherto have focused on labour conditions and the activism of formal game makers in post-industrial economies (Bulut, 2020; Ruffino & Woodcock, 2020). Recentering academic attention on platform game work exposes the increasingly rampant internal segregation within the video game industry, as increasing numbers of temporary, contract and outsourced, female and migrant labourers are recruited to construct, promote and sustain a booming market at unprecedented pace (Bulut, 2015; Ozimek, 2019). Exploration of platform game work provides the opportunity to enhance and critically interrogate study of the platform economy, as its idiosyncratic labour processes bring multiple stakeholders together in novel ways and reveal new elements of the emerging control regime of virtual work on a global scale.

In the following sections, I present an overview of the unique mode of accumulation in the Chinese video game industry and outline the fragmented labour control of platform game work. The fragmentation of control is characterised by three salient features including: the crucial role of extra platform intermediaries; the hybrid use of human and machine labour in order matching and community management; and the mutual reinforcement of platform diversity and fast-moving platform architecture, that both accelerates workers' mobility across platforms and stifles their opportunity for collective action. These three features significantly expand the number and type of agencies involved in organising platform game work, making the control pattern more decentralised and network-based. Theoretically, this article calls for a more nuanced labour process analysis of both game work and gig work to reveal the inner contradictions and stratification of work control, especially when game and gig work intersect.

The rise of platform game working

In the literature on digital labour, early discussion of video gaming saw the production side of the story as a subtype of cultural and immaterial production (Dyer-Witheford & de Peuter, 2009; Hammar et al., 2020; Whitson, 2019; Xia, 2021), with a major line of scholarship focused on the game workers who were integral to developing and maintaining the virtual economy (de Peuter & Young, 2019; Deuze et al., 2007; O'Donnell, 2014). Newer scholarship beyond the West has investigated game workers' resistance against bodily control (Kim & Lee, 2021). However, most studies still define game workers as either content developers (Whitson, 2019) or casual gamers who contribute free labour (Taylor et al., 2015), a framing which obscures the stratified nature of video game work and skews debates toward middle-class tech and creative workers. Scant attention has been paid to the large armies of outsourced and informal workers from marginalised communities whose labour is devalued in a segregated system.

The maturation of the video game industry has been accompanied by its global re-territorialisation, realised through heightened differentiation between formal and informal game work, and between different sub-sectors within formal and informal markets (Bulut, 2020). While the formal workforce is primarily dominated by middle-class

males who benefit from the regional concentration of financial capital, cultural resources, and technology hubs, their informal counterparts disproportionately reside in peripheral and semi-peripheral regions. For instance, within the game development community (predominately composed of skilled labourers) a growing number of employees work on temporary contracts or in outsourced studios for major game companies looking to cut labour costs and avoid labour disputes (Švelch & Švelch, 2020). Such differentiation is well represented by the exploitative working conditions of video game testers, who are regarded as essential, yet inferior to other core workers such as programmers and creative directors (Bulut, 2020). The work conditions of game testers, who are often classified as support staff, are more akin to those of factory workers (Bulut, 2015; Ozimek, 2019).

Nevertheless, stratification within game development is only part of the story, as the most dramatic shift in the game labour force occurs outside the development cycle within the realm of game promotion and recreation. The prosperity of the online game market, coupled with gamers' demands for social interaction (Hilvert-Bruce et al., 2018), has created an assemblage of promotional or service-oriented game work that is increasingly platform-based, with Twitch live game streaming being the most publicly recognised trailblazer (Johnson & Woodcock, 2019; Taylor, 2018; Wollborn et al., 2021; Woodcock & Johnson, 2019). Unlike the work of game developers, the productive play of professional gamers lies between creative labour and interactive service work, involving intense performative, emotional and aesthetic work to engage audiences, clients and co-workers (Guarriello, 2019; Johnson, 2021; Woodcock & Johnson, 2019). Productive play thus represents a more feminised and precarious form of work than game development (Guarriello, 2019), with workers' emotions being commodified to increase the longevity of both platforms and video game products.

