

Uncovering unpaid labour:
A qualitative study of platforms' strategies
for control and platform workers'
practices of misbehaviour in Belgium

Milena FRANKE

Proefschrift aangeboden tot het verkrijgen van de
graad van Doctor in de Sociale wetenschappen

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Onderzoekseenheid: Centrum voor Sociologisch Onderzoek (CeSO)

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I dedicate this thesis to all platform workers who participated in the research.

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1. Introduction

1.1 Introduction

"The one thing to avoid as a delivery rider is that you're just waiting, not doing anything. When you are waiting for an order outside on your bike, you are working but you don't earn any money." (Hans, 23 years, food delivery courier)

"I charged a ridiculously low price from my first client. What matters to me is to have a good first evaluation (...) So I told the client, 'I will put the price at a ridiculously low rate, but I'm asking you for a good evaluation'. And she actually wrote me a review which really helped me to get started on the platform." (Arthur, 38 years, domestic platform worker)

These quotes obtained from interviews conducted within the ERC Advanced Grant project 'ResPecTMe' (cf. chapter 5 of this thesis, table 5.1) illustrate unpaid labour as a fundamental aspect of the daily work experiences of platform workers. Both workers explain how they forego payment due to operating within the constraints of platforms' evaluation and task-assignment systems, but they are also aware of and navigate these constraints, although in different ways. The two interviewed workers are active on different types of digital labour platforms, hereafter referred to as 'platforms'. These platforms have been defined as digital intermediaries connecting service providers and clients for the exchange of paid services, either conducted online or in specific locations, such as in this case of food delivery and domestic work (De Stefano, 2016). Platforms are a recent phenomenon, emerging less than two decades ago (Srnicek, 2017; Van Doorn, 2017), and have become subject to growing academic interest (Johnston et al., 2023).

Recent literature highlights unpaid labour – here defined as unremunerated activities that contribute to accessing and/or completing paid platform tasks (Pulignano et al., 2023a) - as a key feature of platform work (Berg & Rani, 2021; Marà & Pulignano, 2022; Moore & Newsome, 2018; Pulignano et al., 2021, 2023a; 2023b; Pulignano & Marà, 2021; Rani et al., 2021; Wood et al., 2019b; Wood & Lehdonvirta, 2023). The prevalence of unpaid labour has raised concerns, with research indicating it presents a heightened form of exploitation lacking compensation through increased pay or access to social security (Cini, 2023a; Pulignano et al., 2021). Platforms are said to extend work and exploitation beyond traditional boundaries, extracting profits from individuals' spare time and personal belongings (Cingolani, 2022; Srnicek, 2017; Walker et al., 2021). Unpaid labour affects workers' private time and compromises their ability to earn higher incomes or engage in other paid activities (Pulignano et al., 2021; 2023a; Pulignano & Morgan, 2022). This PhD thesis aims to enhance our understanding of unpaid labour by exploring how it evolves at the intersection of the various strategies deployed by platforms and the actions taken by platform workers.

This PhD thesis was developed within two interlinked research projects: the project '*ResPecTMe: Resolving Precariousness: Advancing the Theory and Measurement of Precariousness across the paid/unpaid work continuum*', grant agreement n° 833577, funded by the European Research Council (ERC Advanced Grant), PI: Prof. Dr. Valeria Pulignano; and the project '*Precarious work in the on-line economy. A study on digital workers in Belgium and the Netherlands*', funded by the Flemish Research Council (FWO), n° G073919N, PI: Prof. Dr. Valeria Pulignano, Co-PI: Prof. Dr. Steven Vallas. These projects have produced insights into unpaid labour across different countries (i.e., France, Belgium, the Netherlands, Germany, Sweden, Poland, Italy and the United Kingdom) and different work areas (care work, creative work and platform work). This thesis is part of this investigation and focuses on one particular work area and one particular country in detail, namely platform work in Belgium. In Belgium, platforms have emerged in an increasing number of sectors such as food delivery, care, domestic work, and online freelancing encompassing fields like graphic design, IT, and translation services (FOD Financiën, 2023; Maselli et al., 2016).

As evidenced by research produced within the ERC and FWO projects, as well as other relevant studies, considering platforms' way of organising and controlling work is crucial to grasp how unpaid labour is produced and maintained on platforms (Marà & Pulignano, 2022; Pulignano et al., 2023a). Platforms can be understood as changing the logic of value creation and value capture (Poutanen & Kovalainen, 2017). Leveraging digital technologies, platforms can assign work 'on-demand' and compensate workers only for completed tasks, excluding portions of working time from payment (Moore & Newsome, 2018). Work is typically outsourced to 'independent contractors' engaged for brief periods of time, with limited access to social protection and welfare systems (De Stefano, 2016; Schor et al., 2020). Platforms minimize their ownership of assets, generally refraining from providing tools, equipment or physical workspaces, and transfer various costs to workers (Mangan et al., 2023; Srnicek, 2017). They digitally allocate fragmented tasks that are often spatially and temporally dispersed to a vast pool of workers, fostering competition among them (Lee et al., 2015; Prassl, 2018). This fuels unpaid labour, as workers are required to be constantly available and looking for work, while access to payment remains uncertain (Berg, 2016; Berg et al., 2018; Marà & Pulignano, 2022). Non-transparent algorithmic monitoring and evaluation systems further exacerbate exposure to unpaid labour, compelling workers to engage in additional tasks to maintain their reputation on platforms (Pulignano et al., 2023a; Rani et al., 2024; Wood & Lehdonvirta, 2023; Wood et al., 2019b). The use of digital technology allows platforms to offer some flexibility and autonomy to workers while retaining centralized power, setting the conditions under which workers and clients connect (Kornberger et al., 2017; Vallas & Schor, 2020).

As these insights show, an analysis of unpaid labour on platforms must consider the specific strategies that platforms deploy to capture value and control workers. Crucially, platform work should not be understood as a unified phenomenon, but rather in terms of a variety of

organisational models and control strategies (Howcroft & Bergvall-Kåreborn, 2019; Prassl & Risaktt, 2016). Platforms' strategies can differ, for example regarding the rating systems, contracts used, or price-setting structures (Griesbach et al., 2019; Heiland, 2022), leading to significant differences in unpaid labour outcomes (Pulignano et al., 2023a; Rani et al., 2024). Nevertheless, merely considering unpaid labour as a result of platforms' strategies provides only a limited picture. Notably, there is a need to consider the active role of workers in shaping unpaid labour (Pulignano et al., 2024). Workers generally enter platforms to earn an income (Dunn et al., 2020) and actively engage in, challenge or rework conditions in platforms to their own advantage (e.g. Anwar & Graham, 2020; Cameron & Rahman, 2022; Schor et al., 2023; Vasudevan & Chan, 2022). Therefore, it is essential to delve deeper into the practices workers develop as important agents in the reproduction of and resistance to platforms' strategies. This thesis complements existing studies by focusing on workers' practices as forms of misbehaviour, investigating how they unfold in response to platform control. This reveals how platforms' way of organising work is subject to potential subversion (Reid-Musson et al., 2020).

The analytical approach of this PhD is based on labour process theory, which allows to examine unpaid labour through the logics of valorisation and exploitation within paid employment (Thompson, 1989). Labour process theory provides insights into how unpaid labour is generated both through employers' control strategies (Braverman, 1974) and through the deliberate participation of workers in their own exploitation (Burawoy, 1979). This is combined with theories on 'organisational misbehaviour' (Ackroyd & Thompson, 2022), a valuable perspective drawing attention to the various more covert ways in which workers reclaim control over their work under exploitative conditions. Based on these frameworks, the doctoral thesis aims to contribute to the emerging strand of literature on platform work by providing a nuanced account of platforms' strategies for control, workers' practices of misbehaviour, and unpaid labour. The central question of this thesis is: *"How does unpaid labour unfold from platforms' strategies for control and workers' practices of misbehaviour in Belgium?"*.

The research question is addressed in four publications, that constitute the subsequent chapters of this thesis (cf. chapters 2-5). The thesis adopts a qualitative approach, aiming to acquire an in-depth understanding of unpaid labour and the processes and mechanisms through which it unfolds on a limited number of platforms in Belgium (Eisenhardt, 1989; Patton, 1990). Given the variation in control strategies and unpaid labour across platforms (Griesbach et al., 2019; Howcroft & Bergvall-Kåreborn, 2019; Pulignano & Marà, 2020; Pulignano et al., 2023a), a multi-case study research design is employed, investigating platforms in food delivery (chapters 2, 4 and 5), domestic care work (chapter 3), online freelancing (chapter 4) and domestic work (chapter 5). In chapters 4 and 5, a comparative design is used, contrasting platforms across and within different sectors. The thesis provides a nuanced understanding of platform work, expanding on existing literature that has oftentimes focused on ride-hailing

platforms such as Uber (e.g., Chan, 2019; Chan & Humphreys, 2018; Chen, 2018; Lee et al., 2015; Möhlmann & Zalmanson, 2017; Peticca-Harris et al., 2020; Rosenblat & Stark, 2016; Vasudevan & Chan, 2022).

The thesis makes three major contributions to the literature on platform work. First, it enhances our understanding of how platforms establish control, amplifying their ability to valorise and exploit workers. By illustrating how platforms simultaneously foster dependency and empower all participants (cf. chapter 2), the thesis reveals the complex dynamics of control, allowing platforms to retain 'centralized power' (Vallas & Schor, 2020) while simultaneously affording some autonomy to participants. This sheds light on the specific logic of valorisation in the platform economy where platforms establish the conditions under which clients and users connect. Moreover, the thesis expands the understanding of platforms' strategies for control by adding dimensions that have often been overlooked in existing research, such as the use of various contracts (chapter 4) or informal labour arrangements (chapter 3). These factors enable platforms to externalize risks and to increase control by engaging with or disrupting the regulatory system surrounding platform work (Marčeta, 2021). The thesis also provides a detailed examination of how platforms in different sectors direct and govern labour, contributing to existing literature on labour control in platform work (e.g. Heiland, 2021; Rahman, 2021; Rosenblat & Stark, 2016; Veen et al., 2019; Wood et al, 2019a).

Second, the thesis adds to research on labour agency in platform work. While a considerable body of literature illustrates how platforms enforce rules through algorithmic management (e.g., Griesbach et al., 2019; Shalini & Bathini, 2021; Stark & Pais, 2020; Walker et al., 2021; Wood et al., 2019a), there is a more limited understanding of whether and how platform workers actively engage with or oppose these rules, and how they can manipulate them for their own benefit. In chapters 4 and 5, this thesis explores the active role of workers by analysing how they organise consent (chapter 4) but also contest (chapter 5) platform strategies. The analysis contributes to an emerging strand of literature on 'spaces of control' in the platform economy, examining how workers can reclaim some influence over their work (Anwar & Graham, 2020; Bronowicka & Ivanova, 2020; Reid-Musson et al., 2020). Importantly, the PhD scrutinizes workers' practices of misbehaviour within platforms deploying diverse strategies, providing a refined understanding of the nature of the 'spaces' forged by platform workers. It argues that platform strategies and worker practices are inherently intertwined, illustrating how workers' endeavours to reclaim control are integral to broader 'regime dynamics' (based on Burawoy, 1985) (cf. chapter 4). The thesis contends that practices of misbehaviour are influential in providing workers with a sense of agency and empowerment, supporting their pursuit of platform work (cf. chapter 5).

Third, while many studies have stressed the prevalence of unpaid labour, this thesis enriches the understanding of unpaid labour by delving into the fundamentally interlinked platform strategies and worker practices from which it unfolds. Hence the thesis adds to the few

systematic accounts of the processes driving unpaid labour on a variety of platforms (Marà & Pulignano, 2022; Pulignano et al., 2023a; Rani et al., 2024). On the one hand, the thesis lays out how unpaid labour emerges from platforms' diverse strategies for control. Platforms disrupt existing regulations and overturn established employment rights, thereby shifting numerous risks onto workers (cf. chapter 3). Additionally, different mechanisms for labour control in platforms compel workers to partake in unpaid labour (cf. chapter 5). On the other hand, the thesis explores how unpaid labour is both sustained and challenged through workers' practices of misbehaviour. Chapter 5 demonstrates that workers actively navigate unpaid labour, hence manipulating the distribution of value on platforms. This brings to light the fundamentally contested nature of exploitation on platforms and the potential of resistance by workers when confronted with unpaid labour.

Methodologically, the thesis illustrates an approach putting workers' experiences at the heart of an understanding of (unpaid) platform labour. Utilizing narrative techniques, the thesis uncovers the underlying mechanisms, practices and meanings that underpin unpaid labour in the daily work and life of platform workers (chapters 3, 4 and 5). Moreover, it combines the perspective of platform workers with that of platform managers (chapters 2, 4 and 5) and with that of platform users (chapter 2), which proves useful to uncover the complex control strategies through which unpaid labour unfolds. The thesis illustrates the value of an in-depth, micro-level analysis to comprehend issues of exploitation and control in platform labour. In line with labour process theory and theories on organisational misbehaviour, it systematically outlines the day-to-day practices and experiences of workers operating within the rules established by platforms.

Practically, the thesis contributes to current debates on the growing impact of platforms on the labour market and economy in Belgium. Platforms in Belgium make up for a small but increasing share of economic activity (EC Directorate-General for Communication, 2018; Eurofound, 2018; ETUC, 2021) and have proliferated across various sectors (FOD Financiën, 2023). This development is likely to have wider and longer term repercussions, because platforms tend to reshape the conditions and profit-making strategies in the sectors where they emerge (Kenney et al., 2019). The techniques developed in platforms are often applied to and affect other organisations (Kovalainen et al., 2019; Woodcock & Graham, 2020; Rosenblat, 2018), earning platforms the designation of capitalist 'laboratories' where novel methods for control and worker exploitation are tested (Cant, 2019). In Belgium, concerns have been raised about the lack of regulation of platforms (Graceffa, 2018; Pulignano & Van Lancker, 2021). Several of the cases discussed in this thesis exemplify how platforms externalize risks by circumventing existing regulations or exploiting the 'peer-to-peer' tax and social security regime provided by the Belgian government. During the thesis's writing, there was an ongoing court case regarding the status and working conditions of platform workers in Belgium, eventually resulting in the reclassification of self-employed food delivery workers as

employees (Cardinaels, 2023; Carpentier, 2023). The thesis's findings on labour control offer important insights in this regard, being a pivotal criterion for the legal qualification of workers (Maffie, 2020; Stanford, 2017).

The following chapter is structured as follows. The first section sheds light on unpaid labour as the core concept that this thesis aims to explain. The following sections elaborate on platforms' strategies for control and workers' practices of misbehaviour. Each section provides a conceptualisation and indicates central elements in the context of platform work. Subsequently, the way in which control strategies and worker practices interact in a dynamic manner is discussed. Based on these four sections, an integrated conceptual framework is presented and sub-questions are derived from the overarching research question 'how does unpaid labour unfold from platforms' strategies for control and workers' practices of misbehaviour in Belgium?'. Finally, the chapter gives an overview of the structure of this publication-based thesis. It briefly summarises the contents of the four publications, thereby highlighting how they contribute to answering the research question and how they fit together.

1.2 Unpaid labour and platform work

1.2.1 Defining unpaid labour through the perspective of exploitation and valorisation in capitalism

Unpaid labour is a widely used concept that carries different meanings in the sociological literature. Previous research has investigated unpaid labour in areas such as unpaid domestic and care work (e.g., Elson, 2017; Fraser, 2013; Rao, 2018), unpaid volunteering (e.g., Rochester et al., 2010; Stebbins, 2004; Taylor, 2015), unpaid internships (Grant-Smith & McDonald, 2018), or unpaid 'immaterial' labour in creative industries (Gill & Pratt, 2008). This PhD thesis focuses on unpaid labour occurring within the realm of paid employment, which has been less studied to date. It defines unpaid labour as all activities that contribute to production, and are part of the area of paid employment, but are not remunerated (Pulignano, 2019). The PhD considers unpaid labour through the perspective of valorisation and exploitation in capitalism. Unpaid labour under this conceptualization is always forced or unfree because it is rooted in the domination of capitalists who own the means of production (Holmstrom, 1977). While stressing the usefulness of this perspective for the study of platform work, the PhD acknowledges that not all forms of unpaid labour (e.g. volunteering) indicate exploitation and may be better understood through a different approach. The conceptualisation of unpaid labour is based on labour process theory, but complements this perspective with insights from recent theories on exploitation (Avent-Holt, 2015) and takes into account the context of changing employment relationships that increasingly undermine the 'Fordist' system of production (Kalleberg, 2009; 2011; Kalleberg & Vallas, 2018).

Labour process theory departs from a Marxist analysis of capital-labour relationships at the point of production. It clearly links the extraction of unpaid labour within paid work to exploitation and valorisation processes (Braverman, 1974). As argued by Marx (1876), making profits and thereby accumulating capital is the chief objective of capitalists who need to realize an exchange value in the market that is greater than the cost (including wages, materials, tools) invested in production (Knights & Willmott, 1990). To this end, capitalists need to engage in valorisation, i.e., the process of creating, extracting and capturing value (Thompson, 1989). The capitalist labour process is key to achieve valorisation as it involves the conversion of workers' labour power, representing their potential for work, into actual labour effort by entering a production process which yields a product or service (Litter, 1990; Smith, 2015a). Analysing the dynamics of control and exploitation characterizing this process is at the core of labour process theory research (Thompson & Vincent, 2010). These dynamics manifest as a structural conflict of interest between capital and labour. Managers constantly seek new ways to generate more value from workers than is returned in the form of wages (Edwards, 1990; Smith, 2015a). They organise the labour process in a way that workers produce more than their wage and appropriate the resulting 'surplus' value. Valorisation thus implies that workers are only paid the equivalent of the value they produce in parts of the working day (Thompson, 1989). Unpaid labour in this sense is an element in any capitalist production process, at the end of which workers receive an income. It indicates exploitation, as capitalists are made better off at the expense of workers because they appropriate some portion - i.e., the unpaid portion - of the product of labour without fully remunerating workers for this (Avent-Holt, 2015; Selwyn & Miyamura, 2014).

Marxian and early labour process theory generate a perspective of unpaid labour as linked to the production process and the generation of surplus value (Edwards, 1978). Marx (1867) identified two crucial methods through which capitalists exploit workers: absolute surplus-value creation, achieved by lengthening the working day or intensifying the working process to increase surplus value; and relative surplus-value creation, where the value of labour-power is cheapened by introducing technological innovation in the labour process. Recent theories on exploitation allow to expand this approach, providing insights into the diverse avenues through which capitalists derive material advantages encompassing the appropriation of labour effort (Avent-Holt, 2015). Capitalists establish control by amplifying and capitalizing on vulnerabilities in the worker, all while depending on the worker's exerted effort for their own welfare (Wright, 2000). Within this framework, it is crucial to consider the factors contributing to the vulnerability of workers (Wood, 2016). This perspective proves beneficial to address forms of unpaid labour that cannot be referred to as increased capture of relative or absolute surplus value but still contribute to valorisation in capitalism, such as the offloading of costs on workers and denying them access to social-security (Smith, 2016; Wilson, 2020).

There is a need to study unpaid labour within the reality of contemporary labour markets and changing employment relationships (Kalleberg, 2011). Marxian and labour process theory allow to understand the asymmetrical power relation between capital and labour at the heart of the exploitation of labour power within paid employment. However, it is crucial to recognize that the structure of this capital-labour relationship has undergone fundamental changes. In the Fordist system of production, it took the form of a formal employment relationship built on a compromise between the employer, who paid for worker protection and covered economic risks, and the worker, who was hired as a dependent employee and ceded part of his control over the labour process to the capitalist (Beverman, 1974; Thompson, 1989). The employment contract ensured that unpaid labour was executed in a regulated context, where capitalist interests of increasing surplus value were traded off against workers' interests of risk protection and a decent income (Thompson & Mchugh, 2002). The point of production, that is the environment where workers engage in productive labour, was typically associated with the factory, bringing together the whole labour process under one roof (Beverman, 1974). Recently, the globalisation of capitalism has amplified competitive pressures on firms' rates of profit, prompting them to find new ways to cut costs and extract value. Firms have thought to lower their wage bills by outsourcing work to cheaper and less protected workers, both globally and domestically (Doellgast et al 2018; Wilson, 2020). The deregulation of labour markets (Pulignano, 2023), and the rise of flexible and insecure employment arrangements (Campbell, 2017; Rubery et al., 2005) have shifted power from workers to capital, diminishing the influence of organized labour and eroding social and employment rights (Dundon et al., 2020). This weakens the traditional employment relationship, exposing workers to increased vulnerability as they individually bear the risks of work (Alberti et al., 2018; Kalleberg & Vallas, 2018; Rubery et al., 2018). Workers, facing fluctuating income and insecure employment, also lose control over their time and earnings (Pulignano, 2023; Standing, 2011). In this current context, employers have at their disposal more strategic options to intensify the exploitation of unpaid labour.

1.2.2 Unpaid labour in platforms: unpaid labour time and uncompensated costs

Numerous studies have revealed the prevalence of unpaid labour in digital labour platforms (Cini et al., 2023a; Mangan et al., 2023; Marà & Pulignano, 2022; Moore & Newsome, 2018; Pulignano et al., 2023a, 2023b; Pulignano et al., 2021; Rani et al., 2021; Riemann et al., 2023; Wood et al., 2019b; Wood & Lehdonvirta, 2021a). At first sight, this is surprising, given that platforms claim to be 'neutral' intermediaries between clients and own-account workers (Maffie, 2020; Scholz, 2017; Prassl & Risaktt, 2016). However, a host of research has demonstrated that platforms exert control and constrain participants' scope of action (e.g.,

Gandini, 2019; Heiland, 2022; Maffie, 2024; Meijerink et al., 2021; Rosenblat & Stark, 2016; Shapiro, 2018; Wood et al., 2019a). Crucially, platforms assert ownership over the means of production, i.e., the digital infrastructure connecting workers and clients. They use digital technologies such as algorithms to systematically collect, process and monetize data (Langley & Leyshon, 2017; Van Dijk et al., 2018). This enables them to create and capture value (Chan, 2018; Srnicek, 2017; Kenney & Zysman, 2016) and to actively leverage data to establish the rules governing work and transactions (Kornberger et al., 2017; Wood & Lehdonvirta, 2021b). Thus, the labour process is enacted via a platform, that provides the digital-based point of production in which workers operate (Gandini, 2019; Sutherland et al., 2020: 460). Therefore, following Joyce (2020), this thesis understands platform work as an evolving labour–capital relationship. In line with other contributions, the thesis considers concepts from labour process theory as useful tools to grasp control processes and exploitation in platforms (Gandini, 2019; Heiland, 2022; Goldkind et al., 2021; Joyce & Stuart, 2021; Kellogg et al., 2020; Morales & Stecher, 2023; Veen et al., 2019).

Research indicates that unpaid labour is linked to the specific manner in which platforms organise paid work. Platforms are known for cheapening labour by introducing technological innovation in the labour process (Woodcock & Graham, 2020). They structure work in a way that restricts paid working time (Mangan et al., 2023). Specifically, the use of digital technologies allows platforms to hire workers 'on-demand' and solely for the precise slivers of time required to fulfil a task (Shapiro, 2018; Woodcock & Graham, 2020). Consequently, unlike employers in standard employment relationships who are obliged to pay for the entire agreed working time, platforms can exclude portions of working time from payment by compensating workers on a piece-rate basis (Moore & Newsome, 2018; Prassl & Risak 2016). Employers in a standard employment relationship usually act as a buffer between workers and the market, absorbing economic shocks before translating them into decisions about dismissals, recruitment, wages or work intensity. Conversely, platforms can mitigate their exposure to demand fluctuations by shifting them onto workers (Drahokoupil & Piasna, 2017). Tasks are typically fragmented, dispersed and of short duration, lacking employment continuity (Nemkova et al., 2019; Wood et al. 2019a; 2019b). Platforms oftentimes classify workers as 'independent contractors' or 'collaborators', enabling them to minimize costs by sidestepping legal responsibilities and regulations pertaining to wages, working time and employment conditions (De Stefano & Aloisi, 2017; Stanford, 2017; Todolí-Signes, 2017). For instance, bypassing regulation on hiring and firing that would otherwise limit workers' exposure to unpaid labour, platforms can significantly expand their workforce, creating a 'reserve army of labour' for which they do not necessarily need to find sufficient demand (Graham & Anwar 2020; De Stefano, 2016). This implies that platforms undermine the traditional compromise where employers provide social security and assume economic work risks in exchange for workers relinquishing some control over the labour process (Braverman, 1974; Thompson, 1989).

Platform work is often characterized by enduring and unregulated power asymmetries (Crouch 2019; Katz, 2015; Muszyński et al., 2022), placing platform workers in a vulnerable position as they frequently lack rights such as union representation, collective bargaining, income protection, and protection against unemployment, illness and other contingencies (Cano et al., 2021; Chen & Sun, 2020; Crouch 2019; Sutherland et al., 2020; Wood & Lehdonvirta, 2021b). At the same time, workers are often required to partake in unpaid labour to access tasks and secure income on platforms (Shapiro, 2020; Wood et al., 2019b). In other words, platforms assume no employer responsibilities, but still curtail the freedom of workers and extract productive activity (Haidar & Keune, 2021). Thus platforms' operations amplify possibilities for exploitation of labour (Peticca-Harris et al., 2020). This thesis intends to capture the various manifestations of unpaid labour in different platforms at the intersection of the diverse strategies deployed by platforms and the actions taken by platform workers.

The conceptualisation of unpaid labour in this PhD builds on existing studies that have highlighted two different although interrelated dimensions of unpaid labour in platform work. First, studies assert that *unpaid labour time* is an important feature of the platform economy (Berg & Rani, 2021; Pulignano et al., 2023a; 2023b; Rani et al., 2021; 2024). This dimension is central in chapter 5 of this thesis, that illustrates unpaid labour time as involving both 'work extensification' where platform workers work longer hours and 'work intensification', where platform workers amplify their efforts or quicken their work pace (cf. Green, 2001). On the one hand, platforms leverage digital data and algorithms to engage in "classical forms of surplus-value extraction" (Cini, 2023a: 1) at the digital-based point of production. Studies highlight that platform workers are often required to work at high speed (Chen & Sun, 2020; Griesbach et al., 2019; Heiland, 2022), especially in food delivery platforms striving to enhance efficiency in in 'the last mile of delivery' (Moore & Newsome, 2018), but also in freelance platforms requiring immediate replies from clients (Demirel et al., 2021). Moreover, workers on various platforms may face intensified work pressure from having to invest additional efforts (e.g. politeness, additional favours) to maintain positive relationships with clients (Gandini, 2019; Rosenblat & Stark, 2016). Studies also reveal that platform workers often extend their working hours to complete tasks (Wood et al., 2019a). This occurs when platforms impose longer working time, as seen in food delivery platforms assigning orders that require longer delivery times (Duus et al., 2023). Platform workers may also encounter unforeseen additional time requirements and client requests while at work, delaying the completion of their task without any financial compensation (Gregory, 2021; Rahman, 2018).

On the other hand, what stands out in platform labour is that workers find certain portions of their working time and many work-related activities excluded from payment altogether (Pulignano et al., 2021). These labour activities are not recognized as part of the valorisation process, with platforms using 'self-employment' contracts to designate certain periods of working time as 'unproductive', thereby removing them from the realm of paid labour (Moore

& Newsome, 2018). Nonetheless, these activities are essential as they often serve as a prerequisite to access or fulfil paid tasks (Cini, 2023a; Wood et al., 2019b). Notably, securing paid work on platforms often necessitates substantial time invested in job search, involving significant income sacrifices (Berg et al., 2018; Berg & Rani, 2021). On certain platforms, workers may be obligated to undergo lengthy job application processes or provide free sample work before receiving paid assignments (De Stefano & Aloisi, 2017). The unpredictability and scarce availability of jobs, coupled with intense competition among workers, means 'on-demand' platform workers frequently need to be available for extended periods to access work (Berg et al., 2018; Lehdonvirta, 2018; Pulignano et al., 2024). This is particularly evident in transnational online freelance platforms that foster competition between a global 'crowd' of workers (Nemkova et al., 2019; Pulignano & Marà, 2021). Workers face the risk of not receiving any work, and, consequently, no pay at all, which is exacerbated by platform techniques like competitive bidding, where only the worker whose task is selected by the client receives payment (De Stefano & Aloisi, 2017; Graham & Anwar, 2020). Furthermore, active online self-promotion and self-branding are vital for accessing platform tasks, a practice termed 'aspirational labour' in social media platforms (Duffy, 2017; Kovalainen et al., 2019). This is particularly relevant for online freelancers and care platform workers who are selected by clients based on their platform profiles, and hence invest significant time in creating and maintaining attractive profiles to distinguish themselves from competitors (Ticona & Mateescu, 2018; Pulignano et al., 2023a; Wood & Lehdonvirta, 2023).

In addition, workers may encounter unpaid time intervals between on-demand tasks, further prolonging the time necessary to generate sufficient income (Wood et al., 2019a). For location-based platform workers, this typically takes the form of uncompensated waiting time (Duus et al., 2023) or unpaid commuting time, especially when jobs are geographically dispersed and of short duration (Woodcock & Graham, 2020; Pulignano & Marà, 2021). Workers frequently invest a significant number of 'unbillable hours' in communications and negotiations with clients that are hard to recover financially (Shevchuk et al., 2021). They sometimes agree to completing additional unpaid tasks for clients in exchange for higher ratings (Rahman, 2021; Sutherland et al., 2020). Learning how the platform operates often requires additional time due to non-transparent algorithms (D'Cruz & Noronha, 2016; Schor et al., 2023).

Unpaid activities often occur during 'unsocial hours', such as weekends and evenings, with platforms using the pretext of 'flexibility' to create more opportunities for exploiting workers (Huws et al., 2018; Walker et al., 2021). Workers in both online freelancing (Rieman et al., 2022) and location-based platform work (Moore & Newsome, 2019) witness a blurred boundary between work and non-work time, requiring them to adapt their (private) time use to the unpredictability of on-demand work (Pulignano & Morgan, 2022). This reflects platforms' attempt to capture value from all aspects of life and work (Moore, 2017), extending the scope of value production beyond the formal boundaries of paid work and capitalising on various

spheres of life (Boes et al., 2017). It results in the 'colonization' of workers' free time (Pulignano et al., 2023b), undermining the promise of flexibility by platforms (Cano et al., 2021; Li, 2022; Lehdonvirta, 2018). Consequently, workers lose control over the delineation between paid and unpaid platform labour (Pulignano et al., 2023b) and experience substantial job and income insecurity (Wood & Lehdonvirta, 2023). Lacking income protection and being compensated on a task-by-task basis, workers are vulnerable to income loss in the event of a sudden decline in demand (Cano et al., 2021). Moreover, non-payment may occur when clients cancel work or terminate their contact with workers (D'Cruz & Noronha, 2016; Graham et al., 2017b), with platforms typically disavowing any responsibility for ensuring the worker is paid for the time spent on work (Bergvall-Kåreborn & Howcroft, 2014).