Not fully adhering to the 'invisible labour' paradigm (Lukács, 2020; Poster et al., 2016) that ties a worker's labour market marginalisation to social invisibility, these new platform occupations are gradually accepted by society as formal job categories to be defined, recognised and regulated. In China, the surge of platform game work has prompted the national labour bureau to officially recognise various forms of game work as new occupations, further boosting their social visibility. Platforms have also jumped on the bandwagon to formalise their workforce by issuing credentials in collaboration with industry associations. For instance, after passing the written and gaming skill test, platform game companions can obtain an eSports trainer credential which is displayed along with their profile. However, informality persists, both because workers are not legally classified as employees, and more importantly because there remain vast grey areas bolstered by non-platform parties such as gaming guilds and studios. Such indeterminacy is emblematic of the fragmented labour regime that I will detail in this paper. It is this hybridity of formalisation and informality which makes platform game work in China an exemplary case to interrogate common perceptions of the platform economy.

Point-based versus fragmented labour control of platform game work

Labour control at the point of production is the central concern of labour process theory (Braverman, 1998; Smith, 2015; Thompson & van den Broek, 2010). An extensive body of work has been produced to reveal the unique mechanism of labour control underpinning the platform economy and its resemblance to that in traditional workplaces with direct management (Gandini, 2019). Platform workers suffer from employer-imposed flexible employment and scheduling shared by all precarious workers, and are also subject to the heightened algorithmic manipulation, remote control, information asymmetries, and micro-level data extraction which characterise digital Taylorism in the platform economy (Briken, 2020; Cant, 2019; Griesbach et al., 2019; Rosenblat, 2018; Veen et al., 2020).

Nevertheless, as in conceptualisations of resistance in earlier labour process theory, scholars have contested the assumption of algorithmic despotism. Examples of worker agency and autonomy have now been unveiled, in responses to algorithmic control. These include negotiation, obfuscation, proactive catering to and resistance; a theme that was downplayed by earlier extensions of labour process analyses (Bucher et al., 2021, Cameron, 2020; Sun & Chen, 2021; Wang, 2018).

While previous studies have shown the diverse channels of value extraction used by platform algorithms, these studies tend to adopt a point-based analysis hinged upon a single digital platform and the archetypical tri-relationship between workers, clients, and the platform. Such a theoretical inclination might overgeneralise the implications of algorithms for platform-based control, as in some sectors of the economy key platforms have a relatively minor role in how workers are paid (Rand, 2019). At the same time, a point-based analysis risks downplaying the relational structure of service production. It is common for gig work to go through multiple human and machine intermediaries, as well as platform and non-platform stakeholders, knotted in an extended chain or net-like relationship.

In addition to algorithmic control, much human labour is involved in managing platform workers. For instance, African freelancers would re-outsource platform jobs to less resourceful peers in or outside the platform (Anwar & Graham, 2020). Another salient example is the increasing prevalence of the ‘drop servicing’ side gig in the US, wherein a middle person resells client orders to freelancing platforms (Sato, 2022). Apart from individual agents, non-platform stakeholders also abound within the platform ecosystem with one study showing that downstream intermediaries thrive alongside digital platforms as crucial gatekeepers in the field of US cultural production (Siciliano, 2022). In China’s food delivery sector, local service stations continue to function as labour agencies for gig workers despite the dominance of delivery platforms (Lei, 2021). In ride-hailing services, many platforms collaborate with major taxi operators welcoming all taxi drivers to sign up, claiming their platform enlarges the supply pool and will shorten customer wait times (Gojek, 2020). In each situation, individual agents and non-platform stakeholders have diversified labour control by serving as additional mediators in the labour process.

Theoretically, I argue that to fully grasp the control logic of platform game work in China, it is imperative to draw on the wisdom of global value chain (GVC) studies, which typically utilise multi-layer ethnography to illuminate the comparative power and resistance of labourers along the length and breadth of the supply chain. Value chain research underscores that workers at different locations in the production chain are subject to different structural factors, which in turn affect the possibilities and methods of their struggle (Baglioni, 2021; López et al., 2021; Martinelli, 2021). More importantly, it expands the conceptualisation of labour control from the singular point of production to the intertwining of the economic institution, the state, and a global labour market (Anner, 2015). This alternative method of conceptualising platform labour sees it as embedded in and indirectly controlled by entrenched power relations consolidated by global production networks (Howson et al., 2021; Robinson & Rainbird, 2013).

In the context of platform game work, a labour process analysis equipped with a network-based GVC perspective can better unpack the intricate service structure that internally stratifies the workforce and pushes marginalised workers further away from clients. Therefore, it is imperative to move beyond the theorisation that labour control is exercised by a dominant platform acting as a behemoth exploiting powerless workers. Instead, as I will show in the following analysis, the platformisation of game services in China is better conceived as the rise and consolidation of a fragmented interactive pattern of control embedded in ‘a field of stakeholders’ (Ticona, 2022) with independent and often conflicting interests. This view presents a more relational picture than the prevailing depiction of the sharing economy movement in the western contexts.

Data and methods

This study is based on a longitudinal project charting and analysing the history and organisation of platform game work in China, which involved the collection of 90 interviews, on-site and virtual ethnography, and archives from 2019 to 2022. This article draws on a subset of the main data collected from summer 2019 to fall 2021 with 40 platform game workers, eight managers from gaming platforms, studios, guilds, or venture capital firms, 11 game company employees, and 11 gamers who are familiar with gaming services.

I focused on interviewing and observing ordinary game boosters, streamers, and companions as they were the three most common platform game workers. Of all interviewed workers, 17 identified as women and 23 as men, with ages ranging from 19 to 31 years at the time of interview. Twenty-six workers had acquired income as game companions and 13 via paid boosting. Thirteen earned donations through live streaming, and seven earned extra income via other gaming activities such as running private servers or hosting chat rooms. For 28 workers, platform game work constituted their primary source of income. While the remaining 12 workers had other incomes, only two had socially recognised 'stable' jobs that provided social security. Overall, these workers' gaming incomes ranged from 1,000 to 20,000 yuan (1 yuan = 0.2 AUD) per month with an estimated hourly wage of 15–50 yuan, not accounting for hidden costs such as order waiting times, internet fees, and platform penalties.

Participants were located via both personal connections and random selections on platforms. Initial interviews lasted from 40 to 200 minutes and were conducted in Chinese. I provided on-demand workers monetary compensation equivalent to their hourly rate to minimise the impact of our conversations on earnings. Moreover, I added at least one social media handle for all interviewees and kept them updated on my research progress. While I lost contact with ten people, other workers continued to provide me with clues and insights on various topics after the initial interview, which facilitated my study to great extent. All names used are aliases. All data were coded using MAXQDA software.

Context: an overview of platform game work in China

The Chinese video game industry is much more diverse than its counterparts in other countries, both in terms of the class and gender backgrounds of gamers, and the quality and genre of games available on the market. China has the highest percentage of both gamers and active female gamers in the world (Chen, 2017; Harper, 2020). According to a 2019 industry report, women players constitute 44% of all gamers in first and second-tier cities in China, and the percentage of women who invest a significant amount of time and money in gaming is way above the global average (Newzoo, 2019).

The high embeddedness of video games in people's everyday lives and the apparent near-gender equality in gaming in China cannot be interpreted simply as the democratisation of digital gaming. Rather these features are a clear reflection of the industry's high capacity to commodify all forms of gameplay and solidify internal stratification of market demands and production models (Liu & Lai, 2020). As Zhang and Fung (2014) have remarked in their study of Chinese online gaming guilds, heavy reliance on cheap labour and immediate profit returns shortens the production cycle of games and inadvertently turns more gamers into consumer labour.