Second, the PhD draws on research that conceptualises unpaid labour as reflected in various *uncompensated costs* for platform workers that were traditionally shouldered by employers (D'Cruz & Noronha, 2016; Mangan et al., 2023; Pulignano et al., 2023a; Pulignano & Marà, 2021). Unpaid labour is described as a 'sunk' cost that cannot be recovered by workers (Pulignano et al., 2023a), representing the economic and social effort expended on activities necessary to access and pursue platform work (D'Cruz & Noronha, 2016). Chapter 3 of this thesis explores these costs, particularly focusing on the way in which both 'economic' sunk costs, such as non-payment and additional expenses, and 'social' sunk costs, including the loss of free time and damaged interpersonal relationships (Pulignano, 2023a), unfold in the specific context of domestic care work. Unpaid labour time reflects these costs as workers forego the benefits associated with standard employment where all time is compensated. However, platform workers also incur numerous additional costs that can be classified as 'non-time based' forms of unpaid labour (Pulignano & Marà, 2021). Importantly, they are often excluded from employment rights and social protections afforded to employees, leaving them without access to, for example, unemployment benefits, healthcare, sickness benefits or paid holidays (Mangan et al., 2023; Marčeta, 2021). Consequently, additional costs arise in the event of illness or accidents, and workers are unable to build up social protection rights (Schoukens, 2019). In addition, unlike employees in standard employment relationships who usually receive the necessary equipment for their work, platform workers often need to utilize their private resources (Mika, 2020). This can involve expenses for tools and materials, smartphone usage or, in the case of location-based platform workers, the use of own vehicles such as bikes and cars (Goods et al., 2019). Platforms may even require workers to pay for access to work themselves (Mangan et al., 2023; Veen et al., 2019), or may retain a percentage of the payment workers receive in every transaction as their 'fee' or 'commission' (Aloisi, 2016; D'Cruz & Noronha, 2016).

Crucially, these expenses represent 'sunk' costs because they prove challenging for workers to recover, primarily due to their often low income. Despite frequently being classified as self-employed contractors, platform workers typically have less autonomy in setting their prices

(Mangan et al., 2023). Online freelancers on platforms encounter difficulties achieving a return on investment comparable to conventional freelancers. This is because they cannot readily increase their prices for new jobs or clients and because the platform-specific reputation they build (e.g., through their rating score) is non-transferable to another employer or platform (Graham & Anwar, 2020; Pulignano et al., 2023b). On global platforms, freelancers may find themselves compelled to reduce their prices below subsistence levels because they face cost-based competition from workers in low-income countries (D'Cruz & Noronha, 2016; Demirel et al., 2021). For offline platform workers, a key issue is payment below minimum wage levels, due to lack of enforcement of collective agreements on platforms (Todolí-Signes, 2017; Veen et al., 2020). The capacity of platforms to offload work-related costs to workers while decreasing their pay has been identified as a key risk in in platform work (Berg 2016; Graham et al., 2017b; Scholz, 2017; Van Doorn, 2017).

In brief, the overview illustrates that platforms capture an increased share of unpaid labour time and transfer costs to workers, while at the same time exposing them to the risk of low pay and non-payment. The pervasive use of digital technologies and algorithms enables heightened exploitation by extracting productive labour within and outside the conventional labour process (Cini, 2023a; Schor et al., 2020). Existing literature highlights a connection between platforms' way of organising work and unpaid labour. Unpaid labour is expected to vary according to the nature of work in different sectors of the platform economy (Pulignano & Marà, 2021) and regarding platforms' distinct operations (Pulignano et al., 2023a). This thesis explores how unpaid labour is created and maintained and how platform workers respond to and make sense of it in various platforms. The analysis will start from the strategies deployed by platforms to control and exploit workers (chapter 2) and consider how these strategies contribute to unpaid labour (chapter 3). Subsequently, the analysis will investigate workers' practices of misbehaviour linked to platforms strategies (chapter 4) and how they shape unpaid labour (chapter 5). Thus this thesis aims to provide a nuanced understanding of unpaid labour, viewing it as emerging from an ongoing contention between capital and labour, including the potential of worker resistance.

1.3 Platforms' strategies for control

The thesis considers platforms as strategic players seeking to accumulate capital through the exploitation of workers. Platforms' strategies for control indicate the choices of techniques made by platforms to assert authority over workers and enhance valorisation. The use of the term 'strategies' reflects the perspective of labour process theory, seeing management as driven by the goal of profit-making but able to adopt various paths to achieve this objective (Friedman, 1990). This terminology avoids a deterministic view, highlighting the plurality of

choices managers can make to secure profits, without presupposing that all management actions are coherent, deliberate or exempt from external pressures (Friedman, 1977; Hyman, 1987). The ultimate purpose of managerial strategies is to align the workforce with the imperative of capital accumulation, as employers' profits rely on the labour performed by workers (Littler, 1990; Thompson & Laaser, 2021). Beginning the analysis of unpaid labour by looking at managerial strategies mirrors the assumption that capitalists, as owners of the means of production, typically take the lead in organizing work. Nevertheless, the PhD acknowledges that workers can also influence work organisation and management strategies through their own practices (Friedman, 1990). Following Marxian and labour process theory, this PhD considers three key elements of management strategies that enable control and exploitation: first, it examines the commodification of labour power, which is an important precondition for controlling and exploiting workers (Smith, 2015b) and the focus of chapter 2 of this thesis. Second, it investigates how employers establish control over the labour process, and third, how they maximize the rate of value extraction - both analysed across chapters 2-5 of this thesis (Wood & Kelly, 1982, in Friedman, 1990). While listed separately for analytical purposes, these dimensions of management strategies overlap and mutually condition each other, as the empirical analysis will demonstrate.

1.3.1 Commodification strategies

As demonstrated by Marx (1867), the commodification of labour power is a necessary prerequisite for establishing control over workers and realising profits. Commodification is the process in which 'free' workers sell their labour power to any capitalist, while also being forced to do so because they don't own the means of production. Labour power becomes a commodity subject to market rules, entwined in market relationships characterized by competition (Marx, 1867). By appearing in market relations as a 'just equivalence' of exchange, the exploitation of labour power becomes obscured (Knights & Willmott, 1990). Negating the specificity of the concrete labour power that contributed to the production process is essential for successful transactions, enabling the rendered products or services to be equivalent and exchangeable with other things (Pitts, 2018). This process sees 'exchange value' taking precedence over 'use value', a critical precondition for the accumulation of capital (Smith, 2015b).

Consequently, analysing how transactions occur is essential to fully understand control and exploitation in platform work. In longer-term contractual relationships, employers can limit transaction costs by reducing search costs and working with trusted individuals they already know (Drahokoupil, 2021). The wage relationship hides unpaid labour, creating the illusion that wages compensate for a full day of work (Holmstrom, 1977). In contrast, platforms mediate work through market exchange by hiring 'independent' workers for one-off transactions, which

initially comes with higher transaction costs. They establish a 'triangular' relationship among platforms and formally independent clients and workers, circumventing the wage relationship (Lehdonvirta et al., 2019; Schörpf et al., 2017; Stewart & Stanford, 2017; Van Doorn & Badger, 2020). Hence, the commodification of labour in platforms acquires a more complex character. It is necessary to consider exchanges between workers, users and the platform happening in a digital environment to comprehend how platforms can get participants under their control and become viable business models.

1.3.1.1 Commodification strategies in platforms: intermediation and market exchange

Previous research has identified a process of labour commodification on platforms, pointing to the way in which platforms capture value from workers while disembedding them from the protections and rights afforded to employees (Aloisi 2016; Bergvall-Kåreborn & Howcroft 2014; Boes et al. 2017; Marčeta, 2021; Wood et al. 2019b). To understand how commodification occurs, considering the significance of digital data and technology as tools for platforms to get participants under their control becomes crucial. Platforms' ability to collect, store, and process extensive data on users and activities has been identified as a key source of profits and labour control on these platforms (Chan, 2018; Duggan et al., 2020; Van Dijk et al., 2018; Van Doorn & Badger, 2020; Van Doorn, 2017; Kenney & Zysman, 2016; Zysman & Newman, 2006). It enables to establish an 'intermediation business' (Drahokoupil, 2021), furnishing technological means to coordinate, structure and oversee a realm of market encounters between client and worker demand (Shapiro, 2020). Accordingly, platforms are often defined as 'multi-sided markets' (Langley & Leyshon, 2017; Sánchez-Cartas & León, 2018; Peticca-Harris et al., 2020). To succeed, platforms must "get both sides of the market on board", meaning both clients and workers must ultimately benefit from interacting through a common platform (Rochet & Tirole, 2003: 1990). This is assured by enhancing efficiency through digital operations and exchanges, allowing the reduction of transaction costs (Schor et al., 2020). Platforms' digital infrastructure streamlines 'matching' by lowering search costs, enabling clients to purchase specific services through separate transactions, even for smaller tasks or payments (Drahokoupil, 2021). By acquiring and sharing information on users and workers via the use of rating systems, platforms enhance transaction efficiency between unfamiliar parties (Frenken & Schor, 2017). Network effects are key to diminishing transaction costs and attracting participants, where the more workers and users participate, the greater the benefits of platform use (Sánchez-Cartas & León, 2018; Poutanen & Kovalainen, 2017). However, platforms may have little incentive to lower transaction costs symmetrically for both sides of the market. Indeed, numerous studies have illustrated that platforms strategically expand their workforce to be able to offer to clients an "instant recourse to a large pool of cheap workers" (Prassl, 2018: 90). They create a flexible workforce that can swiftly be adapted to changes in

demand (Lata et al., 2023). Consequently, platforms' competitive strategies likely expose workers unpaid labour, as they operate with labour oversupply while clients use multiple platforms in search of the most economical option (Mangan et al., 2023).

Presenting themselves as 'neutral' intermediaries or mere databases for 'independent' workers and clients to connect, platforms obscure relations of dependency and control (Purcell & Brook, 2022; Sundararajan, 2017). Platforms stay 'hidden' behind the algorithm, creating the illusion of worker independence due to the absence of a physically present 'boss' (Kalleberg & Dunn, 2016). In so doing, they justify the independent contractor classification of their workforce, making workers responsible for their own economic success (Haidar & Keune, 2021). Workers' labour stays concealed behind the platform interface and is often not recognized as real work (Moore, 2017; Silberman & Irani, 2016), being referred to as a small 'gig' (De Stefano & Aloisi, 2017). This allows platforms to operate as 'asset-light' corporations (Srnicek, 2017), sidestepping the challenges associated with owning fixed capital or directly employing labour (Vallas & Schor, 2020). Instead of producing specific goods or services, platforms capture a share of the value generated in transactions (McKnee, 2017; Scholz, 2017), for example by taking a percentage of the worker's revenue or adding a fee to the customer's final cost (Kalleberg & Dunn, 2016; Rochet & Tirole, 2003). In addition, the digital data generated by users and clients is kept by the platform and can be used to expand production efficiency, or be transferred to external parties (Attoh et al., 2019; Chan & Humphreys, 2018; Rosenblat & Stark 2016).

This intermediation business empowers platforms to establish themselves in markets by exerting market control and dominance, making participants dependent on the platform (Rahman & Thelen, 2019). Platforms dictate the rules and conditions under which users and workers connect and interact with each other, independently of external regulations (Frenken et al., 2020; Joyce, 2020). The infrastructure of platforms re-configures the client-worker relationship, especially as the 'peer-to-peer' platform model allows direct connections and exchanges between individuals, by-passing labour market intermediaries and institutions (Frenken et al., 2020; McKnee, 2017; Peticca-Harris et al., 2020). To overcome reliance on existing institutions and grow their business, some platforms form partnerships, such as collaborations with restaurants for food delivery platforms or with local care providers for care platforms. These partnerships serve as strategic resources to consolidate control over multi-sided markets, fostering dependencies and gaining influence over market participants (Van Doorn et al., 2021). While certain platforms simply 'match' workers with clients based on their profiles (Maffie, 2020), others adopt an 'infrastructural role' (Drahokoupil, 2021), actively structuring and coordinating worker-client interactions. The latter is particularly pertinent in on-demand platforms where tasks need to be completed 'just-in-time' and in specific locations, such as food delivery or ride-hailing platforms (De Stefano, 2016; Huws, 2018). These platforms have

important coordination requirements, necessitating efficient allocation of work while steering both the timing and spatial aspects of the tasks (Heiland, 2021, 2022).

In summary, given the complex labour arrangements platforms generate, there exists a need to enhance our understanding of how control and commodification occur in platforms. Literature underscores the relevance of considering intermediation and market transactions within the platform-worker-client 'triangle' (Schörpf et al., 2017; Stewart & Stanford, 2017; Van Doorn & Badger, 2020), facilitated by the use of algorithms and digital data. Creating dependency is crucial in platforms, they must 'lock in' participants to their services in order to develop a defensible market position and secure profits (Maffie, 2024). However, there is still a gap in examining the specific strategies platforms employ to bind all actors to the platform and how this aligns with the logic of valorisation (Kelkar & Shestakofsky, 2019). This constitutes an important first step in analysing how platforms establish the rules governing labour, and is at the core of chapter 2 of this thesis.

1.3.2 Labour control strategies

1.3.2.1 Defining strategies for labour control

While standing as an important prerequisite, the purchase of labour power by employers alone does not guarantee profitable production. As indicated by labour process theory, human labour power is an indeterminate potential which, unlike other factors of production, does not generate a fixed return upon purchase (Thompson, 1989; Thompson & Smith, 2001; 2009). To reduce this indeterminacy, capitalists must transform the working time allocated to paid work into profitable production (Thompson, 2010). Hence, capitalists need to establish labour control as the foundation for both value creation and extraction by organising the labour process in a way that maximizes worker effort (Smith, 2006; Thompson, 1990). The work of Edwards (1979) provides the most comprehensive account of control in labour process theory (Vallas, 2012). Following Edwards (1979), this thesis defines a control mechanism as to fulfilling three functions: the direction and specification of tasks; the monitoring and evaluation of performance; and discipline and reward to elicit compliance (Edwards, 1979). It sees management attempts for control as continuously contested by workers, resulting in an ongoing struggle for control over the labour process (Edwards, 1990; Hyman, 1982).

Edwards (1979) identifies three major control mechanisms. First, simple control is based on personal supervision of workers by managers who can openly and arbitrarily exercise their power given the absence of external regulations. Second, technical control implies that the technical infrastructure of the production process enforces the content, method and pace of work. Taylorist principles of scientific management result in a detailed division of labour, as archetypically illustrated by the assembly line. The conception of work is separated from its

execution (Edwards, 1979; 1990). Third, bureaucratic control institutionalises hierarchical power through expanding inequalities between distinct positions. The exercise of power is vested in formal rules instead of in an individual person. Consequently, control acquires a more normative and subtle character (Edwards, 1979). Edwards (1979) shows that employers' dominant control strategies evolve over time, reflecting worker resistance to control and changing socio-economic conditions. However, he also clearly states that they can coexist and complement each other (Edwards, 1979; 1990). In practice, different control mechanisms often interact or reinforce each other (Friedman, 1990; Thompsom & McHugh, 2002). Organisations can chose among a continuum of possibilities regarding the degree of direction and supervision of work (Friedman, 1990; Edwards, 2006). The literature observes a trend towards an increased hybridity of control, where organisations combine elements from different mechanisms (Thompson & Van den Broek, 2010). Control mechanisms have become more complex and multifaceted, and often include more subtle, 'indirect' and unobtrusive methods that tend to obscure the visibility and origins of control (Scott, 2017; Thompson & Van den Broek, 2010). Therefore, this PhD pays attention to different forms of controls on platforms, and studies them in relation to each other. Importantly, as Edwards (1975; 1990) defines control as sector- and firm-specific, the PhD delves into variations in labour control between platforms. These variations are illustrated across the empirical chapters, and specifically in chapters 4 and 5, which contrast platforms with different mechanisms for labour control both within and across sectors.

While understanding control within the labour process is crucial for grasping how value is extracted from workers, it is widely acknowledged that 'control' cannot be solely explained in the context of the immediate point of production (Edwards, 1990). Numerous studies underscore the importance of considering external factors when examining how employers establish control. In particular, discipline through market forces has been identified as an important source of control, with employers exposing workers to, or shielding them from, market forces to varying degrees (Burawoy, 1983; 1985; Edwards & Scullion, 1982). Accordingly, attention must be paid to both 'organizational control', involving managerial command and directional power, and 'market control', exerted through labour supply and demand (Ivanova et al., 2018). Therefore, the doctoral research studies both control related to the immediate direction of work operations (Edwards, 1990) and control exercised through activities that precede or follow the labour process, such as client demands, recruitment and dismissal (Bélanger & Edwards, 2013).

1.3.2.2 Labour control in platforms

Although platforms typically outsource work to independent contractors and pay them only for completed work, they cannot fully escape the problem of labour indeterminacy. In order to effectively match supply and demand, platforms need to mobilize the engagement of formally independent and often geographically dispersed workers, to some extent retaining them within the platform (Gerber & Krzywdzinski, 2019; Stark & Pais, 2020). A host of research has debunked platforms' claims of acting as mere intermediaries and demonstrated that they exercise control over workers, directing their actions and limiting their autonomy (e.g., Gandini, 2019; Meijerink et al., 2021; Schörpf et al., 2017; Rosenblat et al., 2018). However, the nature of control exerted by platforms differs from traditional employment relationships (Stewart & Stanford, 2017; Vallas & Schor, 2020).

Numerous studies highlight the rise of 'algorithmic management' (Duggan et al., 2020; Jarrahi et al., 2019; Stark & Pais, 2020; Sun, 2019; Rosenblat, 2018) or 'algorithmic control' (Griesbach et al., 2019; Lata et al., 2023; Pignot, 2023; Wood et al., 2019a) as means through which platforms govern their workforce. While earlier work on the platform economy often characterizes algorithmic management as a fully-fledged and novel control mechanism (Kellogg et al., 2020; Lee et al., 2015; Todolí-Signes, 2017), recent investigations suggest that algorithmic management techniques are often rooted in and combined with conventional organization-based management techniques (Heiland, 2022; Li, 2022; Shalini & Bathini, 2021). This amalgamation of controls enables platforms to implement their performance standards outside legal frameworks (Shalini & Bathini, 2021; Wood & Lehdonvirta, 2023), overseeing and directing workers while retaining the 'independent contractor' classification (Aloisi, 2016; Noponen et al., 2023). Crucially, the extent and forms of control implemented differ strongly between platforms, with some allowing significant choice regarding working hours, methods, or work evaluation, while others enforce more stringent control and specify the entire work process and the precise timing of tasks (Frenken et al., 2020; Griesbach et al., 2019; Maffie, 2020). This has implications for workers' exposure to unpaid labour (Pulignano et al., 2019; 2023b).

1.3.2.2.1 Different control mechanisms across platforms

Existing research has outlined various mechanisms through which platforms exercise control over labour in a digital environment. Studies illustrate that workers experience direct 'simple' control on platforms where powerful algorithms unilaterally impose decisions (Griesbach et al., 2019; Shalini & Bathini, 2021; Veen et al. 2019). For instance, certain platforms in food delivery or ride-hailing unilaterally impose or modify working hours and pay rates without consulting or informing workers (Griesbach et al., 2019). The algorithms allocating working hours or tasks are

often not understood by workers (Rosenblat et al., 2017; Veen et al., 2019) and may be frequently adapted in some cases, resulting in unforeseen changes in working conditions (Rosenblat & Stark 2016). What is more, numerous online and location-based platforms have the power to deactivate workers' accounts or to cut pay without prior notice (Berg et al., 2018). These unilateral decisions can foster a sense of unjust discretionary authority among workers, exacerbated by the lack of external regulations governing platforms (Nemkova et al., 2019). As a result, workers experience reduced control over their work and income, contributing to instances of unpaid labour. Sudden changes in pay or deactivation can lead to an abrupt loss of income (Askitas et al., 2018). However, the direct, unilateral control capacities of platforms are more limited in sectors where workers conceive their work independently, such as online freelancing or care work (Aleksynska et al., 2018). For example, online freelancers can often set their working hours and pay rates themselves (Lehdonvirta, 2018).

Furthermore, research has brought attention to the presence of technical controls in platforms (Bergvall-Kåreborn & Howcroft, 2014; Kellogg et al., 2020; Veen et al., 2019). Scholars have pointed to an emerging 'digital Taylorism', wherein platforms standardize the labour process and dictate the content, method and pace of work through algorithms (Huws, 2014; Noponen et al., 2023). They have also compared the division of tasks in parts of the platform economy to a virtual assembly line (Aloisi, 2016; Todolí-Signes, 2017; Griesbach et al., 2019). This analogy is particularly applicable to online 'microtask' platforms and some location-based platforms such as in food delivery and ride-hailing, where tasks can be broken down into discrete units with clearly defined job instructions and fixed outputs (Graham et al., 2017b; Gerber & Krzywdzinski, 2019). In these sectors, platforms can implement detailed measurement and monitoring of the labour process, along with automated performance checks (Duus et al., 2023; Moore & Joyce, 2020). For example, technical controls for food delivery couriers may involve the obligation to accept orders within seconds as well as precise instructions from the GPS system, fixing tight timeframes for task completion (Griesbach et al., 2019; Veen et al., 2019). Technical control serves to minimize worker influence over working time and pay. Regulations pertaining to the timing and speed of work have the potential to generate unpaid labour, such as the obligation of continuous availability (Berg & Rani, 2021), or the requirement to work at extremely high speed (Chen & Sun, 2020; Heiland, 2022).

Further, a significant strand of literature examines how platforms use technology to establish more indirect and subtle forms of control over workers. Especially in highly skilled platform work, where standardising the labour process is challenging, the focus shifts towards mobilizing workers' voluntary engagement through subtle means that tap into their communicative and cognitive capacities (Gerber, 2021; Gerber & Krzywdzinski, 2019). In these forms of platform work, elements of bureaucratic control may be present, while workers still enjoy a considerable degree of self-direction (Ivanova et al., 2018). Platforms expand inequalities between workers

through mechanisms like rating and ranking systems, placing those with good feedback and reviews in more advantageous positions regarding job access and pay (Shalini & Bathini, 2021). Moreover, workers' metrics can be used to implement platform-based rewards programs and loyalty schemes, dissuading workers from switching to competitors (Maffie, 2024). Notably, metrics are often non-transferable, compelling workers interested in keeping their rewards status to remain on the platform (Vasudevan & Chan, 2022; Pulignano et al., 2023b). Since control via rating and reputation systems operates post-labour process, these systems provide a semblance of self-direction while enabling platforms to retain control over labour (Wood et al., 2019a). Rating systems function as client-based modes of performance control, with customers holding a prominent evaluative role (Maffie, 2022; Rahman, 2018). This can give rise to what Schor et al. (2023) call 'double subordination', where workers are subject to simultaneous control by platform companies and customers alike. The role of customers is particularly important in sectors requiring one-on-one interactions with clients, such as care work (Ticona & Mateescu, 2018). It can also be significant in platforms granting clients additional discretionary powers, like payment and tipping decisions (Schor et al., 2023). In consequence, workers are incentivized to undertake additional and often uncompensated tasks or efforts, performed in exchange for tips or a higher rating score (Gandini, 2019; Rosenblat & Stark, 2016). Workers frequently engage in 'relational work' to build trust with clients, aiming to secure future work opportunities (Kelkar & Shestakofsky, 2019; Shalini & Bathini, 2021). In some instances, workers are even found to trade off their pay against a higher rating score (Rahman, 2019; Wood & Lehdonvirta, 2023).

1.3.2.2.2 Algorithmic and market control

Algorithmic management underpins the different forms of control deployed by platforms. Following Möhlmann and Zalmanson (2017), algorithmic management can be defined based on five characteristics - which have been highlighted in numerous other studies as well: (1) tracking of workers' behaviour, (2) constant performance evaluation, (3) automatic implementation of decisions, (4) workers' interaction with a 'system', and (5) low transparency. Each of these interconnected features facilitates the exploitation of platform labour and may be implemented to varying degrees in different platforms.

First, algorithmic control relies on the continuous monitoring of the platform workforce (Möhlmann & Zalmanson, 2017). This generates digital data encompassing details on workers' behaviour, their interactions with clients, and personal information (Berg, 2016; Rosenblat & Stark 2016). In offline platforms such as food delivery, tracking workers' location is essential to achieve control (Heiland, 2021). For online freelancers, monitoring can go as far as tracking mouse movements and keyboard presses (Aleksynska et al., 2018). This digital monitoring has been compared to

Foucault's 'panopticon' and enables surveillance at an extremely low cost (Thompson, 2003). Real-time surveillance and measurement of worker behaviour in some platforms can create pressure, as any deviance may be promptly detected and punished through for example exclusion from pay (Duus et al., 2023). Statistics derived from worker behaviour curtail workers' control over working time and limit their opportunities for higher-paying work (De Stefano & Aloisi, 2017; Rosenblat et al., 2017).

Second, algorithmic control involves constant performance evaluation based on the data collected on workers' behaviour, that is translated into individual performance measures (Filippas et al., 2020; Shapiro, 2018). This can include various metrics, for example metrics on the number of completed tasks, or on the speed of task completion (Griesbach et al., 2018), as well as client ratings (Chan & Humphreys, 2018). In platforms where evaluations are linked to rewards such as prioritized access to work or sanctions such as deactivation from the platform, they act as powerful incentives (Möhlmann & Zalmanson, 2017). Algorithmic rating systems amplify platform workers' experience of income insecurity stemming from platform employment, fuelling their exposure to unpaid labour (Stark & Pais, 2020; Wood & Lehdonvirta, 2023). Workers may feel compelled to invest unpaid time and efforts to enhance their ratings or statistics to secure access to work and pay (Marà & Pulignano, 2021; Rahman, 2018). However, algorithmic rating systems might also mitigate unpaid labour by permitting flexible working hours and fostering trust between clients and workers, thereby facilitating transactions on platforms (Filippas et al., 2020; Schor & Fitzmaurice, 2015).

Third, algorithmic control entails a strategic shift of managerial responsibilities from humans to machines (Aloisi, 2016; Noponen et al., 2023). Platforms are observed to automate various managerial tasks, such as work assignment, supervision, setting target behaviour and evaluating workers (Lehdonvirta, 2018; Möhlmann & Zalmanson, 2017). To achieve this, platforms leverage self-learning algorithms, that continually improve their performance by processing large amounts of incoming data (Chan & Humphreys, 2018; Rosenblat & Stark 2016). Some platforms automatically implement decisions, based on the programmed rules of the algorithm (Möhlmann & Zalmanson, 2017). A typical example is the automatized assignment of shifts or tasks according to platforms' criteria in food delivery platform work (Drahokoupil & Piasna, 2019; Lee et al., 2015). This leaves little scope for workers to influence pay and working time, thereby diminishing their agency (Lata et al., 2023). Other platforms deploy algorithms as tools to provide decision support, combining automated decision-making with human supervision and intervention in the labour process (Pulignano et al., 2023a; Wood, 2021).

Fourth, and relatedly, platform workers oftentimes interact with a 'system' rather than with a human, as platforms remain hidden behind the digital interface (Kelkar & Shestakofsky, 2019; Möhlmann & Zalmanson, 2017). Important elements of the exchange between platforms, workers and clients, such as communications, payment, and evaluations, often occur through

the technological infrastructure provided by the platform (Malin & Chandler, 2017). In many cases, worker support is provided by a chat or e-mail system, lacking a human contact point, which may necessitate additional efforts or time spend on contacting the platform (Huws et al., 2018). This can limit worker discretion and act as a barrier for workers to challenge unfavourable ratings (Graham et al., 2020), or reclaim pay (Möhlmann & Zalmanson, 2017). Platforms that incorporate a human contact point for workers may mitigate this constraint (Pulignano et al., 2023a). Due to the fragmented and dispersed nature of their work, platform workers rarely meet each other, diminishing their opportunities to exchange information and to learn from one another (Wood et al., 2018; Yin et al., 2016).

Fifth, an important feature underpinning labour control on platforms is the limited transparency of the rules governing work. Many studies point to platforms strategically withholding information from workers, preventing them from accessing information that they could use to their own advantage (Gregory, 2021; Maffie, 2024; Shapiro, 2020). These information asymmetries are a key expression of power imbalances present in platforms. They limit workers' control over their work by constraining their capacity to make informed decisions, such as task or client selection (Van Doorn, 2017; Rosenblat & Stark 2016; Veen et al., 2019). Information asymmetries play a crucial role in the implementation of subtler and less visible forms of workforce surveillance and control (Shapiro, 2018). Much research has highlighted the opaque nature of algorithmic rating systems, impeding workers' understanding of how to enhance their reputation and consequently affecting their access to work and clients (Rahman, 2021; Sutherland et al., 2020). This results in an experience of 'algorithmic insecurity' among workers (Wood & Lehdonvirta, 2021b), involving heightened uncertainty regarding their income that makes them more susceptible to unpaid labour (Wood & Lehdonvirta, 2023). The lack of knowledge about the inner workings of work-assignment, rating and compensation systems means that workers must engage in lengthy efforts to learn how to improve their access to work (Berg et al., 2018; Rahman, 2021). Additionally, it hinders their ability to plan ahead, as they remain uncertain about the quantity and timing of available work, potentially facing unexpected increases in workload due to unforeseen additional tasks or client requests (Rahman, 2019). At the same time, information asymmetry enables platforms to hide control and exploitation from workers (Möhlmann & Zalmanson, 2017).

Overall, a pivotal characteristic of algorithmic management is its' capacity to simultaneously restrict and enable workers' autonomy (Li et al., 2022; Noponen et al., 2023; Wood et al, 2019a). Platforms retain authority over important functions (e.g. the collection of data and revenue), while devolving others (e.g. the specification of work methods and working time) to clients and workers (Vallas & Schor, 2020). In some cases, control is found to operate at the end of the labour process rather than during it, allowing workers the freedom to choose how they work as long as their output is accepted by clients (Wood et al., 2019a). Platforms leaving room for workers' discretion can be part of their exploitation strategy. Delegating 'minute' decisions

to workers can serve to justify their classification as independent contractors (Shapiro, 2018). Flexible hours may incentivize workers to extend their working days, filling up their evenings and weekends with more work (Lehdonvirta, 2018; Walker et al., 2021).