Consequently, China's game industry largely rests upon the profitability of free-to-play mobile games and related eSports events (Ismangil, 2018; Szablewicz, 2016), with their annual growth significantly outpacing other gaming products. The social and competitive nature of online games has given rise to a whole gamut of lucrative businesses that are the brick and mortar of the gigantic gaming ecosystem. These secondary businesses hire large numbers of gig workers with humble educational backgrounds and organise novel types of

game work such as paid boosting (Miller, 2015), game companion/coach/teammate (Shen et al., 2021), real money trading (aka. gold farming) (Liboriussen, 2016; Tai & Hu, 2018), account rental, game hacking, and private server. Some sectors, such as gold farming and its variant boosting, are at least two decades old, while live streaming and game companion are newer creations that require better connectivity. Regardless of the sector, all services are increasingly organised on a platform basis. For example, an individual game companion plays an online game for a predetermined amount of time with clients who place orders via a service platform that takes around 20% of the order amount as commission. Game companions team up with customers in completing in-game missions and winning matches, helping customers level up and providing emotional support throughout the course of the game.

Owing to the informal nature of the industry, it is difficult to estimate the overall number of platform game workers in China. However, based on data from key platforms, I have calculated that there were at least 7 million platform game workers by the end of 2020. In addition, the gender-balanced gamer demographics in China led to the high participation of women in platform game work. In my fieldwork, full-time women workers vastly outnumbered men in game companionship, especially after the pandemic upended the economy. According to my observations of multiple online groups, even in paid boosting which is traditionally considered men's work, women constituted at least 15% of the workforce; a higher proportion than that found in China's other male-dominated gig sectors, including food delivery where only about 10% were women (Meituan Research Institute, 2020).

Despite variations within this diverse workforce most platform workers, like the overwhelming majority of gig workers, are not defined as employees of the platform. They have irregular schedules without social insurance, and their income varies greatly over time. A very tiny minority are contract workers for platforms who receive a modest base income and prospects for promotion but are subject to severe guidelines regarding the minimum number of hours they must work and the games they can play. Although these contractors are relatively better off than pure gig workers, they usually hit a popularity and income ceiling due to gaming celebrities monopolising traffic. As one contracted *League of Legends* streamer complained:

The platform never sets my work schedules. But in reality, I need to make sure not to directly compete with those top streamers in their golden hours, which forces me to live stream the game at midnight after they have all logged off. I simply don't possess the capacity and luck to become a top streamer. (Interview with Ann, Sept 2019)

These distinctive features make platform gaming in China a highly illustrative case through which to understand the variation in labour processes and control in the digital economy and by which to explore the broader implications of the rise of cloudwork under precarious capitalism.

Fragmented labour control of platform game work in China

This paper unearths three key features that collectively render the control of platform game work fragmented. The crucial roles of gaming guilds and studios, the widespread adoption of relationship labour, and platform diversity increase the number of control agencies and complicate the interactive patterns of labour control within the platform gaming ecosystem. Rather than being controlled by a single powerful entity, often a dehumanised algorithm in platform analysis, Chinese platform game workers are embedded in a resilient network of different platforms and extra-platform mediators that fragment not only the labour control model but also the workforce. While workers enjoy a certain degree of mobility in a virtual terrain managed by different entities, these

intermediaries are more or less able to constrain the workforce with a combination of machine and human power.

Extra layers of mediators in organising platform game work

Labour process analysis of the gig economy typically conceptualises digital platforms as the sole mediators between capital and labour (Gandini, 2019). However, as Lei (2021) has outlined in her study of food delivery workers in China, the ecology of platform work can be further complicated by the interference of an extra layer of mediators; such as local service stations acting as labour agents. This extra layer of mediators challenges the common ways scholars conceptualise labour control and resistance in the gig economy. In the case of platform game work in China, additional agents, including gaming guilds and gaming studios, play an even more decisive role in labour control than do service stations in food delivery service.

While gaming guilds originated as communities of gamers of multiplayer games to support each other in battles, join team competitions or organise virtual gatherings, they have become more commercialised over time (Zhang & Fung, 2014). As a result the term ‘guild’ has taken a different meaning in China. In the context of platform game work, a ‘guild’ or ‘Gonghui’ in Chinese, refers to a formally registered management company that many game workers, especially live streamers and companions, choose to join through a contract. Once a worker joins the guild, the guild helps train and promote the worker on the platform while taking a pre-determined percentage of the worker’s income, including regular order incomes and bonuses. Some guilds even rent a cheap villa in the suburbs to provide free lodging and meals for contractors, although in such cases, workers are subject to all-day surveillance by the company.

In contrast, gaming studios are commercial entities that hire on-site or remote workers, usually boosters and companions, to complete second-hand the orders studios receive via various platforms. Studios typically have the upper hand in securing better orders as they accumulate positive ratings more efficiently than individual gig workers, thus feeding a vicious circle of magnifying the visibility of studios while obscuring and marginalising individual workers on the platform. Moreover, gaming studios also amass sufficient resources to trick the platform algorithm into boosting their rank by bulk-creating fake IDs and followers. As a result, some new workers join such studios to receive stable orders, even though the agency further chips away at their hourly wages.

Gaming guilds and studios were able to solidify their business models before the rise of digital platforms in China and have simply repackaged themselves as a fourth player in platform game work, with their own independent interests, serving as an arbitrator between the worker and the platform. To some extent, these mediators have become a handy agency through which platforms exert indirect control over workers that are otherwise difficult to reach. However, gaming guilds and studios operate across multiple game platforms and are thus far more autonomous than the service stations affiliated with food delivery service platforms (Lei, 2021). In response, platforms have taken precautions against the monopolising potential of large gaming guilds and studios. For instance, platforms have established their own official guilds to compete with other non-platform guilds. However, according to a guild manager in Shenzhen, most efforts to tame the expansion of extra agents are superficially enforced:

The total number of guilds is inflated because many seemingly independent guilds are actually branches of larger companies to avoid platform regulation. Platforms are also crystal clear about the fact; nevertheless, they decide to maintain peace on the surface. (Interview with YT, Dec 2020)

Although extra mediators are powerful players in the ecosystem, they are far from dominating the platform game market, as workers proactively weigh the costs and benefits of affiliation with extra mediators. In my study, all workers have considered the option of joining a guild or studio, and almost half have done so. Those who join enjoy benefits such as promotion opportunities, stable clients, and even income rebates but are subject to stricter control by the mediating entity. Workers also risk joining unhelpful companies that are run like a Ponzi scheme, ultimately damaging their interests.

Theoretically, the guild is obliged to promote you, but there are too many famous live streamers in it, and you don't get the chance to be promoted. Once you sign the contract, you are left on your own, but 20% of your bonuses still go into the pocket of the guild! (Interview with Zeng, Dec 2020)

However, neither the platform nor extra mediators can fully control workers due to the unique patterns of communication between workers and clients, which enable the two parties to get to know each other and add contact information. Unlike ride-hailing drivers or delivery workers who only have one-shot interactions with customers, my research showed that platform game workers were able to build closer and long-term relationships with customers by completing returning orders. Disintermediation, or Sidan in Chinese, is against the rule of all platforms, guilds, and studios. Still, apart from claiming that all Sidan workers are unlawful scammers, these entities have few concrete strategies for dealing with the issue. In my study, although all workers still maintained their platform profiles to attract new customers, they had also earned more or less extra platform income through direct transactions with clients, especially if they had accumulated sufficient social capital to receive stable orders:

I still use Platform B to take companion orders, but for boosting, I prefer direct orders via referrals from friends and returning customers. I used to work for studios, but they snatch a significant portion of my income, and I don't get flexible schedules. (Interview with Sam, July 2019)

The illustrations above imply that platformisation of game work is an uneven, unfinished, and contested process met with proactive intervention by both extra-platform mediators and workers themselves. Rather than eradicating non-platform mediators that existed long before the platform economy, platforms absorbed them into a new symbiotic relationship, which shaped the ways through which workers were controlled by and reacted to the system.

Hybrid control: between algorithmic rankings and human labour

The proliferation of game guilds and studios limits the scope of what platform algorithms can rule. Even within the platform's reach, labour control is less dependent on algorithmic management. Apart from the common tactic of utilising algorithms and clients to exert indirect control (Griesbach et al., 2019; Rosenblat, 2018), gaming platforms also rely heavily upon, and in some cases increasingly count on, contingent human labour to conduct matching and manage the gamer community.