Being exposed to unregulated competition with their peers, platform workers may find that market forces are the most important sources of control (Ivanova et al., 2018). Most platform work is extremely client-driven. Instructions by clients are pivotal for platform workers, who are often obliged to offer what the customers want at the price that they are willing to pay (Graham et al., 2017a; Huws, 2014). Thus, workers need to invest much time to tailor their work to clients' wishes (Gandini, 2019; Rahman, 2018). To a lesser extent, this is typical of all service work, but platforms have gone the furthest in applying the logic of on-demand service provision even to highly skilled work (Maselli et al., 2016). Moreover, recruitment and dismissals are fundamental control mechanisms in platform work. Most workers are not hired into jobs but merely to perform a specific task (Vallas, 2019). Platforms' recruitment and dismissal practices directly originate from market demand, circumventing regulation governing these processes (De Stefano, 2016). Importantly, platforms strategically foster competition between workers by maintaining low recruitment barriers and intentionally recruiting a larger pool of workers compared to clients, letting multiple workers compete for the same task (Prassl, 2018; Scholz, 2018; Graham & Anwar, 2020; Graham et al., 2017a). This drives platform workers' exposure to unpaid job searches, applications, and online self-promotion, as they need to stand out from competitors (Berg et al., 2018; Gandini, 2016; Weber et al., 2021).

All things considered, labour control in platforms is multidimensional and complex, comprising elements of both direct, and more subtle, indirect controls. These are underpinned by digital data and non-transparent algorithms, which play a key role in facilitating exploitation in a digital environment. Market control further contributes to worker discipline, exposing workers to client requests and significant fluctuations in demand. The different control mechanisms discussed above are empirically illustrated across the thesis's empirical chapters. They cannot be found in pure form in the empirical reality, instead, they overlap and mutually reinforce each other (cf. Edwards, 1979). Notable differences in control strategies across and within different sectors of the platform economy can be expected (Gerber & Krzywdzinski, 2019; Griesbach et al., 2019). Importantly, labour control is likely to stimulate unpaid labour, as will be explored in chapter 5 of this thesis.

1.3.3 Risk-shifting strategies

1.3.3.1 Risk-shifting as a strategy to facilitate exploitation and control

To fully understand control and exploitation, there is a need to examine how management maximizes value extraction, not just by controlling the labour process, but also by strategically

shifting risks and costs to workers, a crucial method for mitigating labour indeterminacy (Thompson, 2010). The analysis of risk-shifting as part of managerial strategies for control requires to consider how these strategies embrace not only the labour process, but also extend to a specific institutional and regulatory setting (Nichols et al., 2004). Specifically, this thesis examines how platforms strategically utilize different contractual arrangements (cf. chapter 4) and alter access to material support and benefits like social protections (cf. chapter 3).

First, changes in contracts form a crucial dimension of managerial control (Nichols et al., 2004). A substantial debate exists in the literature concerning how employers strategically turn away from full-time, standard employment contracts. There has been a rise in the use of self-employment and various contractual arrangements such as temporary agency work, subcontracting, or so-called 'zero-hours contracts', where workers are remunerated only for the hours worked without guaranteed income during periods of low demand. This enables employers to cut costs and reduce the firm's uncertainty (Ales et al., 2021; Euwals et al., 2017; Fleming, 2017; Purcell et al., 2004). Notably, some employers are replacing employees with workers who are legally self-employed, but often wholly dependent on the company, termed 'bogus' or 'false' self-employment (Murgia & Pulignano, 2021). These changes undermine the formal protective regulations regarding income and working time ensured by standard employment contracts through employment rights, and the autonomy these contracts guarantee for workers (Rubery et al., 2018). 'Non-standard' employment forms generally make work more unstable and insecure, weakening the position of workers (Standing, 1997; 2011). They enable employers to offload risks to workers, for example providing them with insufficient and unpredictable hours (Wood, 2018; Rubery et al., 2015). Additionally, they expand employers' possibilities to discipline and control workers by regulating their access to work (Holst et al., 2010). Therefore, an analysis of managerial strategies needs to acknowledge the increasing diversity of contractual arrangements providing different avenues to control and exploit labour, as is done in chapter 4 of this thesis.

Second, and relatedly, an important aspect of managerial strategies pertains to the extent to which employers provide material benefits and social protection to workers (Nichols et al., 2004). By avoiding to hire workers under standard employment, thereby excluding them from employment rights and collective bargaining, companies create conditions conducive to reducing wages and wage-related benefits (Rubery et al., 2018; Standing, 1997). Further savings can be realized concerning benefits such as seniority pay, and employers can sidestep expenses related to social protections like pensions, unemployment benefits, healthcare, and sickness benefits (Kalleberg, 2009; Marčeta, 2021). This enables firms to make significant reductions in wages per unit, and results in an increased vulnerability and risk exposure for workers (Kalleberg, 2009; 2011; Kalleberg & Vallas, 2018). This vulnerability paves the way for exploitation and control, as workers are more dependent on the employer providing them with work (Crouch, 2019). As Cini (2023) points out, the more weakened labour is in terms of

rights and protections, the more its contribution to the valorisation process tends to be unacknowledged, increasing the risk of unpaid labour. The link between platforms' risk-shifting strategies and unpaid labour is addressed in chapter 3 of this thesis, exploring how platforms undermine employment regulations and social protections through a process of informalisation.

1.3.3.2 Risk-shifting strategies in platforms: contracts and 'regulatory arbitrage'

Many studies on control in platform work have taken a narrow approach, concentrating primarily on the utilization of algorithmic management systems to steer and direct workers (e.g., Griesbach et al., 2019; Möhlmann & Zalmanson, 2017; Rosenblat & Stark, 2016; Shalini & Bathini, 2021; Stark & Pais, 2020; Walker et al., 2021). This risks overemphasizing the role of algorithms and digital technology while overlooking that control and profit-making fundamentally hinge on platforms' ability to externalize labour costs by shifting risks to workers (Drahokoupil, 2021; Schor et al., 2020). As Vallas et al. (2022) explain, it is precisely by rendering workers more vulnerable that platforms can establish control.

Platforms are at the forefront of recent structural transformations in labour markets, institutions and employment relations, including the rise of flexible and precarious forms of work (Kalleberg & Dunn, 2016; Lata et al., 2023; Pulignano, 2019). Leveraging digital technology, platforms reshape employment relations (Duggan et al., 2020), decoupling labour from legal regulations and minimum standards (Macdonald, 2021; Woodcock & Graham, 2020). Consequently, platforms dismantle worker protections and rights, transferring risks that were previously borne by employers and the state to workers (Vallas 2019; Vallas & Schor, 2020). Platforms' strong self-regulatory role enables to exert powerful influences over their institutional environment (Vallas & Schor, 2020). The 'peer-to-peer' platform model can cause disruption as it allows direct connections and exchanges between individuals, bypassing traditional intermediaries and existing institutions (Frenken et al., 2020; McKnee, 2017). Examining the effects platforms' organisational models have on workers' protections is essential for understanding the emergence of unpaid labour (Marà & Pulignano, 2021).

Central to platforms' risk-shifting strategies is their endeavour to avoid classification of their workers as employees of the platform (Cherry & Aloisi, 2013; De Stefano, 2017; Prassl, 2018). Platforms strategically describe themselves as market 'intermediaries' (Marčeta, 2021) or 'tech companies' (Sundararajan, 2017). This rhetoric is instrumental in eschewing designation as, for example, transport or courier companies, as it implies that platforms do not themselves provide the services customers seek, but rather administer technology to facilitate exchanges between demand and supply (Tomassetti, 2018). Accordingly, most platforms characterize their workers as independent contractors (Cherry & Aloisi, 2013). This practice, termed

'contractual outsourcing' (Woodcock & Graham, 2020), can take different forms. Most typically, platforms hire workers under various self-employed contracts (Scholz, 2017). However, some platforms also rely on different contractual arrangements, such as temporary agency work (Heiland, 2022). Recent research highlights instances where platforms eschew providing workers with contracts altogether, replacing traditional labour contracts with Terms of Service agreements that grant platforms immunity and relieve them of employer responsibilities (Van Doorn, 2017). As noted by Crouch (2018), this creates the illusion that platform work transforms the employment relationship into a genuinely equal contract that doesn't require the protective provisions of labour law. The strategies employed by platforms regarding contracts are crucial for cost reduction and labour exploitation, allowing them to sidestep standard regulations of wages and employment conditions (Muszyński et al., 2022). Drahekoupil (2021) refers to a strategy of 'regulatory arbitrage', where platforms exploit the cost advantage of hiring workers as self-employed rather than as employees. Platforms enjoy a 'discount' in comparison to traditional employers by benefiting from regulatory advantages (Mangan et al., 2023). This 'discount' implies that platform workers are compelled to shoulder the risks traditionally covered by employers themselves (Dundon et al., 2020; Vallas & Schor, 2020). Importantly, whereas the standard employment relationship collectivizes various risks, platform workers have to bear these risks individually (MacDonald, 2021).

On the one side, platforms reduce labour indeterminacy by transferring economic risks to workers (Marà & Pulignano, 2021). They minimize their exposure to demand fluctuations, instead shifting them onto workers who often lose income when demand decreases (Drahekoupil & Piasna 2017). By categorizing workers as independent contractors, platforms evade regulations governing recruitment and dismissal, enabling them to engage workers for short durations and to dispose of them swiftly (Kalleberg & Dunn, 2016). Further, the independent contractor classification allows platforms to circumvent collective bargaining and wage regulations, exposing workers to the risk of low income (Ravenelle, 2019; Van Doorn, 2017; Woodcock & Graham 2020). In addition, platforms are not obliged to furnish self-employed workers with work-related resources, further relieving them from these expenses (De Stefano, 2016). On the other side, platforms reduce costs by shifting social risks to workers (Aloisi, 2016; Shapiro, 2018; Stanford, 2017). Evading classification as employers permits platforms to cut expenses related to social contributions, including unemployment, pension and sickness benefits (Cherry, 2016). This limits workers' access to social benefits and statutory protections (Cano et al., 2021). Platforms also distance themselves from the responsibility of ensuring coverage for workers' health and safety risks. Leveraging technology to bypass working time and safety standards, platforms expose workers to risks associated with overwork (Wood et al., 2018a) and working 'unsocial' hours, such as nights and weekends (Wood & Lehdonvirta, 2021b). Health insurance is often not provided, and platforms circumvent health and safety regulations, neglecting coverage for workplace accidents (Graham et al., 2020). Moreover,

while conventional employers are obliged to protect their workers from customer misconduct, platforms often evade responsibility for harmful customer behaviours. This leaves workers susceptible to abuse, fraud or assault, especially as they often have very little information on clients, whom they face individually in an unregulated environment (Johnston et al., 2023; Schor et al., 2023).

This overview shows that platforms' strategies for control rely on externalizing risks and stripping away the economic and social rights and protections previously afforded to workers (Vallas & Schor, 2020). This translates into costs borne individually by workers, as will be illustrated in chapter 3 of this thesis. Moreover, while numerous studies underscore the significance of the contractual classification of platform workers (e.g., Cherry & Aloisi, 2013; Prassl, 2018), existing literature on platform work often overlooks the existence of diverse contractual groups, each potentially reflecting distinct control strategies, which will be explored in chapter 4. All in all, the literature on platforms' strategies indicates that platforms leverage technology both to tether participants to the platform and to heighten vulnerability on the workers' side (Lata et al., 2023; Sun et al., 2021). This highlights the need to study platforms' digital-based work organisation and the control mechanisms deployed alongside risk-shifting strategies to fully understand how platforms exploit and control workers (Schor et al., 2020).

1.4 Platform workers' practices of misbehaviour

1.4.1 Defining workers' practices of misbehaviour: consent and contentions

The previous part has shown that platforms deploy a combination of powerful strategies for control. This prompts the question of the agency of the workers providing the services and creating value for these platforms. The focus now shifts to their actions and experiences.

The indeterminacy of labour power implies that there is a structural absence of agreement between workers and employers over the work effort required in exchange for wages (Thompson & Smith, 2009). Employers aim to increase exploitation, while workers seek to protect and extend their own interests for job security, higher rewards and satisfying work (Thompson & McHugh, 2002). Workers may resist capitalists' efforts at exploitation (Thompson & Smith, 2001; Vallas et al., 2022), reclaiming some control in the 'space' between the purchase of labour power and its translation into profitable production (Edwards & Scullion, 1982). To analyse how this happens, this thesis examines *workers' practices of misbehaviour*, a focal point of attention in chapters 4 and 5.

Based on the work of Ackroyd and Thompson (1999 – 2nd version 2022), 'organisational misbehaviour' can be defined as day-to-day, workplace-level practices that workers develop around the system of managerial controls. The analysis thus starts from the rules imposed by management and studies how workers respond to these rules by developing practices around

them. This can involve engaging with, adapting or opposing managerial controls, or establishing new rules themselves (Ackroyd & Thompson, 2022; Barnes & Taska, 2012). The resulting practices enable workers to regain a part of the control lost under exploitative capitalist production relations. While some practices initiated by workers may be based on strategic or long-term thinking, others may simply be rational ways to cope with or to 'get by', given the constraints imposed by management. Hence, the term 'worker practices of misbehaviour' incorporates a broad range of coping practices and survival tactics aimed at reclaiming control, that may vary between active engagement through increasing degrees of non-compliance to active hostility and withdrawal (Ackroyd & Thompson, 2022). The organisational misbehaviour approach provides key conceptual tools to unveil more covert, lower-scale actions of dissent in organisations, even in contexts characterized by pervasive surveillance and control, such as platform work (Fleming & Sewell, 2002; Reid-Musson et al., 2020). As the focus is on the "dynamics of control and resistance" in the workplace (Ackroyd & Thompson, 2022: 22), the study of overt and collective forms of worker resistance is beyond the framework's scope.

The present PhD thesis illustrates practices of misbehaviour as underpinning both the organisation of consent (cf. chapter 4) and worker contentions (cf. chapter 5). The main reason for studying both consent and contentions is to explore workers' active role in both participating in and resisting their own exploitation, which is pivotal for understanding the dynamics surrounding unpaid labour. The thesis thus acknowledges the coexistence of cooperation and conflict within the capitalist labour process (Hyman, 1978), where workers are active agents in the resistance and reproduction of capitalist social relations (Smith, 2015a).

Worker consent is a central topic in labour process theory, asking why workers work sufficiently hard as to produce 'surplus' value (Burawoy, 2012). The analysis of consent sheds light on how work is organised so that on a day-to-day basis workers continue their tasks and go along with the work process, without the need for employers to resort to excessive force or coercion (Clawson & Fantasia, 1983). It is important to note that consent does not imply strict adherence to all rules imposed, as workers can also consent by 'misbehaving', actively engaging with and manipulating rules to their own advantage without fundamentally challenging employers' goal of profit maximization (Vallas, 2023; Vallas et al., 2022). An important precondition for the development of consent is that the labour process allows for some degree of autonomy, enabling workers to positively "invest in labour" (Burawoy, 2012: 188). Crucially, workers consent by gaining something back for themselves, even when they don't undermine management objectives (Purcell & Brook, 2022; Wood, 2021). A common illustration of this point is Beynon's (1973) investigation of assembly line workers who 'work back the line'. This means that workers work faster than required by the assembly line, so that they can make time for themselves that they use for rest and social interaction. As Beynon (1973) illustrates, workers are able to consent

by securing a 'space' of their own in ways that management cannot always control (Thompson & Findlay, 1999).

The notion of consent in labour process theory was first fully developed by Burawoy (1979), who analyses how consent is produced at the point of production. Consent is explicitly defined as active agreement; it pertains to the actions of workers participating in the labour process rather than their initial attitudes. Specifically, Burawoy (1979) departs from an analysis of the relations in production, that is the relations of the shop floor between workers and management. He observes that these relations are enacted in the game of 'making out', meaning workers construct their work as a game where they attempt to maximize their levels of production in order to reach a piece rate that earns them incentive pay. 'Making out' is essentially a coping mechanism, as workers enter into the game to counter the weariness of their work and to make time pass quickly. However, the very activity of participating in the game creates consent with regard to its rules. As Burawoy (2012: 198) highlights: "Games obscure the conditions of their own playing through the very process of securing participation. Just as one cannot play chess and at the same time question its rules, so one cannot play the game of 'making out' on the shop floor and at the same time question its rules.". Burawoy (1979) stresses the agency of the workers, as playing the game relies on the workers' initiative. This means that games have the potential to create conflicts with managers, who aim to secure surplus value.

Burawoy (1979) demonstrates that consent is essential for management to secure profits, with workers finding rewards in working harder to 'win' the game, hence willingly and actively participating in their own exploitation. Work games help to sustain management control by diverting workers' attention away from their exploitation (Wood, 2021). Even though games originate from worker initiatives, management often actively intervenes and regulates them. Ultimately, Burawoy (1979) disproportionally focusses on games that align with capitalist interests, arguing that games that oppose management ends rarely persist because they are repressed by management (Clawson & Fantasia, 1983). This view has been criticized for reifying consent, as the only possible outcome is more exploitation (Vallas, 2012). This is why the current thesis adopts a broader approach, studying not only workplace games, but also other compliant and non-compliant practices developed by workers. The organisational misbehaviour approach helps to nuance the account of worker conformity in organisations, bringing to light practices of dissent that may lead to increased productivity in some cases and output restriction in others (Ackroyd & Thompson, 2022).

Understanding how workers shape 'spaces of control' (Beynon, 1973) is essential for the theorisation of workers' practices of misbehaviour. As highlighted by labour process theory, conflictual interests are formed around the wage-effort bargain, which establishes customary levels of working effort in exchange for pay, but is subject to constant disagreement and potential dispute between workers and employers (Thompson & Smith, 2001; Thompson, 1989;

Thompson & Smith, 2009). Within this wage-effort bargain, workers actively defend their own interests, carving out possibilities to maximize their benefits from work (Thompson & McHugh, 2002). They do so by constantly finding ways to evade and subvert managerial organization and direction, working around or challenging the imposed rules. Misbehaviour can also involve workers making new rules themselves, that are progressively constructed and enforced among co-workers (Taska, 2012). In so doing, workers manipulate the wage-effort bargain to their advantage, allowing them to regain some control over their work and income (Ackroyd, 2012). 'Misbehaviour' can extend beyond consent and develop into *worker contentions*, where workers actively oppose the capture of value by employers, potentially threatening profits (Ackroyd & Thompson, 2022). The term 'contentions' indicates a "struggle over a small number of overlapping material and symbolic resources" at work (Ackroyd & Thompson, 2022: xix). It signals the active non-cooperation of workers who define limits to control and exploitation, giving rise to a continuous struggle between workers and employers over the extraction of labour effort in the workplace. Worker contentions indicate the limits of managerial exploitation and control, consistently challenged by workers (Ackroyd & Thompson, 2022; Thompson & Smith, 2009). Ackroyd and Thompson (2022) identify four analytically distinct but empirically often overlapping areas of contention: workers can content the amount of time devoted to work, the amount of work that is done, the appropriation of the material and products used and produced and the appropriation of their identity. The importance and salience of contentions in each area varies over time and between organisations (Ackroyd & Thompson, 2022). For the study of unpaid labour, practices aimed at contesting the amount of time spent on work are particularly important. Working time and the capacity to limit it is of central concern to workers because it allows them to protect a 'private' space where they can dissent even when work activities are tightly specified or regulated, hence regaining some control over their work and life. Numerous studies point to practices such as time wasting, absence (Harrison & Martocchio, 1998), and more recently, 'cyberloafing' (personal internet use during work), illustrating how employees limit their working hours or spend a significant share of these hours on private activities (Blanchard & Henle, 2008; Paulsen, 2011). Importantly, workers can reduce the time spent at the disposal of one employer due to possessing both 'effort power' - the ability to restrict work effort - and 'mobility power' - the ability to quit one employer for another. This means that contentions can extend beyond the labour process and take the form of 'mobility struggles', challenging managerial control and exploitation by moving between employers (Smith, 2006). Studying workers' mobility choices and employers' retention strategies, alongside contentions over wages, work pace and other conditions relevant to effort bargaining, is particularly relevant in the realm of task-based, on-demand platform work (Gerber & Krzywdzinski, 2019).

Differences can be expected in the practices developed by highly skilled compared to lower skilled workers. According to Ackroyd and Thompson (2022), the outcome of contentions in

terms of wages and working conditions is affected by the balance of power between managers and workers. Highly skilled workers are sometimes able to carve out spaces of control at the expense of less skilled workers, or to form alliances with management. Managerial control targeted at skilled workers often involves strategies of 'responsible autonomy' (Friedman, 1977), devolving responsibilities to workers without tight supervision, while lower skilled workers frequently encounter more rigid control. This in turn affects their capacity to reassert control over their work.

In sum, this doctoral thesis draws on insights from labour process theory (Burawoy, 1979; Beynon 1973; Smith, 2006; Thompson & Smith, 2001; 2009) and from the literature of 'organisational misbehaviour' (Ackroyd & Thompson, 2022; Barnes & Taska, 2012), to study workers' practices of misbehaviour aimed at reasserting control over their work. Constructing spaces of control enables workers to consent to but also to contest the exploitative conditions of their work. In practice, consent and contentions frequently coexist. As Edwards (1990: 141) highlights, "there are degrees of active consent and conflict that cannot be reduced to a single measure", "the analytical task is to explore their nature and constituent parts" (:144). In the context of platform work, Schor et al. (2023) propose to consider worker practices on a continuum ranging from consent to contestation. Therefore, the PhD research allows worker practices to vary between different kinds of productivity-increasing and counterproductive actions. The primary objective is to illustrate both workers' participation in and their resistance to their own exploitation. Importantly, however much employers are able to benefit from worker practices, these practices primarily serve workers' purposes and are created and maintained on workers' initiative (Clawson & Fantasia, 1983). This is a major source of dynamism at the workplace, giving rise to a continuous struggle for control (Edwards, 1990; Smith, 2015b).

Lastly, the PhD's focus on workers' practices of misbehaviour raises the question of workers' attitudes. Burawoy (1979) argues that consensual attitudes are generated in the day-to-day social interactions at work, reinforcing the existing power relations. The organisation of work as a game leads to workers not recognizing their hard work as exploitation because they are focused on the rewards that come with winning the game. Therefore, a central assertion in Burawoy's work is that exploitation, while essential to any analysis of capitalism, is not subjectively experienced as such (Burawoy, 2010; 2012). While this premise has faced criticism (Clawson & Fantasia, 1983), investigating whether workers are able to develop a sense of empowerment or influence over their work is important to understand how workers cope with experiences of exploitation (Hyman, 2006). Therefore, while this PhD does not attempt to provide a comprehensive account of worker attitudes, it still recognizes workers' subjective experiences of the social relations at the workplace as important elements for grasping how workers make sense of their exposure to unpaid labour.

1.4.2 Platform workers' practices of misbehaviour

There is a debate in the literature concerning the extent to which workers can develop their own practices on platforms. Many contributions emphasize the weakened agency and power of workers to challenge platform rules (Lata et al., 2023; Lee et al., 2015; Shibata, 2020). This is attributed to the pervasive algorithmic management strategies employed by platforms, constraining the range of actions available to workers and leaving them with little choice but to engage in unpaid labour (Gandini, 2019; Rosenblat, 2018; Wood et al., 2019b). For instance, Pignot (2023) describes how ride-hailing platform workers are tightly bound to algorithms to secure the next ride or additional income, hampering genuine resistance to control. Simultaneously, the development of consent may be hindered in platforms due to task fragmentation, diminished contact among workers (Bergvall-Kåreborn & Howcroft, 2014; Graham et al., 2017b), and the frequent absence of traditional organisational rewards such as career progression (Duggan et al., 2022; Webster, 2016). Furthermore, platform workers are expected to have fewer opportunities to exert their agency because they often face precarious working conditions, being paid by the task and shouldering the demand-related risks of work (Purcell & Brook, 2022; Wood & Lehdonvirta, 2021b). Based on this literature, Walker et al. (2021:27) conclude that "workers in the gig economy frequently appear powerless, (...) defeated, supine and largely non-resistant".

However, other contributions have distanced themselves from a deterministic perspective that assumes the defeat of workers' resistance through algorithmic technologies (Woodcock & Graham 2020). Galière (2020) contends that algorithms don't necessarily instil fear and passivity but rather necessitate an active engagement of workers. Recent studies have started to map expressions of agency and oppositional behaviour among platform workers (e.g., Anwar & Graham, 2020; Chen, 2018; Sun & Chen, 2021; Tassinari & Maccarrone, 2019) and highlighted the challenges platforms encounter in retaining and managing their workforce (Azzellini et al., 2022, Wu et al., 2019; Shevchuk et al., 2021). Mobility power is expected to be particularly high, as self-employed platform workers can register on several platforms and shift their activity from one to the other (Gerber & Krzywdzinski, 2019; Maffie & Gough, 2023). Additionally, using their own resources during platform work may amplify workers' power and opportunities to resist (Demirel et al., 2021; Cingolani, 2022). To maintain the self-employed classification of their workforce, platforms cannot be seen to direct the work too closely (Woodcock & Graham, 2020). For instance, platforms cannot formally prescribe how many and what hours workers should spend on work (Shevchuk et al., 2021). Platform control ultimately hinges of workers' willingness to buy into the established rules (Galière, 2020; Shapiro, 2018). For these reasons, fostering consent holds paramount importance in the context of platform work.

1.4.2.1 Work games in platform work

Existing literature underscores the distinctive character of games in platforms (Gandini, 2019; Malin & Chandler, 2017). While Burawoy's (1979) analysis of workplace games is based on face-to-face encounters between unionized, manual workers in an automobile company during the post-world war two period, the generation of consent takes on a different form in the realm of platform work. Existing studies often point to platforms strategically devolving some autonomy to workers, encouraging them to partake in productivity-enhancing behaviours (Galière, 2020; Rosenblat & Stark, 2016). Platforms are observed to install work games 'from above' (cf. Woodcock & Johnson, 2018) by designing work to resemble a game through features such as competition, scores, and rewards. This gives workers a sense of satisfaction akin to playing a game while simultaneously increasing their efforts and maximizing their labour supply (Gandini, 2019; Malin & Chandler, 2017; Van Doorn & Chen, 2021; Vasudevan & Chan, 2022). 'Gamification' appears to be particularly prevalent in ride-hailing and food delivery platforms, adopting techniques such as surge pricing where platforms temporarily raise pay rates in locations with high client demand to incentivize workers to work in those particular locations at a given time (Rosenblat, 2018; Shalini & Bathini, 2021; Shapiro, 2020). This is found to elicit revenue-maximizing games (Rosenblat & Stark, 2016), or so-called 'order pricing games' where workers constantly assess variable offers designed to motivate them to work (Van Doorn, 2020). Next to pricing techniques, gamification through platform-designed metrics offer workers the potential to make their work more interesting and to improve their position in the platform by earning 'points' or 'badges' (Vasudevan & Chan, 2022). Chan (2019) highlights the gamified nature of user-generated ratings in certain platforms, where 'rating games' can pressures workers toward the normalization of platform surveillance and work intensification to maximize their ratings. In essence, gamification 'from above' serves as an indirect and subtle control mechanism aligning workers' interests with those of the platform, directing their efforts towards the platform's objectives and thus eliciting worker consent to exploitation (Purcell & Brook, 2022).

On the other hand, workers can trick the algorithm and conceive games independently from the platform. For instance, ride-hailing drivers leverage tracked GPS data and passenger evaluations to improve their own performance (Möhlmann & Zalmanson, 2017). Among online workers, games related to flexible scheduling occur, where workers implement personal time management practices to balance platform work with family commitments (Lehdonvirta, 2018). Cameron (2022) uncovers a diverse array of games crafted by ride-hailing platform workers, not all of which align with platforms' objectives. In the 'relational game', workers concentrate on creating positive customer encounters, going above and beyond to achieve high customer ratings by offering gifts and additional services. Conversely, in the 'efficiency game', workers set boundaries with customers, avoiding additional efforts to maximize their

income per time spent on work. They devise their own monitoring tools beyond the app or manipulate the rating system. Both types of games are initiated and controlled by workers and are perceived as meaningful, but they have different implications for worker exploitation and retention on the platform (Cameron, 2022). This illustrates the need to adopt a nuanced approach to worker consent in platform work, recognizing the various ways in which workers can carve out a 'space' for themselves and regain some control through the practices they develop.

The amount of autonomy and control that platform workers can retain over their work varies across platforms and according to the skill level of workers. There is substantial evidence that especially highly skilled online freelancers can exercise temporal control in ways that are unavailable for standard employees (D'Cruz & Noronha, 2016; Jarrahi et al., 2020; Sutherland et al., 2020). However, there is a more limited understanding of how these workers engage with or manipulate platforms' rules for their own benefit (Anwar & Graham, 2020; Wood et al., 2018). Findings from Pulignano et al. (2024) suggest that some freelancers may cooperate with platforms because they are able to monetize their skills, while others feel their skills are unrecognized due to competitive bidding for platform tasks, and, as a result, they attempt to circumvent the platform. Consequently, chapter 4 of this thesis explores how workers on platforms requiring different competences and skills (food delivery work versus highly skilled online freelancing) organise consent through the practices they develop.

1.4.2.2 Worker contentions in platform work

There is a small emerging strand of literature on 'spaces of control' in the platform economy, examining how workers can influence work outcomes by adopting everyday practices aimed at regaining control (Anwar & Graham, 2020; Bronowicka & Ivanova, 2020; Reid-Musson et al., 2020). Investigating the role of platform workers in shaping such 'spaces' requires consideration of the reconfigured work-effort bargain in platform work where platforms exert control while transferring economic risks and dismantling social security protections (Moore & Newsome, 2018; Pulignano et al., 2024). Workers respond by contesting exposure to these risks in various ways (Schor et al., 2023). Based on emerging findings, there seem to be various potential sites of contention where platform workers may regain control and limit exploitation. Mumby et al. (2017) observe that pervasive algorithmic control may have the side-effect of extending workplace resistance beyond the traditional boundaries of the firm. For example, the use of algorithmically mediated customer control by platforms has broadened the service encounter, creating more touchpoints between workers and clients. This expansion means workers' resistance can occur not only during the execution of work but also before, during, and after task completion, for example during worker selection or rating (Cameron & Rahman,

2022). The platform algorithm is both the means by which control is ceded to capital, and the avenue through which workers can reassert control (Purcell & Brook, 2022).

One important site of contention appears to be the algorithmic management and datafication of platform work. Confronted with information asymmetries, platform workers develop interpretative practices, attempting to discover and guess the algorithm's rules governing work allocation and pay (Bronowicka & Ivanova, 2020; Möhlmann & Zalmanson, 2017). They share these insights with peers through digital channels such as social media and forums (Chan & Humphreys, 2018). In so doing, they create spaces for in-group expression outside platforms while at the same time challenging the power asymmetries in platforms and exposing the sometimes 'unfair' rules of the algorithm (Bronowicka & Ivanova, 2020). Moreover, platform workers have devised methods to evade algorithmic surveillance. Online freelancers use timing methods to work around the tracking of their keyboard presses and mouse movements, making their own time for non-work-related activities (Wood et al., 2019a). Ride-hailing workers disable tracking through their apps and resort to alternative GPS systems (Chan & Humphreys, 2018). Some even employ different bot applications and register their vehicles on multiple devices to avoid penalties or secure higher fares (Chen, 2018; Möhlmann & Zalmanson, 2017). Engaging with multiple platforms simultaneously or maintaining multiple accounts on a single platform represents crucial practices that workers in different sectors use to minimize platform control and exploitation (Barratt et al., 2020; Duggan et al., 2022; Gerber & Krzywdzinski, 2019).

What is more, workers engage with and challenge platforms' reputation systems. Building a positive reputation is crucial for workers to regain control (Gandini et al., 2016; Silberman & Irani, 2016), and they employ various practices to achieve this. While some focus on improving their ratings, metrics, or profiles within the platform (Pulignano et al., 2023a), others may expand their online 'self-branding' practices beyond one platform and advertise themselves through various social media accounts (Gandini, 2016). Workers also attempt to rework platforms' reputation systems to their advantage. For example, they try to re-integrate their reputation into interpersonal relationships with clients, mitigating the insecurity caused by algorithmic rating systems (Wood & Lehdonvirta, 2023). Rahman (2019) shows how online platform workers influence their rating scores through extensive negotiations and interactions with clients. Additionally, platform workers are found to share information on tasks and clients among each other with a view to improving their performance and reputation on platforms (Wood et al., 2018).

Workers reckon with and try to mitigate the risks associated with platform labour (Bronowicka & Ivanova, 2020; Schor et al., 2023). They seek to increase the predictability and stability of their work by cultivating interactions with clients and establishing personal routines (Petriglieri et al., 2019; Sutherland et al., 2020). Online platform workers are found to engage in mutual assistance and task redistribution (Lehdonvirta, 2016; Yin et al., 2016). In the realm of food

delivery work, couriers communicate for the sharing of equipment and assist each other in the event of accidents or system breakdowns (Gregory, 2021; Lee et al., 2015; Veen et al., 2019). Some platform workers set limits around the work they are willing to accept (Reid-Musson et al., 2020), for example refusing tasks that might jeopardize their health and safety (Möhlmann & Zalmanson, 2017), or avoiding specific clients (Lee et al., 2015). Food delivery workers exert both effort and mobility power to mitigate the impact of platform work, influencing the intensity of the delivery process and avoiding to deliver at certain times (Heiland, 2022). Online freelancers who notice that a client is dissatisfied may cancel a project before the client leaves a negative rating (Rahman, 2019).

This brief overview illustrates the multitude of sites and practices that workers have at their disposal to contest platforms. While some practices help workers to do their work more efficiently and contribute to creating value for platforms (Barratt et al., 2020), others are at odds with platforms' strategies, jeopardizing both the efficiency and the availability of labour (Heiland, 2022). In line with Chen (2018), the PhD research considers platforms as 'contested spaces' where workers actively try to manipulate conditions to their own advantage. Workers' interests may diverge from those of platforms, and they may only tolerate platform control up to a certain point (Shapiro, 2018). Platform workers have openly expressed dissatisfaction regarding payment, social security and health and safety issues, claiming a larger share of the value created by platforms (Cant, 2019, Tassinari & Maccarrone, 2020; Umney et al., 2023; Wood & Lehdonvirta, 2019). However, it remains unclear how this disagreement manifests in everyday practices of resistance around unpaid labour. The organisational misbehaviour approach has been identified as useful to uncover self-employed platform workers' struggle over their lack of autonomy, revealing practices that subvert and challenge platform control to a certain degree (Reid-Musson et al., 2020). Chapter 5 of this thesis uses this perspective to study if and how platform workers seek to regain control over their income lost due to unpaid labour, which is key to limit exploitation (Holmstrom, 1977). Importantly, the chapter pays attention to differences in workers' practices across various platforms with different control strategies, offering a nuanced understanding of contentions in platform work.

As to workers' experiences of platform work, much literature points to platforms being characterised by a strong rhetoric of flexibility, worker freedom and self-fulfilment, aiming to foster consensual attitudes (Galière, 2020; Morales & Stecher, 2023; Scholz, 2017; Schor, 2017; Tirapani & Wilmott, 2022). Platform work is portrayed as a freer alternative to direct employment and the allure of 'not having a boss' commonly motivates individuals to enter this kind of work (Purcell & Brook, 2022). This rhetoric impacts on platform workers' experiences, as they take pride in becoming self-entrepreneurs, and internalise a 'hyper-meritocratic' justice logic (Galière, 2020) that legitimizes the risks of platform work (Schor et al., 2023). Workers' possibilities to carve out discretionary spaces in their work often serves as the foundation for

embracing the 'entrepreneurial' discourse. For example, the freedom to set their own hours allows workers to identify as entrepreneurs and creates a sense of agency among them (Rosenblat, 2018). The 'open' nature of platform work, where platforms seemingly accept almost all applicants, contributes to sustaining this perception (Peticca-Harris et al., 2020; Schor et al., 2020).

Although self-entrepreneurial freedom as part of platform workers' lived experiences cannot be dismissed – many platform workers encounter a degree of freedom and discretion in their work (Tirapini & Wilmott 2022; Todolí-Signes, 2017) –, recent contributions highlight a contradiction between the promise of freedom sold by platforms and the day-to-day experiences of dependency and material deprivation of workers (Haidar & Keune, 2021; Jossierad & Kaine, 2019; Purcell & Brook, 2022; Ravenelle, 2019). This tension can trigger conflicts, with workers rejecting the assumptions of the 'self-employed contractors' business model (Tirapini & Wilmott 2022) or refusing to endure unfavourable and restrictive conditions (Shapiro, 2018). Some recent studies have started to explore how workers make sense of their precarious and exploitative conditions (Bucher et al., 2021; Purcell & Brook, 2022), for example by engaging in 'identity work' (Jossierad & Kaine, 2019). As demonstrated by Cameron (2022), participation in different types of games can underpin divergent stances towards the platform – either perceiving it as a facilitator, or as constraining and hampering workers' success. Thus, the experiences of platform workers can vary based on the practices they develop within different types of platforms. Depending on the different strategies implemented by platforms, workers make sense of and respond to their exposure to unpaid labour in different ways, as elucidated in chapter 5.

1.5 Control and consent regime dynamics in platform work

Following labour process theory, this thesis examines platform strategies for control and worker practices of misbehaviour as fundamentally linked to each other. Labour process theory refers to this complex interrelationship as "the dialectics of control and consent" (Clawson & Fantasia, 1983: 671), highlighting the importance to study how both constitute each other. On the one hand, worker practices can be regarded as an outcome of control. This is exemplified by the abovementioned subtle control mechanisms such as gamification, where platforms intentionally leave some room for discretion to workers and actively spur the development of worker practices when these result in increased productivity (Galière, 2020; Rosenblat & Stark, 2016). On the other hand, workers' practices may influence management strategies. If the practices established by workers threaten management objectives, management is likely to expand or modify control measures (Burawoy, 1979; Edwards, 1979). Platforms like Uber have reacted to worker resistance by adjusting their organisational model to avoid re-classification

as an employer, especially after legal cases were directed against them (Aloisi, 2016). Employers may also assimilate workers' everyday misbehaviour practices (Ackroyd & Thompson, 2022). This has been illustrated in platforms that capitalize on and integrate the practices developed by workers to expand efficiency and establish a stronger presence in markets (Cini, 2023b; Van Doorn et al., 2021).

To explore the dynamic interplay between platform strategies and worker practices, this PhD thesis departs from Burawoy's (1985) work on 'factory' or 'production' regimes (cf. chapter 4). A key contribution of this framework is that it looks at the structural conditions under which consent and coercion are produced, locating workplace dynamics in a bigger picture of changing societal and market institutions, and state policies (Smith, 2015b; Thompson & Van den Broek, 2010; Wood, 2021). According to Burawoy (1985), a factory (or production) regime refers to the overall political form of production, including both the control-consent dynamics within the labour process, and the political apparatuses of production, i.e. the institutions that regulate and shape the workplace. Examining a 'regime' thus requires a comprehensive evaluation of various factors. In the first place, it involves considering the wider framework of rules governing workers' behaviour (Edwards & Scullion, 1982; Thompson & Findlay, 1999). This encompasses all the rules implemented by employing organisations to organise work and manage workers, including the contracts they use (Nichols et al., 2004). Secondly, the analysis should delve into the practices developed by workers as active agents in resisting and sustaining regimes (Wood, 2021). This involves examining how workers organise consent through misbehaviour or participation in 'work games' (Burawoy, 1979), hence shaping regime dynamics by reclaiming control for themselves.

Burawoy's (1985) approach allows to study labour control regimes as the historically contingent yet relatively enduring methods through which management exploits workers. On a broad level, Burawoy distinguishes between the despotic organisation of work, where exploitation is heightened through coercion, and the hegemonic organization of work, where consent prevails, facilitating exploitation without constant coercion (Clawson & Fantasia, 1983). The author demonstrates how the dynamics of capital-labour struggles over control are influenced by factors like market competition, the welfare state, and labour organisation (Edwards, 1990; Thompson & Findlay, 1999; Thompson, 2003). For instance, the 'market despotic' regime that Burawoy (1983; 1985) identifies in early capitalism relied on high levels of competition, worker dependency and weak state regulation, enabling tight and arbitrary control of workers. Conversely, the 'hegemonic' regime emerged from the rise of monopoly capitalism and labour unrest, resulting in union involvement and legal constraints on firms that limited managerial coercion and granted rights and employment guarantees to workers. Under this regime, firms established internal labour markets to foster worker loyalty. Only under these conditions did workers find enough autonomy in the labour process to organise consent through 'work games' (Burawoy, 2012; Wood, 2021). Burawoy pinpoints the 'hegemonic

despotism' regime emerging from increased global capital mobility and the dismantling of collective labour from the 1970ies. This regime allowed management to turn the mechanisms of the hegemonic regime against workers, securing consent for concessions that enabled increased labour exploitation (Burawoy, 1983; Wood, 2021).

While useful for elucidating how wider societal and market factors shape workplace dynamics of control and exploitation, control regimes should not be perceived as undergoing a linear evolution, as diverse regimes coexist and can be combined (Wood, 2021). Workplace regimes vary extensively across economic sectors, industries and firms (Edwards, 1986; Littler, 1990; Thompson, 1990). Importantly, regimes are never settled as they change and emerge from ongoing struggles (Thompson & Van den Broek, 2010). Recent literature has confirmed the relevance of the 'regimes' approach in studying global production systems, highlighting the interplay of social relations and institutions in labour control, as well as the active role of workers (Baglioni et al., 2022).

This raises the question to what extent and how exploitation in platforms is sustained by a particular regime, which is explored in chapter 4 of this thesis. Pulignano et al. (2023b) integrate insights from Burawoy's (1985) factory regime approach into their analysis of socio-technical regimes of worker autonomy and unpaid labour across platforms. However, worker consent has not yet been examined as part of a particular 'regime' in platform work. Existing studies often view 'control regimes' in platforms solely based on the rules imposed, overlooking the active role of workers in shaping these regimes (Heiland, 2022; Kellogg et al., 2020). A comprehensive analysis of 'regimes' in platform work means to look at the rules set by platforms through the use of digital technology, the worker practices unfolding from these rules, and the institutional setting surrounding platform work. Key here are the abovementioned risk-shifting strategies, encompassing 'regulatory arbitrage' by exploiting various contractual arrangements to eschew worker protections while maintaining control. As Cohen (2010) demonstrates, contractual arrangements significantly influence worker practices. Workers in his study engage in extensive efforts and provide unpaid favours for clients when self-employed, while resisting to do so when they are hourly-paid employees (Cohen, 2010). The distinction between 'truly' self-employed workers versus employees is harder to make in platforms, where workers navigate tensions between experiences of autonomy and dependency (Haidar & Keune, 2021; Purcell & Brook, 2022). Chapter 4 explores the specific responses and practices developed by platform workers hired under diverse contractual arrangements.

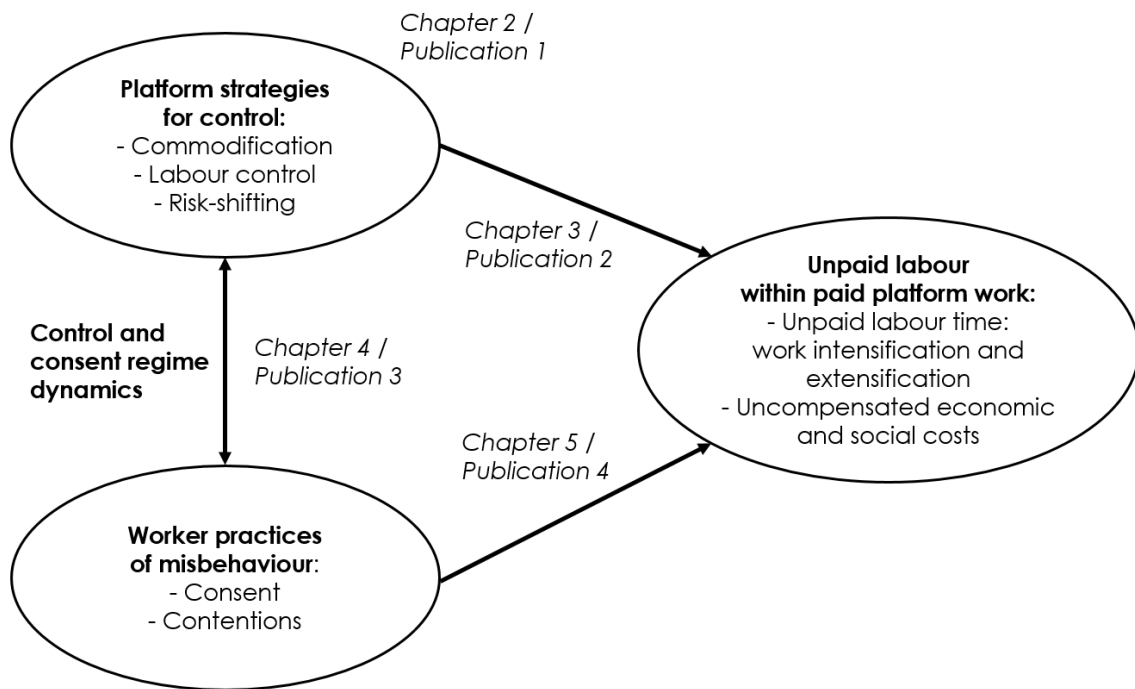
1.6. This PhD: Examining how unpaid labour unfolds from platforms' strategies for control and platform workers' practices of misbehaviour

1.6.1 Integrated conceptual framework and research questions

The above discussion of the concepts and analytical approach used in this thesis is now summarized in an integrated conceptual framework, that also provides an overview of the structure of the thesis. As Figure 1.1 (p.54) illustrates, the thesis will investigate platforms' strategies for control and valorisation, workers' practices to regain control and unpaid labour within paid platform work, as well as the designated relationships between these concepts.

The examined concepts are complex and multidimensional. Platforms' strategies for control encompass the way in which platforms commodify labour, establish labour control and shift risks to workers by using specific contractual arrangements and engaging with or disrupting existing regulations. These different dimensions are listed separately for analytical purposes, in practice they overlap and mutually condition each other. Regarding worker practices of misbehaviour, the thesis is interested in both consent and contentions. The thesis looks at the way in which workers actively engage with or challenge platforms' strategies, enabling them to regain some control for themselves. This underpins the generation of consent, enabling workers to continue their work without posing a fundamental challenge to platforms' goal of profit-maximization, but also contentions, where workers oppose platform control and exploitation by manipulating the wage-work exchange to their own advantage. The thesis also considers the dynamic interaction between platform strategies and worker practices of misbehaviour, referred to as 'control and consent regime dynamics' based on Burawoy's (1985) factory regimes approach. Unpaid labour, the dependent variable in this thesis, is defined as unremunerated activities within paid platform work that contribute to production, serving as a key indicator of exploitation. As illustrated by findings in the different chapters of the thesis, unpaid labour encompasses unpaid labour time, understood as the extensification and intensification of working time; and, relatedly, uncompensated economic and social costs. As the conceptual model shows, unpaid labour is shaped by both platform strategies and worker practices.

Figure 1.1: Integrated conceptual framework



Source: Own elaboration

Based on this integrated model, the overarching research question “How does unpaid labour unfold from platforms’ strategies for control and workers’ practices of misbehaviour in Belgium?” can be split up into four sub-questions:

- Sub-question 1: What strategies do platforms use to achieve control?
- Sub-question 2: How does unpaid labour unfold from platforms’ strategies for control?
- Sub-question 3: What practices do platform workers develop to organise consent around and/or contest platforms’ strategies for control?
- Sub-question 4: How does unpaid labour unfold from platform workers’ practices of misbehaviour?

1.6.2 Research context and study design

1.6.2.1 The context of the research: Belgium

This thesis is based on research conducted within two interlinked research projects: the ERC Advanced Grant project ‘ResPecTMe: Resolving Precariousness: Advancing the Theory and Measurement of Precariousness across the paid/unpaid work continuum’ (grant agreement n° 833577); and the FWO project ‘Precarious work in the on-line economy. A study on digital workers in Belgium and the Netherlands’ (n° G073919N). The research developed within these projects took place in eight different countries (France, Belgium, the Netherlands, Germany,

Sweden, Poland, Italy and the United Kingdom) and three different sectors (care, creative and platform work). This thesis's focus is on platform work in Belgium.

This is a understudied phenomenon, as most research on platforms has focused on liberal market economies and excluded Belgium (notable exceptions are Duus et al., 2023; Drahokoupil & Piasna, 2019; Lenaerts et al., 2018; Pulignano et al., 2022; Pulignano & Van Lancker, 2021; Zanoni, 2019). Exploring unpaid labour in a setting such as Belgium can deliver important insights. First, Belgium represents a highly regulated context, featuring extensive labour market regulations and an encompassing system of collective bargaining and social protection (Van Gyes et al., 2009). It is interesting to explore how workers respond to unpaid labour in this setting. Second, Belgium is a pioneer in introducing legislation boosting the growth of the platform economy. Notably, the 'De Croo law' allows officially recognised platforms to use the so-called 'peer-to-peer' status, a fiscally advantageous regime that also exempts platforms from social security contributions. Between 2018 and 2020, 'peer-to-peer' platform workers were exempted from paying taxes and social contributions altogether, whereas from 2021 onwards a 10.7% tax rate applied for earnings up to €7.170 (the 2023 figure) (Paelinck, 2020; United Freelancers, 2024). The use of this status has enabled platforms in Belgium to significantly expand their workforce (Pulignano et al., 2022). It has been heavily criticized as providing a regulatory 'loophole' for platforms to avoid the costs and responsibilities shouldered by conventional employers, putting workers in a vulnerable position (Graceffa, 2018). Belgium also provides a 'student self-employed' status that platforms have used to hire students between 18 and 25 years old as 'self-employed' workers without having to pay tax or social security contributions. Studying unpaid labour in this context can provide valuable insights into the way in which platforms' strategies take into account existing regulations and how this may facilitate the exploitation of workers. Third, during the thesis's writing, there was a continuous debate about the status and working conditions of platform workers in Belgium. Trade unions played an active role in advocating for the re-classification of platform workers as employees to ensure decent pay and social protection (ACV, 2021; Bruzz, 2020), whereas platforms like Deliveroo insisted on the freedom and independence of their workforce, defending their classification as self-employed (Hiroux, 2021). Between 2019 and 2023, an ongoing court case challenged the classification of workers as 'peer-to-peer' and self-employed, ultimately resulting in the requalification of food delivery platform workers as employees (Cardinaels, 2023; Carpentier, 2023). As of January 2023, Belgium has also implemented a new labour deal (influenced by the European Commission directive on platform work), creating a framework of criteria to qualify the legal status and enhance the insurance protection of self-employed platform workers (Securex, 2022). The findings on worker control and exploitation produced in this thesis provide important insights in view of these developments. Fourth, the platform economy, although constituting only a small share of the Belgian economy, has gained in importance over the last few years. The covid-19 crisis has

fuelled the growth of some platforms, especially in food delivery (Pulignano, 2022). Platforms have emerged in an increasing number of sectors (FOD Financiën, 2023). Therefore, it is interesting to study how platforms are able to enter markets and attract workers and clients in Belgium.

1.6.2.2 Study design and methodology

To answer the research questions, the PhD adopts an inductive case-study approach (Eisenhardt, 1989; Patton, 1990), aiming for an in-depth understanding of unpaid labour, platform strategies and worker practices on a limited number of platforms in Belgium. Given the platform economy's recent emergence and the limited availability of studies in Belgium, thorough investigations are crucial to comprehend how (unpaid) platform labour unfolds. Hence, a qualitative research approach is deemed most suitable, because it allows gathering detailed knowledge about social processes in specific settings (Mortelmans, 2013). While other studies have already argued that platforms commodify, control and exploit workers, the current thesis seeks to explore *how* this happens and *what consequences* this has for workers and their experiences of platform work. The thesis was developed within the qualitative stage of the abovementioned FWO and ERC research projects, where the objective was to generate theory and new hypotheses from data, that will subsequently be tested in a quantitative survey (the latter phase exceeds the scope of the current PhD research). Together with the other studies emanating from these projects, the thesis attempts to provide rich insights into the phenomenon of unpaid labour and its' underlying mechanisms. The research does not pursue statistical representativeness but instead aims to come up with categories, concepts and ideas that enhance the understanding of the particular features of platform work in each examined case.

In line with labour process and organisational misbehaviour theories, the unit of analysis is the micro-level of the 'workplace' where the dynamics of control, consent and contentions unfold (Ackroyd & Thompson, 2022). Notwithstanding this focus, the analysis also recognizes that structural factors at higher levels, such as national and sectoral regulations and available contractual arrangements, fundamentally shape labour process dynamics and outcomes (Thompson & Van den Broek, 2010; Thompson & Vincent, 2010). Due to the focus of this PhD on unpaid labour within paid employment, the research specifically targets platforms for the exchange of paid services, hence excluding platforms for the sharing or exchange of goods (e.g. Airbnb, eBay), platforms for inherently free-of-charge activities, and social media platforms (Bajwa et al., 2018; Eurofound, 2018). The research includes platforms that originated in Belgium and those that originated from other countries but are also operational in Belgium (Fabo et al., 2017). It features both 'online' labour platforms where services are provided

remotely and 'offline' or location-based platforms where workers and clients are 'matched' online but the service is provided in a specific location (De Stefano & Aloisi, 2017).

As the literature review shows, a nuanced account of unpaid labour needs to consider differences across platforms and sectors (Pulignano et al., 2023a; Pulignano & Marà, 2021). The selection of the diverse cases (i.e. platforms) happened within the ERC and FWO research projects and was extensively discussed with colleagues. It involved several stages. As a first step, we conducted desk research to determine what platforms are active in the countries under study. In Belgium, the government provides a list of officially recognized platforms that is updated every year and includes platforms providing various online and location-based services (FOD Financiën, 2023). However, the list is incomplete, as many platforms active in Belgium were never officially registered by the authorities. This problem has appeared in previous research, noting that the rapid evolution of the digital economy is largely undetected by official statistics (Degryse, 2016). Therefore, the desk research was extended by collecting a large amount of platform names and url's from articles, social media and via search engines. This led to a list that was as complete as possible at the start of the data collection. Case selection from this list was based on various criteria. One important criterion was to maximize variation regarding platforms' strategies and unpaid labour. Therefore, attention was paid to choosing platforms that differ regarding the location of work (online/offline), the nature of – and the skills required for the work. The case selection was also done with a view to maximizing cross-country comparisons, aiming to select platforms active in multiple countries we studied where possible, or platforms with similar business models across countries with a view to generating comparability. To enable comparisons not only between sectors but also between platforms within the same sector, at least two platforms per sector were selected. Finally, attention was paid to selecting types of platforms that to date had been less well researched, such as care and domestic work platforms. The presence of such platforms in the sample helps to avoid a bias towards male-dominated platform work (e.g. ride-hailing, food delivery) by complementing it with jobs that are typically associated with female workers (Berg et al., 2020; Kovalainen et al., 2019; Ticona & Mateescu, 2018). The reasoning for the selection of specific platforms for each of the publications used in this thesis is explained in the methods sections of the respective chapters (cf. chapters 2-5).

Within the platforms, a number of criteria were used to select individual workers, aiming to create diversity in the experiences of - and responses to unpaid labour. Our selection included workers that differed in terms of seniority (i.e., work experience on the platform), combination of platform work with other jobs (both within and outside platforms), and reliance on other sources of income (e.g. family support, pensions, unemployment benefits). We also paid attention to wage differentials between workers, especially when selecting freelancers on online platforms, where we included both highly paid occupations (IT and graphic design) and less well paid occupations (translation and copywriting). The selected respondents were

as diverse as possible in terms of gender, age, educational level and migration background. The resulting sample is not statistically representative for the entire population of Belgian platform workers. Instead, it is a purposive sample, where the aim was to gather as many novel insights as possible from each selected respondent about the key concepts in the research question (Eisenhardt, 1989; Glaser & Strauss, 1967). Recruitment of respondents proceeded through a combination of strategies, such as contacts via unions, workers' meeting points, social media, using the platforms' search engines to contact or to identify potential respondents, and snowball sampling. To protect respondents' privacy and prevent potential bias, we always made sure to contact respondents directly instead of relying on respondents preselected by platform management. An overview of the sample of workers can be found in each of the four publications (cf. chapters 2-5).

Data collection included both semi-structured and narrative interviews. In the narrative interviews, we promoted respondents to tell us the story of their current and past work experiences at the backdrop of their life histories, with a specific focus on platform work, and posed follow-up questions to elicit more detailed information and descriptions after respondents completed their narration (Schütze, 2008). Additionally, we used a guideline of semi-structured questions as a checklist to ensure comprehensive coverage of the areas of interest. The guideline was developed based on preparatory desk research and literature review, as well as expert interviews with trade unionists, academics and policy-makers that were conducted prior to the worker interviews. The covid-19 situation meant that a large part of the data-collection was arranged online (via Zoom or Skype) and from June 2020 also partly offline, but strictly following the ethics criteria indicated in the Covid-19 risk analysis approved by SMEC and ERC ethics committees. Because covid-19 affected the work and lives of many platform workers (e.g. loss of job or income, changes in the way work is executed, changing hours), it was an unique moment to collect data during the pandemic. The specific method for data collection and data analysis is described in the methods sections of chapters 2-5.

1.6.3 Structure of the thesis

This is a publication-based thesis and each of the four presented publications contributes to answering the overall research question by focusing on one of the sub-questions (cf. figure 1.1, p.54). The four publications were developed collaboratively with colleagues within the framework of the ERC and FWO projects. The fact that this thesis is publication-based means that some repetition is unavoidable, as certain concepts and arguments reappear throughout different chapters.

Chapter 2 (publication 1) starts the analysis by investigating how platforms organise work in a way that allows them to establish control (sub-question 1). It consists of a single case study

based on semi-structured interviews with couriers, restaurant managers, clients and the management of a food delivery platform, along with secondary data and participatory observation by becoming a platform client. Using data from these different sources was necessary to fully grasp the complexity of control in platform work, that requires intermediation and coordination between the different participants. By uncovering the digitally-based labour arrangements underpinning platforms, the chapter reveals how platforms foster commodification by simultaneously empowering and disempowering participants. Using digital data and metrics, the platform facilitates access to transactions by fuelling competition, while at the same time creating dependency by hiding information. As the chapter demonstrates, the joint occurrence of these forces enhances the platform's power to control and to valorise. The chapter illustrates the usefulness of the Marxian concepts of control, commodification, valorisation for the study of platform work, showing the specific way in which they unfold within platforms. Importantly, empowerment and disempowerment enable platforms to establish control by keeping for themselves the digital data that workers and users generate. Valorisation fundamentally relies on platforms' ability to withhold information and shift risks to participants. The insights from this first study are taken forward in the subsequent chapters.

Chapter 3 (publication 2) centres around the question how unpaid labour unfolds from platforms' strategies (sub-question 2). The chapter builds on the insights from chapter 1, and extends its focus to a different sector of the platform economy, i.e. domestic care work. Like chapter 2, it considers how platforms organise work by digitally connecting workers and clients, but it also adds the way in which platforms disrupt regulatory structures by imposing their digital employment models as an important part of their strategies for control. It illustrates how platforms drive the informalisation of work arrangements in the regulated care service sector of Belgium, hence undermining the established rights of workers. The chapter goes one step further in answering the overarching research question by detailing how this exposes workers to unpaid labour. It does so by delving into the analysis of risks, shifted to workers within non-transparent digital platforms – a key element of 'disempowerment' identified in chapter 2 –, and conceptualises unpaid labour as the cost of these risks shouldered individually by domestic care workers when providing services through platforms. The chapter illustrates the complex nature of unpaid labour on domestic care platforms that takes the form of both 'economic' costs incurred by workers such as unpaid time spend on accessing work and being paid below minimum wages, and 'social' costs arising from workers' lack of protection when interacting with clients. To uncover these different manifestations of unpaid labour, the research relied on narrative interviews with platform workers on two domestic care platforms. The open narrative interview format allowed workers to go into detail not only about their work experiences, but also about the biographical and social costs they associate with platform work, which might have been overlooked in a more closed interview format. The method was

helpful to gain insights into domestic care workers' experiences of unpaid labour throughout their career and to grasp the distinct impact of working through platforms. To gain a comprehensive insight into the functioning of the two selected platforms, the narrative interviews were complemented with desk research and information collected by creating client and worker accounts. To better understand how platforms' strategies relate to the specific institutional and regulatory context, the research exceptionally made use of the opportunity to contrast domestic care platform work in Belgium and France, where data on the same two platforms was collected (all other chapters focus solely on Belgium). As illustrated in the chapter, France and Belgium differ significantly regarding the regulations and employment arrangements governing the domestic care sector. The results illustrate that platforms in both countries exacerbate workers' exposure to unpaid labour, notwithstanding the regulatory differences. However, domestic care platforms in Belgium have a distinctive impact on unpaid labour due to the specific strategy of 'regulatory disruption' they adopt, accounting for unpaid activities related to job access which are already contained in the French system.