Gaming platforms explicitly promote and recruit manual labour rather than rejecting or concealing it. Game companion platforms' use of the 'order dispatching hall' (Paidanting, hereafter PDT) illustrates this dynamic. PDT is one of the main ways users can place an order on companion apps but it can also be used to evaluate and select workers, and thus forms an additional tool to algorithmic rankings and matching. PDT's are virtual chat rooms where clients manually select workers with the assistance of a

moderator/host. To initiate a successful order, clients, who are greeted ‘bosses’, enter the ‘hall’ and tell the host their basic order requirements such as the name of the game, preferred gender, in-game roles, and expected pricing. On seeing such requirements in the order system, aspiring workers can join a round of self-introduction in the hall, where clients are able to choose one or more workers who meet their needs. The whole process is officially called ‘jumping orders’ and involves the active participation of the platform’s moderator who helps greet clients, confirm the speaking order, mute participants, monitor offensive or lewd remarks, and de-escalate any tension.

Platforms’ promotion of PDT reflects their endeavour to address users’ discontent with algorithmically matched companions. The sound of a game companion’s speaking voice is an important selection criteria for gamers hiring services. An algorithmic search cannot sort people’s speaking pitch and tone, so PDT provides a voice testing space for customers to discover their preferred companions. Additionally, due to the prevalence of male-to-female voice changers, PDT has become an expedient way to detect machine-simulated voices. When gamers use voice changers, the voice is prone to background noise, current sound, and delay. Some customers can rely on these signals to determine whether workers and studios use voice changers before placing orders. More importantly, PDT aggressively shifts the cost and time of locating orders from customers to workers themselves. Prospective companions are required to employ more human labour to secure orders, under conditions that unwittingly intensify competition between workers. Nearly all workers who were interviewed complained about a lack of order acquisition resulting in the long hall waiting times and worker-to-customer ratios as high as 30–50:1 in a hall.

After dozens of tries, I have yet to grab any order in the hall. What a waste of time! It is more efficient to locate potential bosses using the search function and direct message them. (Interview with Max, Aug 2020)

More notably, platforms have transformed PDT hosts into another gig workforce dominated by female game companions, whose devalued and informal labour has replaced the algorithmic labour performed by well-paid core programmers. Using Platform L (PL) as an example, workers could apply for work as part-time hall moderators after accumulating some work experience. Each approved moderator was then allocated a three-hour slot to moderate the virtual room daily and was free to take standard companion orders outside the time frame. The platform evaluated moderators, and those with higher ratings could choose to work during the golden hours, potentially bringing them more followers and tips.

Despite low monetary compensation, hall moderation is highly competitive due to the potential for social capital accumulation. PDT’s promises of expanding a worker’s client pool alleviate collective grievances toward the platform and induces what scholars term *aspirational labour* (Duffy, 2017), the subjectivity of enduring low-paying positions in the hope of guaranteeing higher, future income. Sally, a game companion explained the benefits of serving as a moderator:

PL gave me 20–24 yuan for a three-hour slot, but I could also receive tips from bosses without completing orders. More importantly, I could get to know more bosses during moderation, among whom many will place orders on me later. (Interview with Sally, Dec 2020)

PDT is by no means a platform’s only method of minimising the unintended consequences of algorithms. PDTs also insert human labour into algorithmic rankings. My ethnography indicated that PB’s customer service representatives would register as top-ranked workers in the search interface. After receiving an order, these representatives forwarded the request to a group chat room where companions competed for the work. Customers were

not always notified in these situations, that the person taking the order was not necessarily the same as the person fulfilling it. Notably, algorithmic rankings were thus secretly reconfigured into human matching through this subcontracting process.

The reliance on hybrid control is not confined to the game companion apps but is also quite salient for other types of game work. For instance, the leading boosting app, Platform D, promotes their ‘manual hosting’ feature in the main interface, where a customer service agent oversees the entire order completion process.