Chapter 4 (publication 3) explores the practices workers develop around platforms' strategies (sub-question 3). The chapter adds a comparative perspective, comparing two on-location food delivery and two online freelancing platforms. This proved useful to shed light on differences and similarities in platform strategies and worker practices within and across sectors. Just like in chapter 3, data mainly consists of narrative worker interviews, which revealed workers' more covert actions and attempts to engage with, adapt, or resist the specific platform rules they faced. The chapter also draws on desk research and interviews with platform management to gain a comprehensive understanding of the various strategies deployed by platforms. Based on the previous chapters, chapter 3 considers digital intermediation and risk-shifting as central parts of platforms' strategies for control. It takes an additional step in the analysis of platforms' strategies by including the contractual dimension, showing that not only informalisation (as observed in domestic care work), but also the use of self-employed and other precarious contracts (such as the Belgian 'peer-to-peer' contract) can be part of platforms' strategies to control and exploit labour. It also showcases the different ways in which platforms direct and steer work within and across different sectors. Importantly, whereas chapter 2 and 3 focus on what platforms do, chapter 4 adds the practices of misbehaviour developed by workers to the picture. Drawing on labour process theory and theories on organisational misbehaviour, the chapter shows how workers create 'spaces of control', allowing them to organise consent around the specific rules governing work within platforms. By bending and challenging the rules, workers actively shield themselves from the risks offloaded by platforms. The nature of the resulting 'spaces' fundamentally differs between food delivery, where couriers regain control by creating protective circumstances, and online freelancing, where workers strive to safeguard their capacity for independent

competition. The chapter illustrates how the dynamic interaction between platforms' strategies and workers' attempts to regain control accounts for distinct 'regimes dynamics' in each of the examined platforms.

Chapter 5 (publication 4) provides insights into the way in which unpaid labour unfolds not only from platforms' strategies but also from workers' practices (sub-question 4). It further develops the comparative perspective, contrasting a food delivery and a domestic work platform to capture the variety of platform strategies, worker practices and unpaid labour across platforms. Narrative worker interviews were used to gain insights into workers' experiences of unpaid labour throughout their career and to contextualize these experiences in their overall work and life situation. This furthers the understanding of how platform workers lose but also regain control over their income, and of the meanings workers attribute to unpaid labour given platforms' specific way of organising work. The chapter builds on the conceptualisation of unpaid labour from chapter 3 and sharpens the focus on a particular dimension of unpaid labour, that is unpaid labour time. Drawing on the framework of 'organisational misbehaviour' which proved useful in chapter 4 to examine how workers carve out spaces of control, the chapter addresses an important remaining part of the research question by exploring how unpaid labour time unfolds from workers' contentions. It incorporates insights from chapter 2,3 and 4 on platforms' strategies for control and analyses the specific work arrangements platforms use to control working time. It shows that workers actively navigate unpaid labour time, which is key for comprehending how workers can protect and extend their interests in platforms by adjusting the changed wage-effort bargain to their own advantage. The analysis reveals differences in contentions between platforms, with food delivery workers contesting the extensification of their work by reducing idle time and domestic workers contesting work intensification by prolonging unpaid labour time. This brings to view that platform workers may limit, but also actively engage in unpaid labour. As argued in the chapter, this is crucial for workers to develop a sense of agency and empowerment in the context of exploitative platform work by recovering some control over their income.

Chapter 6 is the concluding chapter of this thesis. It summarises the main results of this study and highlights the most remarkable findings. Based on that, theoretical implications are derived, and limitations and starting points for further research are identified and discussed. The thesis is then concluded by highlighting a number of policy implications.

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2. Connecting at the edge: Cycles of commodification and labour control within food delivery platform work in Belgium

This chapter is based on: Franke, M., & Pulignano, V. (2021). Connecting at the edge: Cycles of commodification and labour control within food delivery platform work in Belgium. *New Technology, Work and Employment*, 38(2), 371-390.¹

Abstract

In this paper we examine how commodification and labour control unfold within a digital labour platform, focusing on the connections between the platform, its users and workers. Based on a qualitative study covering couriers, clients, restaurants and the management of a food delivery platform in Belgium, we shed light on the complexity of commodification, explaining how the platform simultaneously empowers and disempowers all participants. We illustrate how the platform fosters commodification by granting access to transactions and fuelling competition, while at the same time increasing dependency through withholding information from users and workers. In so doing, we contribute to understanding how platforms exert control and create, extract and capture value by connecting users and workers with each other through the use of digital technology.

Keywords

commodification, control, digital technology, food delivery, labour platform, value, work

2.1 Introduction

Recent studies on platform work – i.e. paid work mediated via on- and offline labour platforms – have turned their attention to the control processes involved (Griesbach et al., 2019; Wood et al., 2018), the role of new technology (Moore, 2017), platforms' abusive use of the self-employment status (Cherry & Aloisi, 2017) and the emergence of platform worker activism and representation (Tassinari & Maccarone, 2020; Vandaele, 2018). Several studies have highlighted the coordination and intermediation processes between different parties as key to understanding how labour platforms work (Heiland, 2021; Langley & Leyshon, 2017). Intermediation is based on platforms collecting and processing vast amounts of data to track

¹ Part of the research was also published in: Franke, M., & Pulignano, V. (2022). Labour Control and Commodification Strategies Within a Food Delivery Platform in Belgium. In E. Armano, M. Briziarelli, & E. Risi (Eds.), *Digital Platforms and Algorithmic Subjectivities* (pp.135 – 148). University of Westminster Press.

and predict transactions and activities, bringing workers and users together in ever-changing constellations for the execution of a task (Van Dijk et al., 2018). Arguments in the literature claim that the way in which platforms steer workers and users through the use of technology is at the core of 'platform capitalism' (Srnicsek, 2017). In addition, it is claimed that these mechanisms underpin value creation, extraction and capture by digital platforms (Zysman & Newman, 2006).

Sociological and labour studies have examined the implications of digital platforms for labour subordination and control, pointing to the importance of algorithmic ratings, monitoring and financial nudges prevalent in these platforms (Gandini, 2019; Shalini & Bathini, 2021). Wood et al. (2019) refer to a process of commodification when explaining how platform capitalism achieves control by subordinating labour through exposing workers to market forces. While these studies are clearly important, they fail to account for the complexity of the labour arrangements generated by platforms (Richardson, 2020). We argue that, by focusing solely on a platform and its workers without considering the entirety of relationships involved in platform work – including the users which we define here as both individual clients and businesses such as restaurants –, labour study scholars are limiting the contribution that they can make to understanding the complex forces underpinning commodification.

Drawing on scholars who use Marxian theory to locate platforms at the centre of "digital economic circulation" (Langley & Leyshon, 2017: 13), we attempt to uncover the complex nature of these forces by examining the relationships between platform workers and users. In so doing, we reveal what we call the empowerment and the disempowerment cycles connecting a digital labour platform, platform users (i.e. restaurants and clients) and workers (i.e. couriers), showing how they serve the logics of valorisation – which we here define as value creation, extraction and capture – within platform capitalism. Our study explores how platforms foster commodification by fuelling competition through the use of digital data and metrics to boost efficiency in managing transactions between workers and users, and simultaneously create dependency through withholding information. This suggests that commodification occurs through both competition and information asymmetry, and that the joint occurrence of these forces enhances platforms' power to control and valorise. The two questions are thus: 1) how do labour platforms commodify relationships between workers and users; and 2) what practices do they use in the service of valorisation?

Examining digital data and metrics is key to understanding how 'new' modes of capital valorisation and labour control occur (Srnicsek, 2017). Shapiro (2020), for instance, refers to dynamic price-setting as a calculative technique allowing platforms to optimise efficiency at the expense of other market participants. Attoh et al. (2019) show how Uber workers' subordination occurs through their participation in the production of digital data. Digital data and metrics are deployed within the platform-worker-user relationships to reduce transaction costs (Lehdonvirta et al., 2019), concealing the social arrangement behind the platform

interface (Richardson, 2020). This is because “valuable data is generated when customers browse their apps and rate the services provided, or when restaurants fulfil orders” (Van Doorn & Badger, 2020: 1476). We complement this literature by pointing to the empowerment and disempowerment cycles and explaining how platforms use digital data, metrics and algorithms within these cycles to commodify and valorise. Based on a qualitative study² within a food delivery platform (FD-Plat – an anonymised acronym) in Belgium, we illustrate the platform practices accounting for the complexity of commodification. We argue that empowerment and disempowerment create dependency, in turn enabling platforms to control workers and users while denying them access to the digital data they generate, as well as restricting workers' access to income and social security. In so doing, platforms extract value within the labour process by controlling labour power. Moreover, they capture value from users (particularly restaurants) who are monitored by the platform through client and worker ratings. The paper has three sections. In the first, we frame our argument within existing theoretical debates. In the second, we present the research design and the methodology underpinning data collection and data analysis before going on to present the findings. In the third, we discuss and conclude.

2.2 Commodification and platform work

Commodification is the theoretical term used by Marx (1867) to indicate how labour is embedded in market relationships of competition, hence generating the “exchange value” of a service/good for somebody “for whom it serves as use-value” (Marx, 1867: 131). Analysing transactions underpinning use / exchange value between users, workers and the platform is thus essential to grasp commodification in the platform economy. While self-employed platform workers and clients exist ‘independently’ of each other, they are brought together ‘on-demand’ by the platform to buy or to sell a service (Wood et al., 2019). Current definitions refer to labour platforms as technological tools organising interactions and transactions between workers and clients online. This is often referred to as the ‘triangular’ platform work relationship (Lehdonvirta et al., 2019; Schörpf et al., 2017), where digital technology and algorithms play a key role in bringing labour supply and demand together (Graham & Woodcock, 2018). Accordingly, labour platforms establish social arrangements between workers and users (Richardson, 2020). Valorisation processes within the platform economy are based on intermediation practices and capitalization processes between platforms, workers and users (Langley & Leyshon, 2017).

Positioning platform work within the social arrangements underpinning ‘platform capitalism’ (cf. Srnicek, 2017) requires an understanding of platform work as a capital-labour relationship

² Data collected includes interviews with workers, clients and the platform management, secondary data and participatory observation as a client.

(Moore, 2017; Stewart et al., 2020). One insightful example is Joyce's (2020) work on the 'cash nexus' between platforms and workers, "deprioritising the legal conceptions of employment that frequently dominate discussions on platform work in favour of a more sociological approach" (Joyce, 2020: 6). Joyce (2020) refers to subsumption as the Marxist term describing the historical process whereby capital comes to dominate labour processes. We argue that pointing to the capitalist nature of the production relationship within platform work also requires focusing on commodification, control and valorisation as equally relevant Marxist concepts. They need to be examined within the context of the triangular platform-worker-user relationship in order to better understand how labour platforms coordinate ever-changing constellations of workers and users. Stanford (2017) compares platform work with the 'putting-out' system in early capitalism, where companies subcontracted work to workers who assembled items (such as shoes, clothing) in their homes. This system illustrates a historical form of capitalist valorisation through coordination where commodification by the conversion of consumption goods ('use value') into monetized commodities ('exchange value') was facilitated by controlling independent workers outside the factory walls.

Recent studies suggest that labour platforms have extensive control over the compensation for and the organization of work, as they can hire workers by task and thus instantaneously adapt the workforce to their needs (Woodcock & Graham, 2020). Platforms impose the conditions under which a fragmented workforce connects with users (Wood et al., 2019) and limit workers' and users' capacities to access information which they could use for their own advantage, thereby exercising control through 'information asymmetries' (Rosenblat & Stark, 2016; Shalini & Bathini, 2021). This happens in a context where platforms shift economic risks to workers, providing no social protection and requiring workers to use their own resources (De Stefano, 2016). Hence, critical labour studies support the assessment that the labour relationships underpinning platforms are intrinsically commodified. Studying how commodification and control occur is essential to understand how platforms have come to dominate labour processes.

2.3 Control and platform work

Labour platforms use algorithms and other technology to collect and process large amounts of data generated by users and workers (Vallas, 2019; Van Dijck et al., 2018). Platforms then prevent workers and users from accessing this data (Helmond, 2015). Recent studies refer to 'algorithmic management' as a control system where self-learning algorithms assume responsibility for making and executing decisions affecting work (Möhlmann & Zalmanson, 2017). However, considering algorithms as a source of control may risk reifying algorithms at the expense of underplaying the importance of the overall dynamics of the capital-labour relations underpinning platform capitalism (Moore, 2018). This is because it is not the use of

algorithms that accounts for platforms evaluating and assigning work (Duggan et al., 2019), but rather it is the power of capital over labour – and the complexity of the underlying social arrangements – that explains how platforms use technology. Accordingly, all players need to be simultaneously coordinated in order for control through an algorithm to be effective (Richardson, 2020). This has two implications for the study of platform work.

First, labour platforms repurpose and fence off capitalist relations in a new environment where workers and users are constantly monitored (Schor & Attwood-Charles, 2017; Schörpf et al., 2017). Data appropriation for value extraction and capture go hand in hand with data expropriation and value creation (Van Doorn & Badger, 2020). Second, commodification of workers' and users' activities results from the continuous coordination by the platform through metrics (e.g. ratings, performance statistics) (Langley & Leyshon, 2017). Platforms use metrics to govern access to and exert control over data and information which are a relevant source of value (Jabagi et al., 2019). As we will explain, platforms engage in valorisation by not only easing access to transactions, thereby fostering the conversion of use value into exchange value through commodification, but also by withholding information from users and workers. This also increases their capacity to exert control. Thus, in line with Gandini (2019) we contend that platforms are a 'place' where control is deployed to respond to the logics of capital valorisation. We illustrate how this happens at the interfaces between workers, users and the platform, using the empowerment and disempowerment cycles of commodification.

2.4 Research Design and Methodology

2.4.1 Context

Digitalisation has fostered deregulation in Belgium (Basselier et al., 2018), in turn potentially undermining trade union power and the encompassing system of collective bargaining and social protection (Van Gyes et al., 2009). Notably, the 'De Croo law' allows officially recognized platforms to use the so-called 'peer-to-peer' employment status. As of 2018, peer-to-peer workers were able to earn up to €6340 (the 2020 figure) tax-free and exempt from social security contributions, though the Belgian Constitutional court recently overturned this scheme and a 10.7% tax rate will apply from 2021 onwards (Paelinck, 2020).

Food delivery platforms have exploited Belgium's quite generous tax regulations to grow rapidly while circumventing workers' bargaining rights and employment protection. The conditions under which Belgian workers engage in food delivery work differ widely. While a large share are young students, economically dependent on their parents, others combine platform work with a job as an employee or in self-employment and yet others rely on platform work as their sole source of income. Most food delivery platforms do not offer employee status, meaning that couriers' access to social protection depends on whether they have other

regular employment or financial support (Drahokoupil & Piasna, 2019). Peer-to-peer couriers are often migrant workers with no stable source of income, generating concerns about such workers' lack of protection and social rights (Graceffa, 2018).

FD-Plat, the food delivery platform under study, hires couriers under various self-employed statuses or under the peer-to-peer status. Originally, all were paid by delivery, i.e. receiving a fixed amount for picking up and delivering the food and a variable amount depending on the distance to the client. In response to the Belgian tax authorities challenging the classification of couriers under the peer-to-peer status, FD-Plat switched from a variable to a fixed delivery fee for peer-to-peer workers in October 2019 and eliminated their possibility to see the client's location before accepting an order and whether or not the client has tipped them. FD-Plat has grown substantially over the past few years, expanding to new cities and restaurants. When setting up business in Belgium, FD-Plat prioritized collaborations with restaurants that didn't yet have a delivery service. Recently, FD-Plat has also started working with restaurants with their own delivery service in place, allowing them to choose between using their own or FD-Plat's equipment and workforce.

2.4.2 Data collection

Data collection and analysis followed an abductive approach, moving iteratively between data and extant theory (Blaikie, 2007). Under this methodological approach, researchers depart from a review of the relevant literature, but challenge their understanding of the phenomenon under study by puzzling over the experiences and perspectives emerging from the empirical material. The objective is to construct theoretical ideas by making ongoing sense of the tension between the extant literature and unexpected research findings (Timmermans & Tavory, 2012). While our investigations were by and large performed from a Marxist theoretical perspective – in particular our interest in commodification, valorisation and control –, the abductive method enabled us to deepen and revise our understanding of these concepts in the platform economy based on unexpected empirical findings.

We started our fieldwork with an interest in how platforms commodify and control labour. We conducted three rounds of interviews with 37 workers between December 2018 and March 2020 (see Appendix 2.1 for an overview of the respondents). The respondents were recruited through different channels, using social media, personal networks, workers' meeting points and snowball sampling. In order to acquire a comprehensive understanding of how the platform fosters commodification and control, we distinguished respondents by employment status, the extent to which platform work was undertaken in combination with other employment, as well as a migration background. The interviews were conducted in Leuven, Brussels, Antwerp and Ghent, cities with varying degrees of urban concentration. Reflecting the demographic composition of Belgian food couriers (Drahokoupil & Piasna, 2019), most respondents were

men in their 20-ies, though we also included five women and older couriers. Conducting multiple rounds of interviews with couriers enabled us to observe how the platform intensified competition by enlarging its workforce and how it increased information asymmetries, especially for peer-to-peer workers. Moving back and forth between data and theory, we inferred how these observations related to labour control and commodification, while cross-checking our explanations with new data. In making sense of the practices underpinning commodification, we found that they occurred within the 'triangular' platform-user-courier relationship. Hence, we felt that data from the other participants would be crucial to fully understand these phenomena.

Interviews with restaurant managers, clients and platform management were conducted in early 2020. Clients were students or workers who used FD-Plat, and sometimes also other platforms, to order food. To explore differences regarding transactions with restaurants, we selected restaurants offering different kinds of food and with a business relationship of varying length with FD-Plat (between one month and four years), some of which also used other platforms. The information provided by platform management was important to understand valorisation processes and the platform's use of digital data. Interviews with restaurants and clients yielded deeper insights into the complex relationships and transactions between the different participants. Interviews lasted between one and two hours and were transcribed verbatim for analysis.

To complement and verify the information gathered in the interviews, we used participatory observation, with one of the researchers becoming a platform client and using the payment and rating system. Our research also benefited from secondary data collected between June 2019 and January 2020, especially the platform's website for workers and a social media community used by workers.

2.4.3 Data analysis

Both primary and secondary data were analysed and encoded, moving back and forth between data, concepts and categories (Blaikie, 2007). The coding was carried out by the researcher who conducted the interviews and was double-checked and extensively discussed with the second researcher to ensure the inclusion of key topics and to formulate hypotheses about the relations between them.

Drawing on the concepts of control and commodification, the analysis started by identifying the various ways through which the platform controls workers and the transactions happening within the platform. In their interviews, couriers described the controls they faced (e.g. statistics, sanctions), but they also highlighted experiences of autonomy, for example influence over their working hours. As further data on the platform, restaurants and clients was collected, we revised and extended the coding scheme, adding more codes on the practices implemented

between users, workers and the platform (e.g. rating mechanisms, monitoring). This resulted in a list of fifty-three first-order topics that came up repeatedly in the interviews. These topics showed that all players benefitted from access to transactions (e.g. 'saving time and effort' in the case of clients, 'increasing sales' in the case of restaurants), but also faced constraints when accessing transactions (e.g. 'problems during delivery' in the case of clients, '(limited) availability of orders' in the case of couriers).

In the second-order analysis, we reframed and rearranged the empirical findings in an 'empowerment cycle' and a 'disempowerment cycle'. This enabled us to theorize about the unexpected coexistence of practices supporting and constraining participants, as we could now see that they fundamentally related to each other, reflecting the platform's commodification strategies. As the analysis progressed, we suspected a relationship between information asymmetry and the platform's capacity to exert control, leading us to go through the empirical material again to verify this link. We also returned to the literature to deepen our understanding of the intermediation processes connecting different participants in the platform economy. Simultaneously considering this literature and our data enabled us to see that these processes fundamentally underpin valorisation and control. The resulting second-order coding reflects empowerment through access to transactions and disempowerment through withholding information, as well as the platform's use of technology and contextual factors. Links to the analytical concepts of commodification and the resulting processes of valorisation and control were added in the coding scheme. An overview of the coding scheme can be found in Appendix 2.1.

2.5 Findings

2.5.1 Cycles of commodification

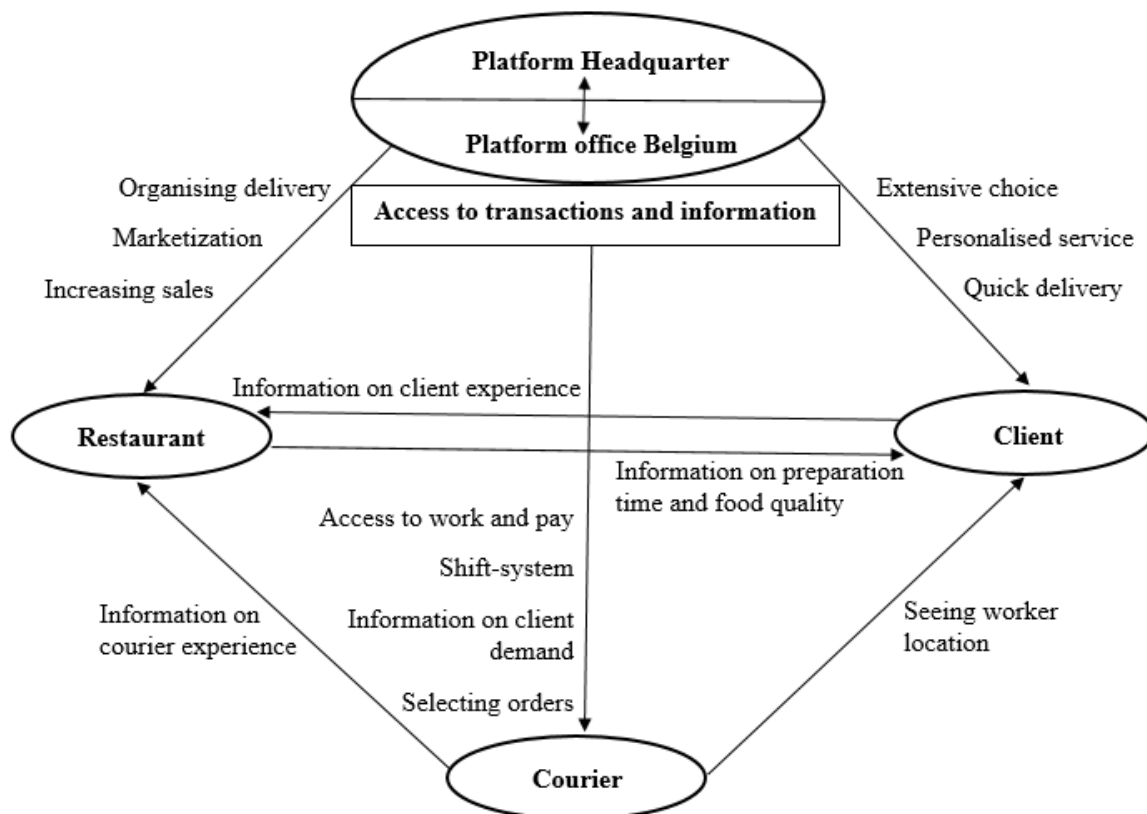
FD-Plat collects and processes vast amounts of digital data on users and couriers. Data is collected through three digital applications - one for clients, one for couriers and one for restaurants - which monitor all activities, choices, locations and contact details of these players. The data collected is processed in two ways. First, it is analysed by the platform's back-office staff, accumulating an increasing amount of information which is then used to make strategic choices and can be transferred to restaurants and clients. Second, it is fed into a self-learning algorithm which makes increasingly accurate predictions of users' and couriers' behaviour as more and more data is collected, with a view to improving delivery efficiency. Data collection and processing are at the heart of the platform's market expansion, as FD-Plat uses data to foster competition by sanctioning and rewarding users and couriers. In doing so, the platform facilitates commodification, as couriers, clients and restaurants connect with each other at minimal transaction costs. At the same time, the ability to commodify relies on

the platform's capacity to withhold information from participants. This tension indicates the way in which the platform enhances its power to control and to valorise, as both information asymmetries and the disclosure of data are used to enhance dependency on the platform, which is also a source of control. Hence, digital technology conceals the underlying labour arrangements empowering and disempowering users and couriers.

The empowerment cycle

As shown in the upper right-hand side of Figure 2.1, FD-Plat offers an extensive choice of meals to clients, deliverable quickly at any time of the day.

Figure 2.1: The empowerment cycle



The collection of client data allows the food selection to be personalised, with the choice of meals, options and special offers tailored to a client's preferences and location. One client describes FD-Plat's online menu as:

"Its psychologic beauty is overwhelming (...) Sometimes I don't know what to eat, should I eat sushi, should I eat a pizza, and then I check all the restaurants, I have lots of choice (...) An application that is always there for you. (...) One touch gets you anything you like." (Client 1)

This extensive choice is made possible by connecting clients with a large number of restaurants at minimal transaction costs. Following a market expansion strategy aimed at maximizing the diversity of food offered, FD-Plat added about one thousand restaurants to the client application in 2019-2020, supported by the platform's analysis of data on client demand and restaurants within different urban areas. This is how FD-Plat fosters competition between restaurants and gains a competitive advantage over other platforms:

“By logging on to [name platform] I can get food from many different restaurants in Brussels (...) I feel like the restaurants I order from are in a much larger radius around me. This is different from other platforms which work with restaurants that are close by and where delivery is even slower” (Client 3)

In addition, the client application discloses real-time information on food preparation times in restaurants and on the courier's location and trajectory to the client. As shown by the client → restaurant arrow in Figure 2.1, clients can evaluate restaurants using a five-star rating system and possibly adding a comment on the quality of the delivered meal and the timeliness of preparation. The platform processes the collected data and transfers it as 'use value' to clients:

“Usually, I choose food from restaurants that have 4.7 or 4.6 stars and I've never been disappointed by them.” (Client 3)

The platform → restaurant arrow shows that FD-Plat supports restaurants by organising the delivery service on their behalf. The platform provides restaurants that don't have their own delivery service with the couriers, infrastructure and the equipment needed to deliver food, including food packaging and a tablet containing the restaurant application, which allows restaurants to choose the dishes and prices shown to clients as well as to manage incoming orders:

“We help with the implementation of group orders, subscription to the internet (...) We also sell special packaging that is good for the delivery process. Our vision is that restaurants should just cook the food and otherwise do nothing.” (FD-Plat management)

Restaurants that already have a delivery service in place may keep working with their own equipment and workforce, while using the FD-Plat application. As a result, restaurants gain access to a large pool of new online clients:

“I agreed to work with [name platform] because so many students order through [name platform]. I'm getting lots more orders from students now.” (Restaurant 5)

In addition, the platform processes data on client ratings and produces additional statistics, such as the 'preparation time statistic' or the evolution of external sales, which it transfers as 'use-value' to restaurants. The upper left-hand side of Figure 2.1 shows that FD-Plat empowers restaurants by providing targeted marketing advice based on data analyses and exchanges between the platform's back-office staff in Belgium and the company's corporate headquarters (see circle at the top of Figure 2.1). As one FD-Plat manager explained:

“For example, we tell the restaurant ‘Have you heard of this new dish, the poke bowl? It’s popular in France, and will be coming to Belgium as well. Don’t you want to include it in your menu?’” (FD-Plat management).

As illustrated by the courier → restaurant arrow in Figure 2.1, couriers evaluate the delivery process, based mainly on their waiting time when picking up food at a restaurant. The platform transfers this data to restaurants, helping them to optimize food preparation and courier collection and further reduce transaction costs. All these things combined allow restaurants to boost their sales, while increasing dependency on FD-Plat:

“External sales account for an extremely high share of our turnover, 22.2%, a share that is rising exponentially (...). Last year alone, this share rose by 90%” (Restaurant 4)

At the same time, as shown by the platform → courier arrow in Figure 2.1, FD-Plat provides couriers with access to work through an almost unrestricted recruitment system. In principle, all adults permitted to work in Belgium can register and download the FD-Plat courier application onto their smartphones. Couriers usually access work through an online shift system, reserving timeslots for the upcoming week. Incoming orders are assigned to couriers by FD-Plat’s algorithm, based on real-time data on client demand, restaurants’ and couriers’ availability and location. According to the management, the use of this system allows FD-Plat to:

“ensure that couriers can access work while riding, (...) guaranteeing a certain revenue per hour” (FD-Plat management)

In addition to the shift system, the courier application has a feature allowing couriers to login outside their timeslots, providing them with information on whether client demand in their delivery zone is covered. If this is not the case, they can start receiving orders from the algorithm:

“You can work anywhere, as long as there is space – you see, when this bar is green, that means there is space available in this zone (...) [Name platform] defines the limit of couriers that can work at the same time and when this limit is reached, the zone is closed, no other couriers can login.” (Courier 22)

When receiving an order, couriers can see the restaurant and – in the case of self-employed workers – the location of the client who ordered the food. Based on this information, couriers can either accept or cancel an incoming order and even have the option of cancelling orders during the delivery process, resulting in the order being automatically assigned to another courier. This system empowers couriers by providing flexibility:

“It’s a decentralized system. You register remotely, you don’t have to interact at all, and then you just start. (...) You can cancel as many orders as you want. You can just pick the ones that you want and that’s it.” (Courier 15)

Pay for self-employed workers is calculated by the algorithm, taking into account real-time data on the street and traffic situation and hence allowing couriers to figure out how to maximize their earnings:

“It’s based on performance, if I go fast then I can do more orders, I can earn more than with a system paid by hour” (Courier 21)

The disempowerment cycle

At the same time, FD-Plat’s ability to commodify restaurants’ services through an attractive online menu relies on transforming restaurants’ ‘unique’ offer into a product displayed in a standardized way for all restaurants on FD-Plat’s client application. This involves withholding some information from clients, for example when special options available in the restaurant can’t be displayed. Restaurants report disadvantages resulting from this lack of information for clients, which become particularly visible in the case of restaurants that have their own delivery service alongside FD-Plat:

“For our own clients, we don’t deliver below €50 outside the city centre. But when clients order through [name platform], they sometimes order for €15. I’ve taken this up with [name platform]. Because for €15, I don’t want to send my workers so far to deliver. I’ve complained several times: ‘Please notify the client – not below the €50’, but they don’t understand my problem.” (Restaurant 5)

Moreover, empowering couriers by letting them choose which orders they accept is only possible at the expense of clients and restaurants not knowing which courier delivers the food, obscuring relationships between users and couriers. In the case of clients, this sometimes prevents them from tipping couriers when placing an order:

“I think the tipping system is weird because you have to give it beforehand. So I think ‘I don’t know if he is going to ride quickly’, that is why I don’t tip” (Client 2).

Restaurants have to deal with delivery delays without knowing what caused the delay:

“Sometimes the dish just stays there, no-one picks it up, and in the evening we have to throw it away. And no client has called us in the meantime, so we don’t know what happened. (...) Sometimes we call [name platform], they know if that particular order has been cancelled by a courier.” (Restaurant 3)

FD-Plat’s rating and monitoring system guides client expectations regarding preparation time and the state of the food on delivery. At the same time, it generates expectations among couriers for the food to be ready when arriving at the restaurant. Thus, empowering clients and couriers goes together with restaurants facing the risk of negative ratings as well as the risk of couriers cancelling the order and leaving the restaurant if waiting times are too long:

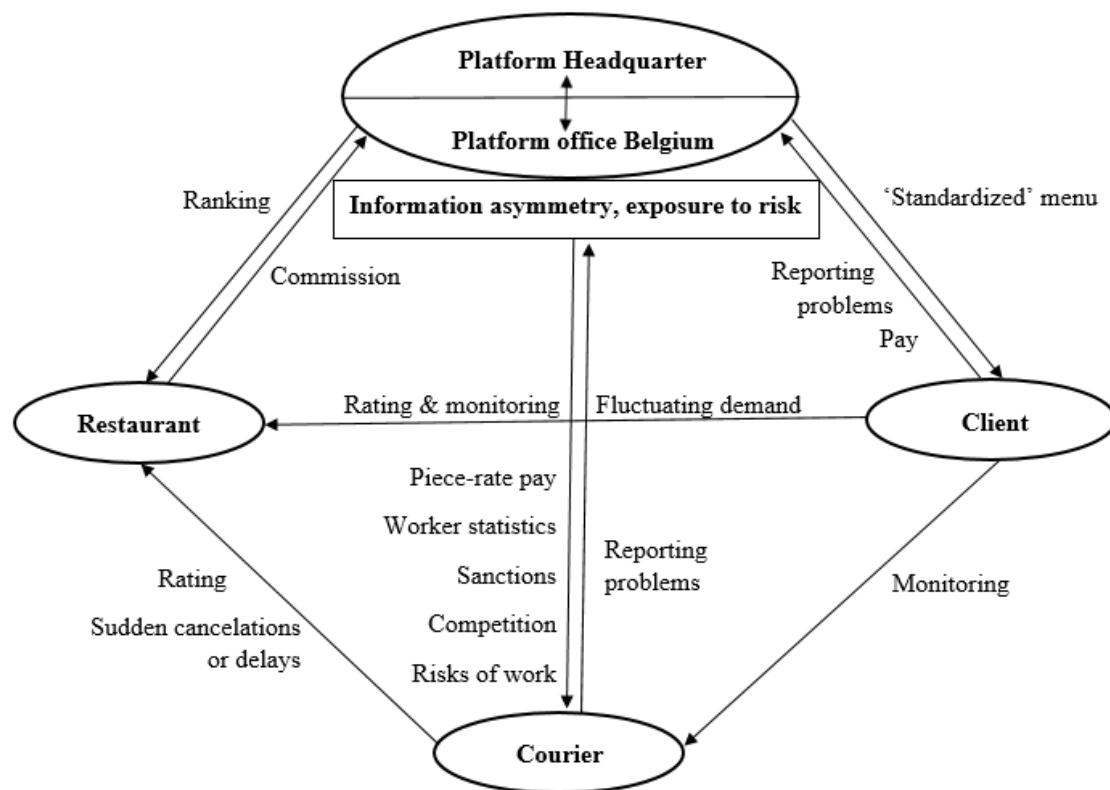
“Waiting times differ a lot between restaurants. The restaurants where I often go, for example, [name restaurant], never take long. (...) But then at [name restaurant], you always have to wait 15 minutes, it’s never ready (...) Once, I actually ended up waiting 45 minutes (...) I never go there now.” (Courier 37)

As illustrated in the upper left-hand side of Figure 2.2, client and courier ratings are used by FD-Plat to rank restaurants in the client application, meaning that highly-rated restaurants appear higher on the list within a certain food category. Ranking decisions are made by the platform, thereby exposing restaurants to risks and maintaining commodification by showing the ranking to clients:

“If we had a bad rating then we would no longer be on top of the list of restaurants. For example, if a client looks for spaghetti in the search engine of [name platform] and we would be lower down the list, then we would have a much lower chance of being selected by the client.” (Restaurant 4)

Moreover, ratings can impact the commission paid by restaurants on every order processed through the platform. As one platform manager told us, restaurants which receive bad ratings often see their commission increased, or the platform might even end the collaboration.

Figure 2.2: The disempowerment cycle



As illustrated by the client → restaurant arrow, the 'on-demand' nature of FD-Plat's food delivery service means that demand for food delivery undergoes fluctuations, which restaurants can't predict or monitor as FD-Plat keeps its technological system to itself:

“This varies every month. (...) Actually, at this moment, we don't have many orders, whereas a few months ago, we had lots. (...) I really don't know why. It also varies for the clients eating in, I don't know if this is related.” (Restaurant 1)

This increases restaurant managers' workload: they find themselves constantly updating their online menu, communicating with the platform and coordinating between incoming orders, clients and couriers. Some restaurants have digitalised their management systems, installing a software that automatically manages orders. Others have introduced food preparation priorities (e.g. first incoming orders, then seated clients) or hired additional staff that work at moments when clients place most orders. This contributes to maintaining restaurants' dependency on the platform.

Information asymmetry also affects couriers' relations with FD-Plat, as they don't know how orders are assigned or what their next order or waiting time will be. Being paid per completed delivery, couriers are unable to predict their earnings:

"If you receive a lot of subsequent orders, then you can earn a lot of money, but sometimes things go very slowly (...) If you only earned €10 after three hours, then it's just not worth it. But on other days, you can make €40 in three hours and then it's worth it, so it really depends." (Courier 30)

Peer-to-peer workers are further disempowered by having to accept orders without knowing the client's address, which is only provided to them once they have picked up the food at the restaurant. Even though tips are given beforehand, the platform doesn't provide them with information on whether or not they have been tipped until after the food is delivered. Peer-to-peer workers thus have to accept orders 'blindly':

"Now it's just €4.36 for everyone, regardless of the distance we have to ride. Plus, as a peer-to-peer worker, you don't see where you have to deliver the order. (...) For me that's not good, but I understand, if they wouldn't do this, then clients outside the city centre would simply not get food anymore, because we wouldn't accept the orders." (Courier 12)

As illustrated by the courier/client → platform arrows in Figure 2.2, both can report delivery problems to the platform via a chat system, though both perceive this as largely ineffective as in most cases the answers given by the platform are standardized. The data collected through the chat is processed by FD-Plat to improve the delivery process, hence increasing the power of the platform vis-à-vis users and couriers.

As shown by the platform → courier arrow, ensuring a quick and timely deliveries goes together with the use of individual performance statistics for couriers, introducing competition based on data on attendance, cancellation of shifts and working during 'peak hours'. Decisions on statistics are made by a non-transparent algorithm, without courier involvement. For example, information collected from the social media community (secondary data) revealed that couriers' statistics worsened after cancelling orders during a two-day storm. Bad statistics are sanctioned by deprioritizing access to the shift system:

"I have to register in advance for one-hour shifts, which I can choose myself. If I'm registered for two shifts from 2 to 4 am, then I have to do those (...) This shows up in the

statistics, if I don't show up, I get bad statistics. And then I will be the last one able to book sessions in the next week." (Courier 8)

The risks of this disempowerment strategy were particularly visible in 2018-2020, when FD-Plat recruited thousands of new couriers. In a situation of increased competition, couriers with bad statistics reported that they were often excluded from accessing any work at all. By recruiting under the peer-to-peer and self-employed status, the platform circumvents Belgian labour market institutions, while at the same time excluding couriers from social security. FD-Plat works with a technological insurance company that monitors workers online, only providing accident coverage when they are actually delivering food, and only covering them for personal injuries, not for any damage to their belongings:

"Recently I took a fall. My jacket was damaged, my bike was broken, but the platform didn't intervene at all. They only cover personal injuries, but not material damage, so it cost me €100 to repair my bike (...). I didn't get anything back, though I notified them through the chat system" (Courier 1)

2.5.2 Control and valorisation within labour platforms

The cycles of empowerment and disempowerment are the result of strategic choices by the platform, which commodifies the relationships between couriers, clients and restaurants by exposing them to market exchange and simultaneously fostering information asymmetries. The joint recurrence of the empowerment and disempowerment cycles accounts for the way in which labour control unfolds as the basis for value creation and value extraction within the platform's labour process. In particular, disempowerment by withholding information enhances the platform's power to control and to valorise.

Based on our data, value extraction within the labour process fundamentally relies on FD-Plat controlling the labour power of its couriers. This can be illustrated by the above-mentioned use of statistics. For example, couriers report that the 'peak hour' statistic induces them to ride on Fridays, Saturdays or Sundays between 19:00 and 21:00, the moments when client demand is highest:

"I get the impression that they decide for me which shifts I do, because I kind of get forced to work the busiest hours" (Courier 36)

Moreover, FD-Plat is able to control labour power through financial incentives, such as extra pay for 'double orders' or 'bonuses'. These enable further efficiency gains for the platform which makes extensive use of bonuses to recruit couriers in a situation of labour shortage (as was the case in 2018) and to incentivize couriers to work at moments when clients place most orders. Similarly, increased competition through enlarging the workforce disciplines couriers through market control, while enabling the platform to expand its services to new users. In an interview, FD-Plat management reported that the platform has two thousand workers on

waiting lists. This large, 'on-demand' workforce allows the platform to extract value by efficiently adapting operations to client demand based on its analysis of digital data:

"We monitor both order demand and the supply of riders on a daily basis, with the data showing us that needs differ daily. For example, on Jan 1st, everyone is hungover and wants to order gravy food, like burgers (...) So we need a large workforce to deal with that (...)" (FD-Plat management)

Importantly, commodified labour facilitates value extraction. Through denying access to social protection, FD-Plat aims to avoid being qualified as an employer:

"We strongly believe that going for full flexibility is the way forward. Under the Belgian system, self-employed workers to some extent refuse protection. (...) In this Belgian context, it is hard to give more protection. There is always the major risk of being qualified as an employer." (FD-Plat management)

At the same time, the platform captures value from users. The conversion of 'use value' into monetized commodities through the use of digital data and algorithms enables the platform to engage in transfers with clients and restaurants. For example, the platform transfers information on restaurants' quality and food offer to clients. Clients pay the full cost of the food and its delivery to the platform, which in turn pays the courier and the restaurant. Interviews with clients show that they consider FD-Plat's delivery system quite expensive (a reason for some couriers not to become clients themselves):

"So I'm filling my basket with €40 worth of food and then I see that on top of that they put a €6 or €8 delivery fee! (...) I really don't understand why this is necessary. Restaurants and [name other platform] will give you free delivery starting from a certain amount. I think that [name platform] could take over that small cost themselves." (Client 3)

Transfers from restaurants are specified in the contract they sign with FD-Plat, which stipulates the responsibilities of both parties as well as the commission to be paid on every order processed through the platform. The commission is usually around 30% for restaurants using FD-Plat couriers, while restaurants using their own employees as couriers often pay a lower commission. As one platform manager told us, restaurants which have received marketing advice often see their commission increased, as the platform's data processing has enabled them to boost sales. Finally, FD-Plat adjusts the commission to a restaurant's market share to increase value capture:

"The commission might be a bit higher for smaller restaurants and a bit lower for example [name of a large restaurant], because they sell much more." (FD-Plat management)

2.6 Discussion and Conclusions

We have investigated how labour platforms commodify the relationships between workers and users by simultaneously empowering and disempowering them and how this contributes to control and valorisation. Our findings revealed the complex nature of commodification within a food delivery platform. Specifically, we have empirically illustrated how the platform fosters competition by granting clients, restaurants and workers access to transactions through an empowerment cycle. At the same time, the platform withholds information and reduces couriers' and restaurants' purported autonomy through a disempowerment cycle. These findings highlight that the platform's capacity to control and valorise is dependent on its ability to commodify by withholding information from participants. The empowerment and disempowerment cycles shed light on how platforms create dependency by establishing the rules and creating the conditions under which users and couriers connect. This dependency in turn increases the platform's power to control workers and users, while itself creating and extracting value.

The findings imply that exploring the complexity of commodification by revealing how and under which conditions empowerment and disempowerment occur is key to understanding how platforms handle valorisation. Platforms furnish the technology through which users and workers connect, hence reducing transaction costs. Users and workers use this technology to perform value-adding activities while competing among themselves, in turn generating more data that is reinserted into the production process. However, our research shows that increasing efficiency in labour allocation only tells part of the story of what happens within labour platforms. Valorisation also fundamentally relies on disempowerment through shifting risks to participants and fostering information asymmetries. In particular, the platform is able to improve its services targeting users and couriers as more data is collected, processed and withheld from those who have generated it. Thus, our analysis moves beyond assumptions under which platforms merely 'match' workers and clients through technology (Harris & Krueger, 2015). We illustrate that the platform controls labour power and that this control is necessary to optimize efficiency within the delivery process.

Our analysis of the complexity of commodification has two implications for the way we theorise the platform economy. First, we show how the platform economy is able to leverage control while at the same time maintaining an illusion of autonomy (Reid-Musson et al., 2020; Shapiro, 2018) by demonstrating that the empowerment of couriers and clients coincides temporally with the disempowerment of restaurants and vice-versa. We agree with the literature suggesting that algorithmic control systems take joint account of workers' discretion over working time and of structural constraints, such as the limited availability of work (Lehdonvirta, 2018; Wood et al., 2018). However, we add that elements often conceived either as 'valuable' (e.g. choosing working hours) or 'disliked' (e.g. power disparities) by workers (Malin & Chandler,

2017; Mäntymäki et al., 2019) are two sides of the same coin, reflecting platforms' strategies to exert control and achieve valorisation.

Second, our study shows that the use of a framework revealing empowerment and disempowerment as underpinning the complexity of commodification within labour platforms has analytical importance. On the one hand, it helps explain how workers and users become dependent on a platform, increasing the latter's capacity to control and valorise. On the other hand, the framework sheds light on the 'distinctive logic' of intermediation in the platform economy (Langley & Leyshon, 2017), characterized by practices and mechanisms fuelling competition between and among workers and users.

Empirically, our study illustrates the added value of considering the entirety of the capital-labour relationships within labour platforms. While there is an increasing corpus of research addressing work in the platform economy, few studies have focused on platform users. We illustrate the specific role played by restaurants who become beholden to the platform, generating a particular set of coordination and control practices. We would argue that fully understanding the implications of digital labour platforms requires examining the way in which platforms commodify the relationships between and among both users and workers.

Our argument is built upon one single platform within a single country, Belgium. This may sound limitative because of the 'spatial' aspect of food delivery work (Heiland, 2021). However, while confirming other research pointing to similar practices in different settings (cf. Lehdonvirta et al., 2019; Mäntymäki et al., 2019; Shapiro, 2020), our study indicates generalisability in the outcomes but also distinctiveness in shedding light on the tension between reducing transaction costs and fostering information asymmetries as underpinning the mechanisms of empowerment and disempowerment we uncover. Studying the cycles of empowerment and disempowerment in different institutional contexts, where workers are hired under different statuses (for example, the status of 'hetero-organized independent workers' in Italy) may help test our analytical framework while at the same time deepening knowledge of the commodification and valorisation strategies of labour platforms.

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Appendix 2.1

Table 2.1 Overview of interview material

Courier interviews					
Courier	Gender	Age	City	Nationality	Status/ other employment
Courier 1	Male	22	Leuven	Belgium	Self-employed
Courier 2	Male	20	Leuven	Belgium	Student
Courier 3	Male	19	Leuven	Belgium	Student, other job
Courier 4	Male	20	Leuven	Belgium	Student, other job
Courier 5	Male	21	Leuven	Belgium	Student
Courier 6	Female	20	Leuven	Belgium	Student
Courier 7	Male	21	Leuven	Belgium	Student
Courier 8	Male	22	Leuven	Belgium	Student
Courier 9	Male	21	Leuven	Belgium/ United States	Peer-to-peer, intern
Courier 10	Male	21	Antwerp	Belgium/ United States	Peer-to-peer
Courier 11	Male	25	Antwerp	Belgium	Student
Courier 12	Male	21	Leuven	Belgium	Peer-to-peer, student
Courier 13	Male	22	Leuven	Belgium	Student
Courier 14	Female	22	Ghent	Belgium	Student
Courier 15	Male	25	Leuven	Romania	Peer-to-peer
Courier 16	Female	31	Leuven	Romania	Peer-to-peer
Courier 17	Male	24	Leuven	Belgium	Self-employed, other job
Courier 18	Male	40	Brussels	Algeria	Peer-to-peer
Courier 19	Male	27	Brussels	Niger	Peer-to-peer, other job
Courier 20	Male	22	Brussels	Niger	Peer-to-peer, student
Courier 17 (contact round 2)	Male	25	Leuven	Belgium	Self-employed, other job
Courier 12 (contact round 1)	Male	22	Leuven	Belgium	Student-independent
Courier 18 (contact round 2)	Male	41	Brussels	Belgium	Peer-to-peer
Courier 21	Male	30	Brussels	France	Self-employed
Courier 22	Male	35	Antwerp	Portugal	Self-employed
Courier 23	Male	21	Ghent	Belgium	Peer-to-peer, student
Courier 24	Male	20	Leuven	Belgium	Peer-to-peer, student
Courier 25	Male	21	Leuven	Belgium	Peer-to-peer, student
Courier 26	Male	22	Leuven	Belgium	Student
Courier 27	Male	21	Ghent	Belgium	Student
Courier 28	Female	26	Leuven	Belgium	Employee, other job
Courier 29	Male	27	Leuven	Belgium	Employee, other job
Courier 30	Male	21	Leuven	Belgium	Student-independent, other job
Courier 31	Male	23	Leuven	Belgium	Peer-to-peer
Courier 32	Male	23	Leuven	Belgium	Peer-to-peer
Courier 33	Male	20	Leuven	Belgium	Student
Courier 34	Male	24	Leuven	Belgium	Employee, other job
Courier 35	Male	30	Leuven	Belgium	Unemployed, receives unemployment benefit
Courier 36	M	23	Brussels	Luxembourg	Peer-to-peer
Courier 37	V	26	Leuven	Belgium	Self-employed, other job

Table 2.1 Overview of interview material - continued

Restaurant interviews			
Restaurant	Kind of restaurant	City	Platform use
Restaurant 1	Brunch and healthy food	Brussels	Only FD-Plat
Restaurant 2	Coffee	Leuven	FD-Plat + other platform
Restaurant 3	Hawaiian restaurant	Leuven	Only FD-Plat
Restaurant 4	Pasta restaurant	Ghent	FD-Plat + other platform + own delivery service
Restaurant 5	Sushi restaurant	Leuven	FD-Plat + own delivery service

Client interviews				
Client	Gender	Age	City	Platform use
Client 1	W	22	Brussels	Private use (student), only FD-Plat
Client 2	M	29	Leuven	Private use (working), FD-Plat + other platform
Client 3	M	26	Brussels	Office account (working) + two other platforms (private use)

Management interview		
Date interview	Managers interviewed	City
24.01.2020	Head of Public Affairs + Chat with regional account manager	Brussels

Table 2.2 Coding scheme

Categories		Sub-categories	Codes
Valorisation	Commodification and control		
Value extraction	Disempowerment Controlling labour power	clients lacking information	tipping the worker problems during delivery lack of transparency and contact with the platform
		restaurants lacking information	'standardized' menu economic dependency on platform restaurant ranking waiting for the worker work intensification
		couriers lacking information	(limited) availability of orders monitoring subject to risks of work waiting time courier - contact with platform courier statistics sanctions bonuses double orders piece-rate pay
Value creation	Empowerment	clients accessing transactions	choosing food changing or cancelling order restaurant rating saving time and effort tracking food preparation and delivery 'treat' or special occasion
		restaurants accessing transactions	increasing sales marketization organising delivery process tracking and managing orders client rating worker rating
		couriers accessing transactions	income from work shift system no personal supervision rating the ride registration – easy process rewarding performance cancelling orders choice (not) to work combination with other activities influence over pace of work
Value capture	Use of technology	Data collection	data from client application data from restaurant application data from worker application
		Data processing	algorithmic decision-making integration local, regional, international level strategic decisions based on data
		Money transfers to the platform	client paying for delivery contract and commission
		Contextual factors	Belgian law and regulation changing payment system city expansion of the platform -adding new restaurants -increasing number of couriers

3. Informal employment on domestic care platforms: a study on the individualization of risk and unpaid labour in mature market contexts

This chapter is based on: Pulignano, V., Marà, C., Franke, M., & Muszynski, K. (2023). Informal employment on domestic care platforms: a study on the individualisation of risk and unpaid labour in mature market contexts. *Transfer: European Review of Labour and Research*, 29(3), 323-338.

Abstract

This article explains how digitally mediated provision of domestic care services perpetuates the invisibility and informality of such work through individualising risk, which we operationalise by one of its dimensions, that of unpaid labour. We understand unpaid labour as the cost of the risk borne individually by workers at the intersection of the social (inter-personal) and economic (monetary) spheres. Drawing on the experiences of domestic care workers providing their services through platforms, the study shows how platforms have made their way into the labour markets and welfare structures of two mature economies, Belgium and France. Via their (digital) rules, they pursue 'regulatory compliance' and 'disruption' as distinct strategies for establishing platform dominance, albeit with country-based differences. Platform-mediated employment outcomes remain generally unrecognised, undocumented and informal, with unpaid labour characterising the cost of the individualisation of risk.

Keywords

Domestic care work, labour platforms, informal work, unpaid labour, individualisation of risk, working conditions

3.1 Introduction

This article focuses on unpaid labour as a distinct but underexplored dimension of the 'individualised risk' associated with domestic care workers providing their services through domestic care platforms (hereinafter just 'platforms') in mature European market contexts in France and Belgium. Whereas several studies have pointed to unpaid labour being an important aspect of degrading platform working conditions (e.g. Berg et al., 2018; Pulignano & Marà, 2021; Rani et al., 2021), there is to date no systematic account of the processes driving unpaid labour on domestic care platforms and the implications for workers.

This article defines unpaid labour as a risk-related cost for domestic care workers, reflecting the economic (related to the material nature of the interaction) and social (related to its inter-

personal nature) effort spent on performing tasks necessary to access and maintain paid employment through the platform (D'Cruz & Noronha, 2016). Importantly, this cost arises primarily in work performed within the regulated domestic care sectors – in our case in France and Belgium – with platforms steering the transition of the employment relationship from formal to informal. We use the ILO definition of informal employment as casual work arrangements which are unreported, characterised by no fixed salary, and lacking social rights and protection (International Labour Organization [ILO], 2020). We contend that unpaid labour is performed as a result of the platform-driven informalisation of work arrangements, as witnessed in two mature labour market contexts featuring formalised domestic care service sectors (i.e., France and Belgium).

Macdonald (2021) employs the concept of 'individualised risk' to describe different types of risks common to domestic care workers' accounts of their experiences. These individualised risks play out at the micro-level and are influenced by a combination of structural factors, namely consumer choices, control, and market-driven prices, as well as market operations and practices arising from significant institutional, socio-economic and technological transformations. This article extends the concept of 'individualised risk' to describe a specific yet common form of risk (i.e., unpaid labour) mirrored in the day-to-day experiences of domestic care workers. Such work includes cleaning, babysitting, pet-sitting, private tutoring and personal assistance to the elderly (Friederici et al., 2022; Strüver & Bauriedl, 2022; Ticona & Mateescu, 2018). This risk consists of ('sunk') costs borne individually by the workers and which are necessary to complete tasks and to access and maintain paid employment through the platform. We illustrate how platform-mediated domestic care entails informal work arrangements dictated by a platform's algorithms to match clients with workers outside the formal framework of employment and social protection within two market economies, Belgium and France, with longstanding and encompassing policies formalising domestic care services. As we will show, algorithmic management can induce unpaid labour through reputation mechanisms: i.e., the risk of a cost resulting from negative client feedback and inducing workers to put up with a client's additional requests. Moreover, while the inter-personal and servile dimension of domestic care work accounts for the unpaid nature of this work in non-digital settings as well, platform technologies exacerbate the unpaid dimension due to the cost of the risk incurred by workers. Respondents reported unpaid labour (i.e., not receiving any monetary compensation) stemming from scams and harassment caused by platform algorithms steering the matching without monitoring the modalities of the matching itself. For instance, workers are often left alone to figure out the safety of a prospective gig, leading to them taking cautionary measures against the potential dangers with which they are confronted (e.g. by notifying family members). Much of this risk is due to the opaque digital environment and low degree of moderation by the platform.

Such unpaid labour in platform-mediated domestic care work occurs at the intersection of social (inter-personal) and economic (financial) service interactions through platforms that operate in accordance with the 'corporate logic' of control (Frenken et al., 2020), with no attempt made to shelter workers from the risk stemming from the use of the platform's technology (Franke & Pulignano, 2021; Pulignano & Franke, 2022). As such, this unpaid labour is distinct from other forms of unpaid labour found within platform work such as idle waiting time in food delivery or ride-hailing work, work extensification in online freelancing, etc. (e.g. Berg et al., 2018; Pulignano & Marà, 2021; Pulignano et al., 2022; Rani et al., 2021).

We start by discussing two strands of theory and research of key importance for the analysis of domestic care platform services: – the unpaid care labour strand and the individualised risk strand – relating them to research on domestic care platforms to examine the specific features and identify the challenges faced by domestic care workers working on platforms. We go on to describe the research design and methodology, present the regulatory contexts in France and Belgium and explain how selected platforms operate. We then present the findings, discuss and conclude, with a focus on the theoretical and policy implications of our study.

3.2 Domestic care work, individualised risk and digital platforms

Literature on domestic care (hereinafter just 'care') understands such work as encompassing all social relations around the provision of care and considered contextual of distinct social market and non-market structures (Lawson, 2007). As Sevenhuijsen (2003: 183) argues: 'Care is part of the practices of active citizenship which is based on notions of relationality and interdependence'. Care is embedded in inter-personal social relations and can be performed in informal and formal contexts, i.e., in households, communities, organisations and the labour market (Hardill & Baines, 2011).

This broader understanding of domestic care work encompassing the formal and informal dimensions of the exchange or inter-personal relations (Fine, 2004) reveals the complexities and contradictions of such work. Classics have related the complexities of the social relations in care to its emotional aspects, reinforcing gendered undervaluation of unpaid domestic care work. Hochschild's (1983) thesis of 'emotional labour', taking the shape of female workers feeling and expressing emotions while providing inter-personal care services, shows how much of care work is usually hidden, devalued and consequently unpaid. Thus, the unpaid nature of domestic care work is underpinned by the artificial separation of work and the worker, which obscures the relational (or inter-personal) character of caregiving (Daniels, 1987). The key significance of the inter-personal character of care work has been widely discussed in the context of low-wage sectors or low-end service work expansion and might also include the necessity to 'figure out' clients' expectations and how work should be organised (Ehrenreich,

2010). Though care workers experience the inter-personal aspect of domestic care services as a source of great satisfaction (Anderson, 2007), employment conditions in care work are deteriorating (Meagher et al., 2016). Market-oriented public policies have contributed to socially and politically obscure the value of care work by viewing 'care users' as consumers and 'care' as a commodity bought and sold in the market (Brennan et al., 2012). These same policies have fostered the growth of platforms for the intermediation of care services provided in domestic environments (Frenken et al., 2020). In other words, the withdrawal of the state from the provision of care services in favour of outsourcing, privatisation and market competition has fostered a series of structural changes that eventually led to these services being mediated by platforms. These in turn have transformed 'the location of, and the parties to, work and care relations' (Macdonald, 2021: 139). Studies report that mega platforms (such as care.com, Uber and Airbnb) were founded in the immediate aftermath of the global financial crash (Sadowski, 2020) to offer a wide range of innovative services. Among them, domestic care services have acquired particular importance. Their growth was fuelled by the COVID-19 pandemic, as they took some pressure off people with care and household responsibilities who were struggling to juggle between work and domestic tasks during the disruptive lockdowns (Strüver & Bauriedl, 2022).

Building on Christensen and Manthorpe's (2016) concept of 'personalised risk', Macdonald (2021: 138–139) coined the notion of 'individualised risk' to examine how the governance through market ideas in social care has shaped employment in such a way as to create risks for workers. The author identifies several broad and intersecting categories of individualised risks, including the risk of isolating and individualising workers; the risk of fragmenting work, working time and work life; and the risk of gendered undervaluation. Risk in each of these categories is influenced by a combination of structural changes, including the market determination of pay and working conditions, market-driven operations and practices as well as consumers' choices and control. The idea behind the concept of individualised risk is that domestic care work is left open to being characterised as informal help where unpaid labour is likely to be more common because of the changes affecting the traditional protection of care work under the umbrella of employment protection (Ticona, 2022).

Studies in liberal market economies have illustrated that platforms may contribute to formalizing employment relationships by fostering 'visibility' among workers traditionally conceived as 'invisible' (Mateescu & Ticona, 2022; Ticona & Mateescu, 2018). Scholarly work in the emerging and informal economies of the Global South has supported this claim by illustrating how platforms steer transitions from informality to formality as they require formal service provision, while many workers in this economy often value informality (Weber et al., 2021). Yet while platforms may enhance formality within contexts of regulatory and legal ambiguity, in more formalized labour markets platform-mediated domestic care work still tends to be informal, not readily identifiable and overt, and not recognised as work. For example,

platforms have had a negative impact on the professionalisation of care in Australia, as professional care workers often end up performing platform-mediated work that remains informal and therefore not officially recognised within the scope of professional interventions (e.g. Macdonald, 2021). Provision of services outside formal structures might lead to social rights and protections being lost (Sedacca, 2022).