The use of human labour in order regulation challenges the tendency of extant studies to emphasise the importance of the algorithmic panopticon in the gig economy (Woodcock, 2020). Even though platforms have not entirely discarded customer ratings and algorithmic rankings, these measures have been downplayed and rerouted by moderators and customer service representatives. Similar trends have been documented and theorised as the incorporation of relationship labour in the study of online service companies (Shestakofsky, 2017; Shestakofsky & Kelkar, 2020). However, one noteworthy feature in the case of platform game work is that such relationship labour is often shouldered by platform workers themselves, which further stratifies the platform gaming workforce. It also points to a promising direction for examining new forms of labour control through the deployment of relationship labour.

Platform diversity and disloyal workers

The resilience of guilds and studios, combined with the platforms’ own reliance on human control, has prevented Chinese game services from evolving into a field fully standardised by algorithms. New gaming platforms keep emerging, and venture capitalism also prompts existing platforms to modify their management models. Consequently, shifting platform types, architectures and regulations motivate workers to venture into multiple sectors and platforms. Only 13 of the workers I interviewed had revenue from just a single platform. Compared to ride-sharing and delivery where a few key players dominate, the ecology of platform game work in China is much more decentralised, with more than 100 gaming and non-gaming app-based platforms, among which at least a dozen possess a sizable market share and workers can earn an income. As a result, workers typically spend a tremendous amount of time navigating the kaleidoscope of platform features, choosing one or more platforms that best guarantee their income.

When browsing gaming forums, it is not uncommon to stumble across workers who offer both boosting and companion services. Some have even coined their own Chinese phrase, ‘Kedaikepei’, which is used as a self-promotional tag. In some lucky scenarios, workers used customers’ to-be-levelled-up accounts for companion or live streaming, earning a double or triple wage. Sam and Max, whom I quoted previously, have served as both booster and companion, as this provides the best earning opportunities for them. Another respondent, Jiaoyi illustrates a most extreme case, taking orders from five game companion apps, one boosting platform, and two extra-platform gaming communities.

I have signed up for many platforms that are pretty messy and lack proper regulation. Platform B is the better one due to its reasonable evaluation system. However, I still receive orders from all these platforms mainly because bosses seek workers on multiple platforms. (Interview with Jiaoyi, May 2020)

In fact, even workers who earned income from a single platform could clearly summarise the pros and cons of working for different platforms. This is because workers frequently exchange such information via group chats and online forums, expediting their already high cross-platform mobility. KS, a female game companion, migrated to PL as PB became too competitive.

Many of my co-workers migrated from PB to PL because there was too much competition at PB. Nowadays, you are regarded as the lucky one if you can secure one or two orders per day in the PDT of B, but in PL here, you could quickly grab five to six orders out of ten trials. (Interview with KS, Nov 2020)

Additionally, all the platforms I observed modified their interface, changed rules, and introduced new functions periodically amid fierce competition and state regulation. The increasingly heavy deployment of relationship labour mentioned above signifies only one dimension of the temporal variations in platform features. Meanwhile, leading platforms also blatantly imitate each other's revenue models to enlarge their customer base. For instance, one major boosting platform, PD, added a companion service in 2017. While PB introduced live streaming, streaming companies launched their own companion platforms in 2019, leading to an exodus of workers from many lesser-known apps. Some workers, including Sally (quoted earlier) view this move by streaming companies as an opportunity to boost their own income:

Taking orders at Platform H is quite rewarding. Although it charges a higher commission fee, you could meet more affluent bosses, who get used to paying 30 thousand yuan for a top live streamer. To them, 30 yuan per hour companion fee sounds like pennies! (Interview with Sally, Dec 2020)

A mutually reinforcing feedback loop between platform diversity and quick alterations in platform architecture speeds up worker mobility and stifles the airing of collective grievances. Workers typically switched to other, less competitive platforms when their income dropped rather than pursuing their rights. Following platform migration, many workers also expressed the hope that the new platform would improve as more features and guidelines are introduced. For example, even though KS was still troubled by clients' non-payment and sexual harassment, she thought PL was visibly becoming more 'institutionalised' over time as it moved to correct loopholes in PDTs. Similarly, Sally appreciated PL's revised way of calculating order prices for competitive games, which protected the workers from overworking on orders.