Domestic care platforms in coordinated and mature market economies in Europe have as yet escaped the scrutiny of researchers. While there are a variety of models formalising the provision of domestic care services in different European countries, platform workers have no access to the employment and social protections enjoyed by workers hired by traditional care providers. Whether this increases the scope for domestic care platforms to steer informal employment within such markets remains an empirical question. While traditional care service providers employ care workers on a regular basis, platforms tend to avoid employment costs by treating workers as self-employed (Berg et al., 2018), potentially enhancing risks for the workers involved.

Recent research, including the study we present here, shows that national governments have started to actively support the domestic care platforms (see the National Disability Insurance System NDIS in Australia, Macdonald, 2021). Thus, we intend to deepen our understanding of national policies by broadening explanations of platforms' strategies of dominance (Haidar & Keune, 2021). While research illustrating how domestic care platforms interact with established sectors is scarce, the few studies available raise concerns when comparing platforms to traditional firms providing care work. First, platforms supply workers directly to individual clients and often take payments from both parties. Second, as platforms are not service providers, they do not bear the costs and risks of service provision. For example, in Australia Macdonald (2021: 103) found that 'labour hire licensing regulation may not apply where firms "on-hire" workers to individuals or households, as the workers are not being hired to perform work in and as part of a business'. Employment protection applies only when the labour hire firm is covered by labour hire licensing regulation, which leaves care platforms outside this regulation as they do not supply care labour to service providers. Likewise, Ticona (2022) and Ticona and Mateescu's (2018) study of care platforms in the US illustrate how neoliberal policies and weak regulation have embraced the invisible infrastructure of insecure platform work.

Hence, there is a need to broaden our understanding of how national labour market regulations and government policies are promoting the transformation of relations within domestic care work and whether this in turn is undermining prospects for decent work by passing on costs to workers through an individualisation of risk. Our research in Belgium and France illustrates that platforms individualise risk by fostering informal employment, a feature to a large extent responsible for the production of unpaid labour.

3.3 Research design and methodology

We use a comparative case study design to explore the individualisation of risk in relation to unpaid labour in care platforms in Belgium and France. While both countries are mature and coordinated market economies, they differ significantly in the organisation of domestic care and employment arrangements in this domain. The two platforms selected operate in a similar manner, a key prerequisite for analysing how comparable domestic care platforms interact with different national regulatory systems in the sector. Selection involved several stages. First, we conducted desk research to determine all platforms active in the domestic care sector. Second, we sampled two platforms (Yoopies and Top Help/Aide au Top) with similar operations in both countries, paying particular attention to matching functions and the systems used to rate and review workers. To deepen our understanding of platforms' operations, we then created client and worker accounts with a view to performing basic interactions (e.g. posting a job, replying to messages, running worker searches in different locations, etc.) on both platforms.

We used narrative interviews with workers as the main way to investigate their experiences in relation to the risk of unpaid labour when providing services through platforms. A total of 27 narrative interviews were conducted with domestic care workers active on Yoopies and Top Help in Belgium and France, as well as two semi-structured interviews with sectoral trade union experts (one in Belgium and one in France). Respondents were selected to ensure a sample as diverse as possible in terms of gender, age and jobs performed via the platform (Table 3.2 in Appendix 3.1). We recruited respondents through the platforms and social media. We used our client accounts to contact potential respondents, whereby we fully disclosed our intention to conduct an interview (instead of offering a domestic care job), in compliance with our ethical guidelines. To recruit through social media, we joined Facebook groups run by domestic care workers, either posting on the group wall or directly contacting group members fitting our sampling criteria. Workers were financially reimbursed for time spent participating in an interview. Interview data were analysed through the software NVivo using thematic coding (Glaser & Strauss, 1967), with unpaid labour and work arrangements as the main themes, which we connected to the functioning of the platforms and the institutional contexts.

3.3.1 Systems of domestic care work in France and Belgium

Legislation was introduced in the mid-2000s in both France and Belgium to formalise and regulate their domestic care service sectors, a traditional hotbed of informal and undeclared work (Lutz & Palenga-Möllenbeck, 2010). Regulations in both countries were designed to incentivise users to declare the services purchased, namely through generously (state)-

subsidised voucher schemes. Yet despite both countries using such schemes, regulations differ significantly, reflecting different policy goals (Farvaque, 2015; Sansoni, 2009).

In France, the 2006 introduction of vouchers under the CESU (*Chèque emploi service universel*) system was part of a larger reform of social services – the so called Plan Borloo – that aimed at generally liberalising the provision of domestic services (Devetter & Messaoudi, 2013). The French voucher system thus applies to all domestic care services (i.e., help for the elderly and persons with disabilities, private tutoring, babysitting, household tasks, etc.) and gives clients a large degree of choice and control over the service and service provider. From an employment perspective, the system establishes the ‘presumption of employment’ (*presumption de salariat*) between the client-employer and the provider-worker that is to be formalised (on the CESU website) once the client has selected a provider. Anyone can become a ‘service provider’ at any time, without professional or institutional (e.g. self-employment) requirements (except for childminders who need certification). Clients can select and recruit providers directly, without having to resort to a service agency. Once recruitment is successful and the employment contract is legally registered, the worker is automatically recognised as employee, and covered by the CESU sectoral collective agreement negotiated at national level setting minimum pay rates, fringe benefits, minimum health and safety standards, and access to social protection. To incentivise formalisation, the CESU system offers a 50 per cent tax credit to clients/employers on the whole amount paid for domestic care services in the previous year (tax credits are paid out the following year after the annual tax declaration), as a form of compensation for the increased costs. The French government directly recommends platforms like Yoopies to clients on the official CESU website. Some scholars criticise the French domestic care employment model as inadequate, as it burdens workers with the costs related to searching for and accessing work, while depriving them of the job stability offered by a standard employment relationship (Devetter & Messaoudi, 2013).

In contrast to France, Belgium's voucher system only covers specific domestic services (i.e., cleaning, cooking, ironing and laundry services), while the provision of services more closely related to personal assistance remains within state social care structures. The system is intended to formalise the domestic work sector, making it a new outlet for employment growth and helping activate the unemployed and hard-to-employ workforce, while offering a source of affordable domestic services to middle-class households (Sansoni, 2009). The Belgian voucher system is organised around a ‘triangular’ scheme that connects domestic service agencies, clients and workers (Safuta & Camargo, 2019). While tax incentives in France are provided *ex post*, in Belgium the state subsidies are included in the discounted vouchers that clients buy from their regional authorities (the cost for clients is around €9 per hour of work). Clients use vouchers to purchase domestic services through state-accredited domestic service agencies, which then assign workers to perform tasks. The agency acts as an employer,

mediating and organising the provision of services to clients and hiring workers as regular full- or part-time employees. Employment conditions in the sector are collectively bargained at national level and regulate pay, working time, access to social security (e.g. unemployment benefits), and health and safety. The national regulation also mitigates job-related risks by preventing workers being tasked with dangerous activities such as climbing up ladders and cleaning windows. Personal domestic care services (i.e., assistance to the elderly and persons with disabilities, and early-childhood education) are provided as in-kind services organised by regional and local authorities in partnership with public, not-for-profit and private providers (Farvaque, 2015). Care workers in this sector are employed by the service providers and therefore enjoy standard employment working conditions regulated by national collective bargaining. Lastly, neither babysitting services nor private tutoring are subject to any form of regulation in Belgium, meaning that service providers in these fields have no access to regular employment or social protection.

3.3.2 Platforms' operations

Yoopies and Top Help/Aide au Top (hereinafter: Top Help) are French-based platforms active in a number of countries worldwide, including France and Belgium. Both provide client households with access to domestic care services – such as cleaning, babysitting, private tutoring, personal assistance to the elderly and to persons with disabilities, while allowing workers to offer their services. Both supply the digital infrastructure for the parties to contact each other directly: workers create profiles and set rates in selected job categories (e.g. babysitting or private tutoring), while clients can either select workers directly from a list of workers and then contact them through the platform's chat, or post job offers to which workers apply.

An algorithm lists workers' profiles in line with the selection criteria entered by a client (e.g. service type, location, etc.). Also displayed are ratings and reviews left by previous clients, profile information, workers' availability, and their activity on the platform. Top Help workers can improve their ranking through 'badges' gained by earning 'points' through performing certain activities such as completing profiles or advertising the platform on social media.

Whereas registration is free of charge, both platforms offer paying (i.e., premium) accounts to both clients and workers. For workers, premium accounts lead to better positions in search result lists, as well as providing direct access to client contact details, thereby increasing the chances of finding work. Similarly, premium accounts allow clients to access a worker's contact details (e.g. their phone numbers), facilitating direct communication.

After 'matching' workers and clients, both platforms leave the practical work arrangements to be agreed between the parties, i.e., not doing anything to enforce the terms and conditions set forth in the collective agreement. In France, Yoopies offers paying clients the option of

administrative support to formally declare the contracted jobs via the platform under the CESU system. Clients can optionally pay through the platform's transaction system which automatically calculates the worker's pay in accordance with CESU minimum rates and social contributions. However, they can also opt to deal with work arrangements and payment on their own. This service cannot be used in Belgium where domestic care work is managed through agencies and companies acting as third-party employers.

3.4 Findings

3.4.1 Economic costs in domestic care platform work: access to work

For Belgian platform workers, costs are engendered from the moment they start looking for jobs. This is due to Yoopies and Top Help framing the 'matching' by inviting clients to 'hire' workers on an individual basis as if they were self-employed, in disrespect of the Belgian sectoral regulation. For workers, this entails losing the advantages associated with standard employment, as they are made individually responsible for bearing new economic costs (which are hard to recover through their rates on platforms and therefore go unpaid) by spending time undertaking tasks associated with accessing work. A first type of increased costs relates to finding work. In regular employment in Belgium, workers are guaranteed stable time-planning – and related income – established by their employers. However, platform care workers looking for jobs must invest significant effort in creating their profiles, promoting themselves by writing detailed descriptions of their educational background and work experience, creating a sense of trustworthiness by adding pictures, and constantly updating their availability, to make themselves visible and attractive:

“It takes some time to fill out your profile, make a small ad. I tried to include that I'm studying medicine [. . .] that I have specific experiences in babysitting and with the elderly. You introduce yourself as completely as possible.” (BEGIGMF08)

Many Belgian workers showed awareness of the additional effort required to access work through platforms as “you need to really do a lot on the website, for your profile, to really sell yourself” (BEGIGCM07) compared to through the standard employment system. However, producing an attractive profile is not enough to find clients. Workers also spend substantial time looking for jobs and sending applications to clients. In our sample, workers consistently showed frustration when applications went unanswered, meaning that ‘work is done for nothing’ (BEGIGMF27). This is due to clients being able to tap into a large pool of workers, without being obliged to let candidates know that the selection is over:

“I send a message to three to four people. But it's a little annoying they don't say ‘No, I don't need help’ or ‘I already have someone’.” (BEGIGMF27)

When workers are pre-selected by potential clients, they are usually invited for job interviews. This entails time and commuting costs, without any guarantee of getting the job. Compared to regular off-platform domestic care work in Belgium, where workers are assigned to clients by their employment agency, platform workers are made to bear the additional costs associated with job interviews. Workers often reported that “Interviews can last a long time: one hour, one hour and a half [. . .] I had one that lasted two hours!” (BEGIGCM04).

French platform workers have the same to report: “I sent at least 20–30 applications. I never got a reply, not even a refusal [. . .] I bear the costs of all this myself” (FRGIGCM24). However, the matching systems used by Yoopies and Top Help comply with the French CESU regulation making job searches an unpaid responsibility of workers. Both Belgian and French platform workers face relatively high costs when accessing paid work due to the highly competitive environment: “there are so many people [workers] registered on this site” (BEGIGMF11) while “there is little variation in the number of jobs posted” (FRGIGCM29). Workers are encouraged to gain an advantage over their peers by obtaining good ratings and reviews to increase their visibility vis-à-vis clients: “I asked her [client] to write me a review [. . .] and she did that right away. I really liked that. [. . .] Now I am 83 per cent visible and pretty high up on the list” (BEGIGMF30). However, the rating system can have negative effects on workers as it encourages them to put up with unrealistic requests from clients expecting more than stipulated in the task description, for fear of getting a negative rating. Workers can find themselves in situations where:

“There are clients that ask you – in four hours! – to clean the tiles, go grocery shopping, clean the whole apartment, pick up whatever is on their floor, the McDonald's bags and the cat's dry pee. We're talking apartments that haven't been cleaned in eight months.” (BEGIGCM04)

Some workers purchase premium accounts to gain an advantage among their peers, as this gives them direct access to client phone numbers. Moreover, premium accounts “work on the algorithm to make my profile jump up among the first hits in the lists that clients see” (FRGIGCM11), thereby granting a visibility ‘premium’. The charge for a premium account is between €7 and €10 per month – an investment which is hard to recover when workers find jobs “that pay €18 in total on the other side of the city” (BEGIGCM04).

Another way in which platforms pass on risks to workers is by not protecting them against frequent last-minute cancellations that involve a loss of (planned) income essential for workers to offset the cost of the tasks performed to find clients through the platform. The failure to recuperate these costs can generate frustration:

“This person was absolutely not fair: she cancelled the appointments three times. Once I was ten minutes away from the meeting place, and she calls me and says: ‘Sorry, I'm not here, can we postpone this until tomorrow?’” (FRGIGCM29)

3.4.2 Economic costs in domestic care platform work: performing work

Findings reveal that the majority of work relationships matched through both platforms remain informal. In Belgium, this is because platforms' 'matching' operations require clients to directly hire workers, in disrespect of the sectoral regulation. A Belgian elderly-care assistant active on Yoopies explained that the financially most beneficial option was to agree to under-the-table arrangements, as registering as self-employed would imply tax charges so high that workers lose their price competitiveness:

"I chose to work through Yoopies because it's sort of under-the-table work. So I don't have to pay, say, €7000–€8000 in contributions and taxes every year." (BEGIGMF11)

In France, the CESU system allows clients to formalise the employment relationship after selecting the candidate. However, both platforms refrain from requiring the parties to sign CESU employment contracts and supervising compliance with regulatory schemes, thereby de facto letting clients determine work arrangements. Findings from France illustrate that these work arrangements are often informal, in particular when clients need "small jobs, just for one evening or for a weekend" and clients 'generally pay cash" (FRGIGCM11). Thus, the casual and on-demand nature of a large share of the work requested on platforms discourages clients from registering workers under the CESU system. Registration entails not only a lot of paperwork, but also higher direct prices due to the social security contributions. One French interviewee gave a vivid account of this: a new client at first paid her through the (optional) Yoopies online transaction system which automatically charges clients the total amount including the deductible employer taxes; however, after the transaction, the client asked: "but next time, can we do cash? Because Yoopies makes me pay €70 instead of the €40 we had agreed on" (FRGIGCM29).

One of the effects of non-compliance with employment regulations is wage dumping (and potentially unpaid work), as statutory minimum wages are not applicable. The informal work relationship gives clients greater bargaining power, letting "clients set the price themselves [...] it's them who set and we accept" (BEGIGCM07). In the highly competitive environment on care platforms, workers generally have to accept what clients offer. Consequently, hourly rates may be lower than the statutory minimum wage (around €10–€11 gross in both France and Belgium) with some clients paying "not more than €5 per hour to take care of their child" (FRGIGCM34). Workers acknowledge that some clients use platforms expressly to circumvent the high costs associated with the formal sector and pay rates below the statutory minimum:

"People have crazy requests, but well, hire a 'normal' cleaning lady if you have such necessity. Don't go on Yoopies. Because they want to pay less. But at the same time, they expect the same level of professionalism and high-level service." (FRGIGCM29)

Despite low pay, workers often put up with clients' unrealistic demands to at least gain some (albeit limited) income and avoid negative ratings and reviews on the platform.

Commuting time and costs are further costs borne by workers in informal relationships, unless clients offer to cover transportation costs (in our sample only one worker reported such an occurrence). While both the French and Belgium regulations foresee reimbursement for commuting time and costs (e.g. “When I worked under the Pajemploi system I earned more than if I had worked under-the-table because my commuting costs were paid” (FRGIGCM33)), in the case of informal platform work these costs are not recovered by workers despite being necessary to perform paid work. The time and effort involved in commuting is magnified when jobs are casual and short (i.e., one to two hours), which is common on platforms. Respondents reported several cases when the time spent commuting was out-of-balance with gig remuneration:

“You have to take public transport, and that's not always profitable when you have to commute an hour and a half for barely two hours of work.” (FRGIGCM29)

Importantly, the informal nature of most jobs posted on platforms means that workers are not entitled to the employment rights and social protection enjoyed by regular employees. These include bonuses, parental and sickness leave, work-related accidents insurance, unemployment benefits, and old-age pension. For instance, when platform workers operate informally, in-work safety measures stipulated in national legislation are not applicable, as reported by one Belgian respondent:

“When I go to people's places I get on ladders, I take my risks. With the voucher system, this is forbidden.” (BEGIGCM04)

Workers are thus exposed to higher degrees of risk (of accidents), without being entitled to accident insurance or sickness leave. They are individually responsible for the civil and medical costs directly related to accidents and cannot receive incapacity benefits, potentially generating further costs for them.

3.4.3 Social costs involved in domestic care platform work

The non-recoverable costs that platforms pass on to workers relate not only to the economic but also to the relational and – more specifically – ‘socio-emotional’ dimension of work. We describe ‘socio-emotional’ as including both the psychological and cognitive activities. We found that platform workers develop empathic relations and attachment to their clients, while being required to manage their emotions, such as for instance:

“To always remain patient, respect the child's well-being, not to raise your voice, but to know how to be firm without raising your voice [. . .] be as communicative as possible with the child.” (FRGIGCM11)

Indeed, emotional labouring aimed at being patient, docile and proactive acquires even greater importance for platform workers as client dissatisfaction can easily lead to a negative

review affecting access to future employment on the platform. As in other service-oriented professions, platform workers must:

“Always try to be as polite as possible, even when people have been vile or not-so-friendly.” (FRGIGCM11)

At the same time, we saw platforms limiting workers' knowledge about clients and the jobs while assigning them responsibility to perform knowledge work, finding out as much as they can about clients. While platforms require workers to create full profiles, clients have much lower entry barriers and are allowed to post jobs with scant information about themselves and the services requested. The platform thus passes on to its workers the burden of 'figuring out' a client's expectations. We found these efforts have the greatest relevance when platform workers are confronted with 'scams' – usually 'sexual-based scams'. Some respondents reported unsettling proposals from clients:

“He called me with a masked number, [. . .] he told me he owned a private clinic for cosmetic surgery in Los Angeles and he had plenty of money, and that he would like to have some nice company when he's in France [. . .] and he asked me to go do some chores at his place and he would pay me €30, €50 per hour.” (FRGIGCM28)

Most workers seemed highly aware that “on the (platforms) there are people who pretend to be families looking for (a cleaning lady) – but actually they are looking for *something else*” (BEGIGCM03). A significant number of the workers interviewed told stories of scams and/or misuse of the platform services. They reported requests to perform cleaning jobs late at night or in unusual dress such as “working in a bikini” (BEGIGCM03). Some even reported sexual harassment while performing work. Workers reported deep uneasiness and fear, for example when clients insistently requested “body massages” (BEGIGCM03), or even forced a worker to stay on in the apartment (BEGIGCM05). Whereas national legislation provides assistance and support to harassed and abused workers, platform workers are individually responsible for coping with harassment or abusive clients and the associated sense of insecurity. They are often afraid of reporting the offences, due to the informal and thus unprotected work arrangements. The 'fuzziness' of client profiles and job descriptions generates feelings of physical insecurity and uneasiness when workers meet new clients, since contacts have been limited to on-platform messaging. A considerable number of respondents reported habitually notifying family members or friends about the client they were about to work for, a precautionary measure taken in the absence of any protection provided by platforms:

“I always write down in a little notebook the clients I've worked for, name, address, phone number, etc., and before I leave I drop it off at my mum's house. If anything happens, there's the information.” (FRGIGMF08)

Table 3.1 Social and economic costs for workers in regular employment and platform work.

Type of employment	Regular employment in Belgium (voucher system, domiciliary care assistance)	Regular employment in France (non-platform CESU and Pajemploi)	Employment via platforms
Social and economic costs for workers			
Profile creation and self-promotion to access work	No	Yes	Yes
Job search and application filing	No	Yes*	Yes*
Participation in job interviews	No	Yes*	Yes*
Additional non-remunerated tasks (e.g. to maintain high ratings)	No	No	Yes
Working below the minimum wage	No	No	Yes
Loss of pay due to last-minute cancellation	No	No	Yes
Communing costs and time	No	No	Yes
Lack of access to social rights and protection	No	No	Yes
Lack of accident insurance coverage	No	No	Yes
Collecting information on clients and figuring out potential scams	No	No	Yes

*Although regular employees in France incur the costs of job search, application filing, and participation in job interviews, these costs are amplified in the case of employment via platforms due to the casual nature of platform-based care work.

3.5 Discussion and conclusion

This article sets out to critically explore how domestic care platforms impact work arrangements within two mature market economies in Europe: Belgium and France. Both countries feature different – yet, relatively encompassing – welfare and employment systems established by governments and social partners with the aim of formalising employment in domestic care services. Despite the diversity of the country-based regulations, we indicate that platform domestic care workers incur unpaid labour. We explain unpaid labour by referring to the ‘individualisation of risk’ (see Macdonald, 2021) incurred by care workers when providing services through platforms, broadening the ‘individualised risk’ perspective by identifying and explaining its antecedents, i.e., unpaid labour understood as the cost of such risk. Unpaid labour stems in particular from platforms putting pressure on existing labour markets and welfare structures for formalised domestic care by imposing their (digital) employment models and rules which follow platforms’ strategies of ‘market dominance’ (Haidar & Keune, 2021). Empirical evidence from Belgium and France shows similar outcomes: i.e., platform-mediated employment remains generally unrecognised, undocumented and therefore informal and open to unpaid labour. However, unpaid labour occurs in different ways in Belgium and France, reflecting the different national legislation governing the care and domestic sector co-opted by platforms (Stark & Pais, 2021). In France where the statutory

system hinges on flexible employment with relatively low levels of protection, platforms find a fertile terrain to operate in a regime of semi-compliance where they are able to avoid liability for monitoring and enforcing statutory employment regulations (i.e., 'entrance by regulatory avoidance'). The domination strategies of platforms in France involve allegedly operating within the law, yet acting as a 'Trojan horse' as they fail to enforce the legal prescriptions, resulting in informal work. Conversely, in Belgium, where sectoral regulations set relatively higher levels of employment protection (often under standard employment), platforms have no other option but to operate by 'disrupting' existing labour institutions (i.e., 'entrance by disruption'). Above all, the disruptiveness of platforms in Belgium is visible in the direct employment relationship they promote, which the Belgian system does not foresee, leaving platform workers without any option to formalize their work. Policy-makers and unions should be aware of the potentially negative effects that the entrance of digital platforms can have on working conditions in domestic care work and on existing policies aiming to formalise employment in this sector.

In both countries, platform strategies hinging on the deployment of digital technologies make jobs more casual and without social protection, and pay unpredictable and unreported. In concrete terms, this involves passing on to workers the economic (including monetary assets such as working time) and social costs (including for example the need to constantly display patience and kindness, the need to 'figure out' clients' expectations to avoid scams, manage harassment, etc.) in the form of unpaid labour for performing care tasks throughout the whole work process. Whereas informal employment represents a similar outcome in both Belgium and France, the individualization of risk (i.e., unpaid labour) fostered by platforms impinges differently on workers, reflecting differing national legislation governing domestic care services. Under the voucher system in Belgium, domestic care services (excluding babysitting and private tutoring which remain outside the scope of the regulation) are carried out by employees on standard employment contacts. Therefore, workers accessing paid work in the traditional labour market in Belgium do not need to engage, for example, in digital activities associated with searching and applying for jobs, because they are matched with clients by the agencies that employ them. Conversely, the French regulation allows domestic care providers to be formally employed by clients directly under a 'private employment' relationship. This means that, even in regular employment, French workers are forced to bear the costs of searching and applying for jobs. Evidence points to platforms increasing the amount of unpaid labour burdening workers when searching for jobs on platforms due to the highly competitive platform environment that compels workers to perform labour-intensive selfbranding activities involving both economic and social costs. On a similar note, platforms' deployment of reputational mechanisms puts pressure on workers, making them feel obliged to perform additional (unpaid) tasks to deliver their best performance (and thereby rule out the risk of a negative review). This contrasts strongly with the Belgian regulated system, where

– as indicated – domestic care workers are not used to undertaking 'voluntary tasks' as their job description is regulated by the sectoral collective agreement. Conversely in France, unpaid labour in domestic care potentially remains a structural feature. Indeed, domestic care work there is highly flexible and 'incomplete' from the point of view of traditional employment protections despite efforts to formalise the sector (Devetter & Messaoudi, 2013). In this context, public policies should first and foremost support and promote good employment rather than bad jobs in the formal domestic care sector, as a precondition for avoiding creating a fertile terrain for platforms to flourish and steer jobs towards informal employment (Table 3.1).

Our study shows how platforms in Belgium and France boost informal employment in contexts of formalised domestic care employment by burdening workers with a significant amount of economic and social costs resulting from the individual risk in the form of unpaid labour. Thus, we contribute to the debate on the 'visibility' and 'invisibility' of care work on digital labour platforms (see e.g. Mateescu & Ticona, 2022; Weber et al., 2021) by contending that, whereas workers may appear more visible thanks to their presence on digital platforms and media (for instance, through rich personal profiles), their work remains invisible because it is stripped of the guarantees and protections – that limit the performance of unpaid labour – embedded in formal employment.

Our study has implications for policy-makers and trade unions focusing on domestic care platform work. First, the lack of enforcement of existing regulations on platforms is a major driver of individualised risk. We argue that it is this non-enforcement that has enabled platforms to carve out a share of the market through their domination strategies in France and Belgium. This suggests the need to expand and apply existing regulations in care services to platforms in order to improve the working conditions of workers. It also requires extending existing national regulations on the care services sector to occupations which are to date unregulated, i.e., babysitting and tutoring. This calls for an active role of the state and trade unions as regulators through legislation and collective agreements. Although collective agreements establish minimum working conditions in domestic care, these standards remain relatively and comparatively lower in the feminised care sectors than those in male-dominated sectors. Moreover, feminised care sectors remain comparatively less organised by trade unions than male-dominated industrial sectors. Organising strategies by trade unions are key to boosting workers' bargaining power and improving working conditions when negotiating with employers, in this case the platforms. Second, our study urges a deepening of our understanding of national policies, as well as a broadened analysis of platforms' domination strategies, looking at the extent to which and how platforms steer employment by a process of 'individualised risks' and assessing the implications thereof for workers.

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Appendix 3.1

Table 3.2 Overview of interviews with workers.

Platform	Country	Respondent code	Services offered on platform	Age	Gender
Yoopies	Belgium	BEGIGMF08	Personal assistance to the elderly/Babysitting	27	F
		BEGIGMF11	Personal assistance to the elderly	49	F
		BEGIGCM03	Cleaning, household tasks/Babysitting	27	F
		BEGIGCM04	Cleaning, domestic tasks/Personal assistant to the elderly and persons with disabilities/Babysitting	57	F
		BEGIGCM06	Cleaning/Babysitting	29	M
		BEGIGCM07	Babysitting	34	F
	France	FRGIGCM07	Pet-sitting/Cleaning	20	F
		FRGIGCM08	Cleaning, domestic tasks/Babysitting	22	F
		FRGIGCM24	Private tutoring/Babysitting	24	F
		FRGIGCM29	Private tutoring/ Cleaning/Personal support to the elderly (no care assistance)	24	F
		FRGIGCM30	Private tutoring/Cleaning	27	F
		FRGIGCM31	Private tutoring	27	M
		FRGIGCM32	Pet-sitting/Babysitting	28	F
Top Help	Belgium	BEGIGMF27	Babysitting	50	F
		BEGIGMF30	Private tutoring/Babysitting	66	F
		BEGIGMF42	Private tutoring/Babysitting	24	F
		BEGIGMF43	Babysitting	24	F
		BEGIGCM11	Private tutoring/Babysitting	33	F
		BEGIGMF32	Babysitting	62	F
	France	FRGIGCM10	Cleaning, domestic tasks/Babysitting	42	M
		FRGIGCM11	Babysitting, pet-sitting, private tutoring	23	F
		FRGIGCM12	Cleaning, domestic tasks/Babysitting	32	F
		FRGIGCM20	Cleaning, domestic tasks	53	F
		FRGIGCM33	Babysitting	23	F
		FRGIGCM34	Private tutoring/Babysitting	23	F
		FRGIGCM35	Babysitting	50	F
FRGIGCM37	Cleaning, domestic tasks/Babysitting	23	F		

4. Control and Consent Regime Dynamics within Labour Platforms

This chapter is based on: Pulignano, V., & Franke, M. (2022). Control and consent regime dynamics within labour platforms. *Work in the Global Economy*, 2(2), 149-175.³

Abstract

Much is known about how labour platforms use 'algorithmic management' to implement rules which govern labour by matching workers (or service providers) with clients (or users). But little is known about *whether* and *how* platform workers engage with these rules by manipulating them to their own advantage, and *how* this accounts for wider 'regime dynamics' across (and within) different types of platforms (e.g. on-location and online). Based on a comparative analysis of two food delivery (Deliveroo and Takeaway) and two freelancing (Upwork and Jellow) platforms in Belgium, we discuss the rules platforms use to govern labour and examine what role workers have in shaping a 'space' of control over the conduct of their work. Drawing on labour process theory, we argue that this space is shaped by the way in which platforms shift risks onto workers by rules governing access to work through rewards, penalties as well as labour deployment reflecting various contractual statuses. Hence, we explain how workers also shape such spaces by organising consent around these rules, pointing to a 'social space' for food delivery workers and a 'market space' for self-employed freelancers. These spaces refer to different regime types, i.e. 'pay-based control' and 'time-based control' for food delivery, and 'customer-based control' and 'task-based control' for online freelancers. These types are shaped by the control and consent dynamics within labour platforms, reflecting the platforms' labour governance strategies and workers' attempts to ensure control over these strategies within the distinctive political institutional realm.