The responses of these platform game workers to platform modifications also serves as a reminder that platform game work is far from being institutionalised in China. Platform game workers tend not to publicly protest workplace injustice because they trust that time will eventually be on their side to improve their working conditions. This is because it is still seen as an emerging form of work with great potential for making quick money and absorbing surplus labour. Even tighter regulations on video gaming since mid-2021 have failed to dampen workers' optimism, as workers believe societal demands for gaming will remain and those legislative initiatives will drive platforms' reform to formalise the sector. As most companion platforms continue to operate despite regulation, workers are further reassured that the state's approach was 'reform' rather than 'repression,' which runs counter to other gig sectors whose modes of exploitation have been more thoroughly discussed and exposed (Pfeiffer & Kawalec, 2020).

Discussion and conclusion

The fragmentation of labour control characterised by the flourishing of extra intermediaries, the adoption of relationship labour, and the fluidity of platform architecture have not exhausted the distinctive circuits of labour control in platform game work in China. One aspect beyond these fragmented processes is the mechanism by which customers' positionality weakens workers' bargaining power. In particular, the fusion of love and labour,

and play and work documented by studies of virtual workers (Holts & Surugiu, 2016; Tai & Hu, 2018) has rendered wage theft more invisible and social accountability more challenging. Many workers find it exceedingly difficult to justify demands for higher wages and labour protection to a less sympathetic public. During my research, companions and boosters would complain about clients who delayed payment, aggressively underpaid, or refused to pay them simply because they were perceived as having fun and thus ‘not purely working.’ Such a process of devaluation might not hold water for many forms of gig work that are unquestionably exploitative, but it bears resemblance with a wide array of feminised labour ranging from fashion blogging to sex work (Duffy, 2017; Rand, 2019).

The rise of platform game work also epitomises the Chinese state’s efforts in tackling the crisis of work and reproduction (Chen, 2020), as well as ordinary labourers’ distrust of traditional work which no longer provides sufficient channels for upward mobility. Most of my respondents deem platform game work more profitable, flexible, and safer than their prior jobs, primarily factory or urban service jobs. Platform game workers’ career trajectories are beyond the scope of this article but constitute an essential part of workers’ self-selection into platform game work and refrainment from collective rights seeking, both of which are investigated in a separate study.

In contrast to how platform gig work is typically portrayed, this study has revealed a decentralised and fragmented managerial pattern defining the control of platform game work in China. This fragmentation of control is symbolised by the interference of extra-platform mediators, such as gaming guilds and studios, that preceded the rise of digital platforms. These extra intermediaries create new circuits of labour control while also curbing the unrestrained power of platforms, unwittingly empowering workers to resist platformisation. Over time, gaming platforms also increasingly rest upon relationship labour, adopting moderators and customer service representatives rather than algorithmic rankings to control the labour force. Platforms also make concerted efforts to absorb gig workers into relationship labour, mitigating dissatisfaction toward the system and further stratifying the workforce. Meanwhile, platform diversity coupled with shifting platform features accelerates worker mobility across platforms, lowering the propensity for engaging in collective rights seeking. Overall, platform game workers are embedded in a network of algorithms, human supervisors, platforms, and extra-platform mediators. Each entity exerts a certain degree of control over workers, but none can dominate the whole system.

By positioning platform game work in the broad spectrum of platform work, this study contributes to an emerging body of scholarship that deconstructs the monotonous and androcentric narratives of the platform economy. I call for incorporating global value chain studies in reimagining the labour control of platform workers while simultaneously moving beyond the typical depictions of platform architecture and the paradigm of algorithmic despotism to shed light on less visible players of the economy.

While most types of platform game work are confined to the Chinese market and Chinese diaspora at this stage, the conspicuous coupling of game work and gig work represents the rise of a resilient labour control system that has already reverberated in other digital localities, such as in the GameFi movement (Timmerman & Elliott, 2022). The overseas expansion of Chinese game companies could further accelerate this diffusion process, prompting scholars to explicate the implications on a global scale.

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