Key words

control, consent, labour process, regime, platform work

4.1 Introduction

Labour platforms are considered to be digital intermediaries for the purchase and sale of typically labour-intensive services, matching clients (or users) and workers (or service providers) (Agrawal et al., 2014; Lehdonvirta et al., 2014). The ability to match clients and workers via

³ Part of the research was also published in: Franke, M., & Pulignano, V. (2022). Controle en instemming segmentatieregimes binnen digitale platformen. *Tijdschrift voor Arbeidsvraagstukken*, 38(4), 517-544.

digital technologies benefits platforms as it does away with the need for and the responsibility associated with an employment contract (Woodcock & Graham, 2020). As such, labour platforms are considered to resemble a specific platform 'type' of governance mechanism (Vallas & Schor, 2020). One distinctive feature is that platforms' use of digital technologies speeds up matching while overcoming geographical boundaries (Grabher & König, 2020; Stark & Pais, 2021).

Nevertheless, matching users and service providers can be a challenge for platforms (Berg et al., 2018), with information asymmetry reducing trustworthiness in the interaction between workers and clients (Akerlof, 1970). The lack of pre-purchase information on whether potential workers are able to deliver a quality service constrains platforms' ability to ensure the quality of their services vis-à-vis potential clients (Rosenblat & Stark, 2016). At the same time, the fragmentation of tasks among a geographically dispersed population of workers makes it more difficult for platforms to assess overall task quality (Kässi & Lehtonvirta, 2018). Platforms adopt labour-governing 'algorithmic technologies' (Graham & Woodcock, 2018) to overcome these difficulties, shaping workers' behaviours and orientations in different ways (Robinson & Vallas, 2020).

Studies have used labour process theory (LPT) to examine how digital platforms subordinate labour through algorithms (e.g., Heiland, 2021; Shalini & Bathini, 2021). As a key resource for the study of production relations at work in industrial capitalism (Smith, 2015), LPT is considered important for expanding our understanding of the role of platforms in mediating the capital/labour relationship by "practices of 'managerialization' and the organisation of work" (Gandini, 2019: 1040). One aspect of 'algorithmic management' is that platforms set rules as the terms and conditions to which both clients and – more importantly – workers have to adhere. These rules often involve metrics and ratings to monitor and organise work in a way creating incentives to – and introducing sanctions for workers who do not – act in accordance with a platform's rules and necessities (Shapiro, 2018). For instance, rating systems and algorithmic control help platforms ensure high degrees of service quality (Wood et al., 2019) by making job access conditional upon high levels of individual performance (Ivanova et al., 2018). At the same time, low-performing workers risk losing their work through access to a platform's clients being curtailed. While the use of performance measurement systems to monitor compliance with the set terms and conditions is not *per se* new – all companies measure their workers in one way or another –, what is new is that compliance and performance are being increasingly monitored by technical devices, whether the algorithms behind the apps used by food delivery couriers, the wearable devices used in Amazon warehouses, the hand-held devices used in parcel delivery services, or the screenshots taken of teleworkers' screens.

Rules as practices and policies set by employing organisations to organise work are acknowledged as one of the core forces shaping a 'factory regime' (Burawoy, 1985). A

factory (or production) regime refers to the overall political form of production, including both the economic effects of the labour process and the political and institutional apparatuses of production, and the state. This raises a fundamental – yet unresolved – question as to how and to what extent the specific platform ‘type’ of labour governance shapes a distinctive ‘regime’ and whether and how it takes into account the overall political form of production, incorporating the organisation of consent, the role of ‘games’ in the labour process and the wider apparatuses of governance rules. Indeed, the organisation of consent within the framework of labour governance by capital is at the centre of traditional scholarly work on misbehaviour and control (see Ackroyd & Thompson, 1999 – 2nd version 2022).

This article addresses this issue by explaining how the ‘regimes’ we empirically observe result from specific (platform) rules governing workers’ behaviour (Edwards & Scullion, 1982; Thompson & Findlay, 1999); yet, we do also look at how the regime type is shaped by the workers securing the ‘space’ and control necessary for the generation of consent (Beynon, 1973), via work games and/or ‘making out’ (Burawoy, 1979). Whereas platforms enable and constrain the use, acquisition and access of competences and resources, workers bring their own distinct resources when performing digitally mediated self-employed platform work (Demirel et al., 2021; Sutherland et al., 2020). Moreover, as we explain, the wider regime dynamics of control and consent include a worker’s contractual status set by a government and providing the structural conditions underpinning implementation of these rules. In fact, the employment contract represents an important dimension in labour control (Nichols et al., 2004).

Focusing on both on-location (food delivery) (Deliveroo and Takeaway) and online (remote) freelancing (Upwork and Jellow) platforms in Belgium, the article uses a novel comparative sectoral perspective to explore the dynamics surrounding the organisation of consent by workers providing different services across a variety of platforms featuring different labour governance strategies across (and within) different sectors. In our analysis of the issues involved in the different sectoral and organisational context of platforms, we focus on two dimensions to date marginalised in studies of the platform economy (Ravenelle, 2017, Schor et al. 2020, Mateescu & Ticona, 2020 in the US are three exceptions). We start by studying the rules – in the form of rewards, sanctions and contractual status – used by platforms to control access to work, as ways of disciplining a workforce are considered to be at the core of the strategies of employing firms in traditional labour markets (Legge, 1995; Rubery, 2007; Grimshaw et al., 2017). We then examine how workers experience these rules, exploring how and to what extent they are able to manipulate them to their own advantage. Both dimensions touch upon the social relationships between capital and labour, looking at how capital exerts control over working conditions and how workers ensure a space to regain control over these conditions. As part of this framing, the term ‘space’ identifies the mapping of the social relationships (of production) surrounding platforms’ control strategies and workers’ organisation of consent in

order to gain control. We define this space in line with the nature of the required workforce competences and skills and a worker's contractual status. We refer to the 'social space' in food delivery, a sector requiring few skills and where workers with different contractual statuses ('peer-to-peer', student self-employed, self-employed and (temporary) employee status) exert control by shielding themselves from the risks (income instability, assignment unpredictability, job insecurity and physical and material safety) of platform work. In online freelancing, we point to the 'market space' where consent is played out by skilled self-employed or student self-employed freelancers exerting control through maintaining their capacity to compete in the market, as selling their services through a platform is usually considered the way in which they can reduce the risks of online freelancing (not finding clients or losing clients, not being able to achieve the prices they wish, thereby facing low pay or no pay at all). We associate each 'space' with different 'regimes', namely 'pay-based control' and 'time-based control' in food delivery and 'task-based control' and 'customer-based control' in freelancing. As we will see, each regime features its own distinct dynamics characteristic of different platform labour governance strategies, across (and within) different sectors, a perspective drawing on labour process theory (LPT) (Thompson & Findlay, 1999; Thompson, 2003).

4.2 Framing Control and Consent Regime Dynamics using Labour Process Theory (LPT)

The question at the core of this article is whether and how platform-based labour governance accounts for different labour regimes through which workers secure the space and the control necessary for the generation of consent. LPT considers the organisation of consent as resulting from capital/labour dynamics of control at the workplace. Edwards (1986) talked about the negotiation of order taking place in a 'material context' where consent has to be created and managerial control is 'far from automatic' (*Ibidem*, 188-288). Recent studies on the digital ride-hailing industry (i.e. Uber) conclude that workers are subject to the same capital/labour power dynamics found in more traditional workplaces and frontline service work (Maffie, 2022 in Edwards & Hodder, 2022: 8).

Studies in the sociological tradition of the labour process reflect on the dynamics of control by focusing on 'work games'. In this perspective, games provide a 'cultural-cognitive control function' as they produce consent by turning workers' attention away from their exploitation and towards winning these games, with success measured by the profit produced for the employer (Wood, 2021: 121-122). A typical example is Burawoy's (1979) 'making out', which turns challenges in the labour process into a series of choices and opportunities for workers to win. This tends to reproduce workers' commitment to playing the games, thereby getting them to consent to the 'rules of these games'. Burawoy (1979) considers labour as an 'active subject' within the dynamics of workplace control (Thompson & Findlay, 1999). As Beynon's (1973) study

of the Ford Halewood assembly plant further illustrates, these dynamics become important for workers to secure the space and control necessary for generating their consent via 'working back the line' or making 'their own time' for rest and social interaction.

LPT has therefore been of great help in developing conceptual tools enhancing our understanding of "how employees have [...] become culturally literate in a way that management cannot always control" (Thompson & Findlay, 1999: 183). 'Misbehaviour' (Ackroyd & Thompson, 1999) is the key concept here, explaining workers' non-conformity with managerial expectations. Taking place within the framework of performance control measures and increased workplace productivity, misbehaviour relates to the conditions and dynamics shaping the processes behind distinct 'workplace consent'. It crystallises around the everyday contested practices and behaviours inside (and outside) work by which workers attempt to protect a 'private' space where they dissent while gaining control over their work and life.

Analysing the structuring conditions which foster or impede workplace consent, some studies in the critical pluralist tradition of employment relationships have specifically focused on the complexity of capital-labour relations (Edwards 2006; Bélanger & Edwards, 2007). These are considered at the core of the explanation of workplace consent, as agents often do not behave according to a predetermined set of interests. Instead, interests are constructed through the evolution of the contradictory relationship between capital and labour (Edwards, 2006). Hence, this article explores how the organisation of consent unfolds from capital/labour dynamics of control across a variety of transnational (online freelancing) and local (food delivery) platform 'types' reliant on different work-related skills (Vallas, 2019).

As much of the traditional industrial and labour sociology literature argues, the natural terrain of interest formation is the 'wage-effort bargain' where 'self-organisation' is considered to be the space for "the effective protection and extension of interests" (Ackroyd & Thompson, 1999: 54). The types of self-organisation most often examined are those connected to the practices of skilled workers. As Ackroyd and Thompson observe, "it is the autonomy of any kind which should be thought of less as an outcome of managerial activity and more as something that is achieved by relentless self-organisation" (1999: 58).

Burawoy (1985) theorises production as a key dimension in shaping the capacity of workers to elicit control by working-class struggles and self-organisation. His 'regime' concept reflects the analytical distinction between the labour process, conceived as a coordinated set of activities and relations involved in the transformation of raw materials into useful products, and the political apparatuses of production, understood as the institutions that regulate and shape these workplace struggles. His theory of 'factory regimes' provides a fruitful approach to understanding variations in broader production politics (Dörflinger et al., 2021; Vallas & Hill, 2012). The theory discusses the varying production regimes that arose under industrial capitalism where levels of market competition, forms of the welfare state, and the impact of

labour organisation are acknowledged as forces shaping the 'factory regimes' that arose under different conditions. At the broadest level, the author distinguishes two types of political apparatuses, 'despotic' and 'hegemonic', which vary in the degree to which they rely on 'coercion' versus 'consent' by 'making out' (Burawoy, 1979).

Recent literature has emphasised the importance of understanding the role played by labour regimes in the structuring, organisation and dynamics of global systems of production and reproduction (Baglioni et al., 2022), where "a labour regime signals the combination of social relations and institutions that bind capital and labour in a form of antagonistic relative stability in particular times and spaces" (*Ibidem*: 1). Building on this concept, the authors consider a range of conceptual debates around labour regimes and global production relating to various issues, including the labour process. Current understandings of the global platform economy have the potential to offer an important contribution to this debate. Shedding light on the hybridity of platforms in forms that contradict the existing approaches of traditional firms and organisations, current studies within the digital platform economy highlight the need to conceptually understand how this happens, theorising about the generation and organisation of consent resulting from the dynamics of control and labour governance within the digital workplace (see Lin, 2021).

Thus, autonomy and domination may, in this sense, be conceived as being "relationally and situationally produced by platforms" (Schübler et al., 2021: 1231). Yet, how platform strategies of domination embrace not only the labour process itself but also extend to a specific institutional setting covering the contractual status (e.g., self-employed) and shifting risk to labour is less investigated to date. In so doing, our analysis relates to labour process research pointing to the 'contract' as an important aspect of Burawoy's work on 'factory regimes' (Nichols et al., 2004). Yet, there is a need both to expand knowledge on platform strategies of domination and control, taking account of the risks workers experience when providing their services via platforms, and to examine whether and how workers gain control for the organization of consent within the framework of these strategies. As Edwards and Hodder (2022: 7) state, while "contemporary workplaces, including the gig economy, have both distinctive features and continuity with the past", it is important to spell out what these differences and similarities are. Therefore, getting to know the ins and outs of the organisation of consent which result from the dynamics of capital and labour control helps promote an understanding of how workers protect themselves from the risks generated by platform work. As we will explain, these risks can take different forms within the wider 'political apparatuses of production' which embrace both the labour process and the institutions shaping workplace struggles (Burawoy, 1985). When examining whether and how the labour governance systems practiced by platforms account for how workers secure the space of control necessary for the generation of consent, we therefore highlight the importance of institutional conditions (i.e. the contractual status and the role of national governments) to explain the nature of the

space shaped by the regime dynamics unfolding across (and within) the platform economy. In particular, a 'factory regime' analysis includes employment contract issues as the way to avoid underestimating the magnitude of the changes happening in sectors and industries, such as the platform economy (Nichols et al., 2004; see also Standing, 2007). These aspects are key in our empirical investigation of labour platforms in Belgium and our corresponding analysis.

4.3 The platform economy in Belgium and its institutional underpinnings

Generally speaking, the platform economy is heterogeneous with regard to both the nature of the work and the workers providing services (Lenaerts, 2018; Pulignano et al., 2022a). Platform workers perform either online activities, for example software development or technology services (Kässi & Lehdonvirta, 2018), or offline activities such as food delivery, ride-hailing, tutoring, babysitting or various household services (FOD Financiën, 2021). In the majority of cases, platform work is occasional and supplements other earnings, although a small percentage of workers rely on platform work as their main source of income (Drahokoupil & Piasna, 2019; Lenaerts, 2018).

Compared to other European economies, the size of the platform economy in Belgium remains relatively small. Survey evidence from the EC Flash Eurobarometer (2018) shows that just 18% of the Belgian population participated in some form of the sharing economy in 2018, well below the rate seen in the four neighbouring countries, France, Germany, the Netherlands and Luxembourg, and below the European average of 23%. However, the use of sharing platforms in Belgium is rising rapidly, with the number of platforms officially recognised by the Belgian Ministry of Finance growing from 30 in 2017 to 69 in 2021 (FOD Financiën, 2021). As a significant share of – especially global – platforms are not registered, the actual number is considered much higher.

Belgium is a pioneer in Europe with regard to the introduction of dedicated legislation on digital platforms, reflecting the government's ambition to encourage both the development of platforms and their uptake by citizens as users, workers and entrepreneurs. The 2016 De Croo Law put platform work on a par with the broader category of 'collaborative economy' jobs, alongside voluntary work, and created a specific contractual status (i.e. peer-to-peer) for individual workers providing their services to clients via officially registered platforms. Between 2018 and 2020, peer-to-peer workers were allowed to perform services via platforms tax-free and exempt from social security contributions up to an annual ceiling of €6.340 in 2020. This status was highly contested, as it favoured platforms through externalising tax and social security costs and exacerbated polarisation between a protected (contractually dependent) workforce (including standard and non-standard employees), for whom income and social

security benefits are guaranteed, and an unprotected (contractually independent or self-employed) workforce which works digitally without employment protection (Pulignano & Van Lancker, 2021). The Belgian Constitutional Court overturned the tax-free scheme, meaning that a tax rate of 10.7% on platform earnings has applied since January 2021 (Paelinck, 2020; Franke & Pulignano, 2021). However, the Court decision did not repeal the possibility afforded to a platform to (re-)classify platform workers as self-employed. Moreover, Belgium offers a 'student self-employed' status, under which students aged between 18 and 25 can earn up to €7,000 a year (indexed) from self-employed work without having to pay tax or social security contributions. Thus, labour platforms in Belgium can hire workers under a broad range of different statuses. On 15 February 2022, the government introduced a 'new labour deal' extending protection (e.g., in the case of accidents at work) to self-employed platform workers, albeit without coverage for peer-to-peer and student self-employed workers.

4.4 Methods

The research was conducted between spring 2020 and autumn 2021 on four labour platforms within food delivery and online freelancing in Belgium. We used Vallas' (2009) typology to select the platforms in accordance with the geographical dispersion of the work (i.e., on-location and online) and the complexity of – and skills required for – the work. We selected Deliveroo and Takeaway (on-location food delivery) and Upwork and Jellow (online freelancing).

Deliveroo hires couriers under the self-employed, student self-employed and peer-to-peer status, allowing the platform to disregard sectoral regulations and to use a piece-rate payment model. Originally, both (student) self-employed and peer-to-peer workers received a variable fee per delivery, consisting of a fixed amount for delivering the food and a distance-based amount dependent on the distance to the client. In response to the Belgian tax authorities challenging the classification of couriers under the peer-to-peer status in 2019, Deliveroo switched to a fixed delivery fee for peer-to-peer workers to be able to justify the use of 'self-employment' contracts for peer-to-peer workers, as it is the client who 'directly' pays the worker. Peer-to-peer workers thus receive the same amount for each order they deliver, no matter how far away the client is, whereas self-employed workers' fees remain distance-related. This change went hand in hand with eliminating the possibility for peer-to-peer workers to see the client's location before accepting an order and to receive financial rewards (i.e., bonuses) from the platform, whereas self-employed workers retain these possibilities. Since 2020, Deliveroo has used a 'free login system' allowing all couriers to 'login' to their apps and to work whenever they want, provided that orders are available. Conversely, Takeaway employs couriers either directly or through an employment agency as employees, paying

them an hourly wage, including overtime. At the time we collected the data, agency workers worked under daily or weekly contracts, but could be offered monthly contracts and direct employment after three months of work, provided they had good performance ratings. Working under a shift-based system, Takeaway couriers are supervised by middle-range managers (i.e., 'driver captains', 'hub coordinators'). At both Deliveroo and Takeaway, workers perform a standardised sequence of tasks, following the platform's instructions through their apps when picking up food at restaurants and delivering it to the client.

Freelancers working for Upwork and Jellow can be self-employed, student self-employed, or – in the case of Upwork – work without registering their freelance activity. As a platform operating across borders, Upwork can supply services at low cost by benefiting from cross-national differences in the regulation of self-employment (Marà & Pulignano, 2022) and by not obliging freelancers to officially register as a company when creating their platform profile. Upwork uses ratings and penalises workers who work outside the platform. By contrast, Jellow is active in Belgium and the Netherlands and does not penalise freelancers working with clients outside the platform. Jellow requires freelancers who create a profile on the platform to declare that they are registered as self-employed and screens profiles to verify that freelancers are not 'bogus' self-employed. Both Upwork and Jellow bring together workers and clients for the execution of high-skilled work. We selected IT, graphical design, translation and copywriting freelancers, as these are the most common services performed online in Belgium according to the online labour index (Kässi & Lehtonvirta, 2018).

Primary data collection included 29 qualitative biographical narrative interviews with platform workers and 3 semi-structured interviews with platform managers from Deliveroo, Takeaway, Jellow. Upwork management never responded to our attempt to reach out for an interview. We conducted 15 interviews with food delivery couriers and 14 with freelancers. To gain a comprehensive insight into the platforms' strategies of control, the interviews were complemented with desk research (e.g., platform websites).

Our sample consisted of 11 women and 18 men, aged between 18 and 66. The gender split was influenced by the male-dominated nature of the selected sectors and occupations (with the exception of translation and copywriting). We recruited freelancers by using the platforms' search engines to identify potential respondents and then contacting them via LinkedIn. Food delivery respondents were recruited via snowball sampling, social media, LinkedIn and grassroots, independent and established unions. We selected participants with different contractual statuses and working on one or several platforms and/or in the traditional labour market (see Table 4.1).

Table 4.1 Overview of interviews with workers and managers

Platform	Interview code	Occupation	Gender	Age	Employment status	Other (platform) work and income		
Deliveroo	BECM08	Food delivery	Male	29	Peer-to-peer worker	Other food delivery and ride hailing platform work and work through a temp agency		
	BEMF16		Male	20	Student, peer-to-peer worker	Other food delivery platform work, financial support from parents		
	BEMF35		Male	23	Student, peer-to-peer worker	Only Deliveroo, financial support from parents		
	BEMF36		Male	43	Self-employed, employee outside the platform	Other job as full-time employee		
	BEMF37		Male	26	Student, peer-to-peer worker	Only Deliveroo, financial support from parents		
	BEMF38		Female	23	Student self-employed	Other student job		
	BEMF39		Male	18	Student self-employed	Only Deliveroo, financial support from parents		
	BEMF40		Male	22	Peer-to-peer worker	Only Deliveroo, financial support from parents		
	BEMFEX06		Deliveroo management interview					
	Takeaway		BECM05		Male	29	Temp agency worker	Only Takeaway
BECM09		Male	30s		Temp agency worker	Other job as a driver		
BECM10		Male	23		Temp agency worker	Only Takeaway		
BEMF17		Male	25		Student, Temp agency worker	Other tutoring platform work		
BEMF18		Male	24		Employee, driver captain	Only Takeaway		
BEMF19		Male	47		Temp agency worker, unemployed	Only Takeaway, receives unemployment benefit		
BEMF48		Female	29		Temp agency worker	Only Takeaway		
BEMF45		Takeaway middle range management interview						
Jellow	BEMF03	Translation and copywriting	Female	38	Self-employed	Other freelance platforms, clients outside platforms, work as a photographer & teacher		
	BEMF13		Female	26	Self-employed	Other freelance platforms, clients outside platforms		
	BEMF10		Male	66	Pensioner, continues working as self-employed	Other freelance platforms, clients outside platforms, receives pension		
	BEMF12	Graphical design and IT	Male	40	Self-employed	Other freelance platforms, clients outside platforms, teaching job		
	BEMF05		Male	40	Self-employed	Other freelance platforms, clients outside platforms		
	BEMF14		Male	32	Self-employed	Other freelance platforms, clients outside platforms		

	BEMFVP01		Female	25	Self-employed	Other freelance platforms, clients outside platforms
	BEMF46		Female	26	Self-employed, prior student self-employed	Also uses Upwork, clients outside Jellow
	BEMFEX07	/	Jellow management interview			
Upwork	BECM01	Translation and copywriting	Female	35	Self-employed	Other freelance platforms
	BECM02		Female	32	Self-employed	Only Upwork
	BEMF01		Female	33	Invalidity statute	Works for another freelance platform, receives invalidity allowance and financial support from grandparents
	BEMF41		Female	27	Employee off the platform	Uses other freelance platforms, employed full time as a copywriter
	BEMF15		Female	22	Student self-employed	Also uses Jellow, clients outside Upwork
	BEMF02	Graphical design and IT	Male	32	Self-employed	Some clients outside Upwork

Source: Own elaboration

Respondents were asked to speak about their work and life experiences and conditions associated with platform work (Schütze, 2008). Respondents told us about their working hours and pay, about a platform's operations and how (and why) they gained or lacked control over the conduct of their work. All respondents also completed a questionnaire on their demographic profiles, reporting on household composition, migration background, pay and job characteristics.

Each interview lasted between 1-3 hours, with an average of 2 hours. Interviews were conducted under Covid-19 restrictions: partly face-to-face (when restrictions were relaxed in the summer and with physical distancing) and partly online via Zoom or Skype. The participants were compensated for their time. All interviews were recorded, transcribed, translated and anonymised. Interview data was analysed using NVivo, coding both platform strategies and workers' ways of regaining control over the conduct of their work. This shed light on the differences and commonalities in strategies across (and within) platforms and sectors. Platform strategies relate to risks reported by workers in the interviews. Although we found that workers' experiences of these risks were platform-specific, we also found important differences in how these risks were assessed between food delivery couriers (e.g. income instability) and freelancers (e.g. losing clients).

4.5 Findings

4.5.1 Platform strategies for on-location services

Both Takeaway and Deliveroo use digital technology to assign orders to couriers, tracking them through their smartphones and specifying the entire work process of food pickup and delivery. Deliveroo couriers access work whenever they want through a so-called 'free login system' (BEMFEX06). Allowing couriers to decide when and how much they work is possible because Deliveroo pays them per delivery, hence the platform leaves the worker moving in and out:

"It is not the case that a boss obliges you to work a certain amount of hours per week (...) You only have to make sure that the orders get delivered." (BEMF37).

However, this means that couriers unable to access or deliver an order do not get paid. By contrast, Takeaway pays couriers by the hour. This is why the platform "plan(s) on the numbers" of couriers working at a certain point in time "so that we have optimal occupancy" (BEMF45). Takeaway asks couriers to either choose a fixed schedule (this option is available for workers directly employed by Takeaway or temporary agency workers with at least three months' service and good ratings) or "to regularly update (their) availability for the coming week" (BECM09) so as to be able to assign shifts (usually 3-hour time slots) that couriers are required to attend (this option is only available for temporary agency workers). Temporary agency couriers updating their availability on a weekly basis have guaranteed access to just 2 shifts per week, meaning that they may end up with fewer working hours than requested:

"Sometimes you post more availability, but you don't get the hours because there are too many couriers available." (BECM10)

As earnings depend on how many working hours they can access, Takeaway can assign "open shifts" on a "first come first served" basis (BEMF17) to couriers who wish to increase their working hours. Conversely, Deliveroo relies on a large number of couriers regularly available for delivering food when needed through its 'free login system'. This means that couriers get disciplined by their peers, as any order foregone will be delivered by another courier who receives the payment:

"For example tonight, it won't happen, but we could be 100 people wanting to work (...) the more we are, the less orders each of us gets, so we earn less." (BEMF39)

Deliveroo awards 'bonuses' to steer couriers' deliveries. Bonuses are increased payments "when Deliveroo doesn't have enough drivers, then you would get a text: you'll get one or two euros more per order that you deliver right now" (BEMF35). However, to comply with Belgian regulations, Deliveroo "cannot offer a bonus to peer-to-peer riders" (BEMFEX06), meaning that these financial incentives only apply to self-employed couriers. The distance-based fee for self-employed couriers means that they sometimes receive just "€3.50 for a short-distance order (...) for an order of €9 you have to go further" (BEMF38). Both peer-to-peer and

self-employed couriers can be assigned 'double orders' (i.e. two orders from the same restaurant), which earn self-employed couriers 1.5 times the fee of a single order and peer-to-peer couriers twice the amount of a single order, in compliance with the rationale that two clients are paying for the delivery. By contrast, Takeaway management optimises courier performance through recurrent assessments using metrics that measure courier availability, delivery times and 'wrong app usage'. In addition, courier performance at Takeaway is assessed by driver captains supervising the daily work of couriers. This enables Takeaway to improve delivery efficiency by retaining well-performing couriers through rewards including progressive "pay increases of 50 cents after 4.5 months" (BECM05), access to more shifts, and promotion to 'driver captain' or 'hub coordinator' – hence, allowing workers to move to a better position in the hierarchy. Moreover, Takeaway rewards well-performing temporary agency couriers who "enter with daily contracts" (BECM10) by offering them a direct employment contract giving them access to such benefits as an "insurance for water damage to their mobile phones, (reimbursement) of 4G costs, things that are not possible to offer with a temporary agency contract" (BEMF45). Conversely, low-performing couriers are sanctioned through temporary exclusion from the shift-booking system or permanent dismissal:

"We check who arrives late, who is using the app in the wrong way. If it happens too much, we notify that person. If things don't change, then we'll do a follow-up (...) we'll give him one last chance before firing him" (BEMF18)

As Deliveroo couriers are paid per delivery, the platform allows them to be inactive for prolonged periods of time and to 'multi-app', meaning that they can use several different platforms at the same time to increase their chances of receiving orders. Moreover, couriers can cancel orders up to the moment they pick them up at the restaurant. However, as the platform does not provide information about when couriers will receive the next order, they sometimes refrain from cancelling orders. This is particularly the case when workers experience long unpaid waiting times between orders:

"If you haven't received any orders for 15 minutes, then you just have to accept everything because otherwise you risk having to wait a long time" (BEMF40).

While self-employed couriers on distance-based fees can access information on the client's location before accepting an order, Deliveroo prevents peer-to-peer couriers on fixed distance fees from cancelling long-distance orders by keeping the client's location and information on whether the order is a double order hidden until they pick up the food at the restaurant:

"You only know where you have to go after you've received the food. Sometimes it can be really far and that's really frustrating because you know that you'll be spending too much time on it for €4.35." (BEMF37)

Conversely, to avoid couriers remaining idle while being paid, Takeaway intensifies the pace of work by assigning orders to all available couriers who "can't choose if we take an order,

unlike at Deliveroo" (BEMF48). The delivery time specified by Takeaway's app sometimes induces couriers to take risks on the road by cycling fast:

"I saw on my app that I was behind schedule (...). I wanted to make up time and then I was on a tram track, it was slippery and bam I fell." (BEMF19)

While both food delivery platforms offer accident insurance, coverage for Deliveroo couriers excludes material costs such as damage to their bikes or phones, which is why couriers report being insufficiently protected in the event of an accident. Takeaway provides bikes and clothing but not smartphones to couriers.

4.5.2 Platform strategies for online services

Jellow charges clients (mostly large businesses) a relatively high membership fee of around €200 a month. The platform offers a matching service where freelancers are suggested to clients based on their platform profiles and portfolios. At the same time, clients can look for freelancers in the Jellow database. Hence, building a "good quality database of highly skilled freelancers" (BEMFEX07) is crucial for attracting and retaining clients. According to management "we screen all assignments for potential bogus self-employment and also do a number of checks on freelancers such as requiring a company number" (BEMFEX07). Freelancers are incentivised to regularly update and improve their profiles to increase their chances of finding clients, knowing that "you're in a huge pool of freelancers and you have to stand out" (BEMF14). By contrast, registration on Upwork is free for both clients and freelancers, with upgrading to paid membership optional. Freelancers apply for jobs by buying so-called 'connects' and have to pay a commission, in many cases significantly impacting their earnings:

"You pay 20% on every Upwork job. So if I get 30 dollars then I immediately lose six dollars to Upwork." (BECM01)

Upwork rewards freelancers by progressively lowering the commission from 20% to 10% or even 5% insofar as they increase their earnings with an Upwork client while remaining within the platform. In addition, Upwork offers a payment system (called 'escrow') for fixed-price contracts that requires clients to deposit freelancers' pay on the platform when stipulating the contract, releasing it on completion of the work. In the case of payment by hour, Upwork is able to monitor freelancers via "a tool that takes a screenshot every half an hour" (BECM01). Freelancers caught working outside the platform are sanctioned through fines or deactivation, which means they lose their jobs and clients on the platform. They also lose access to the 'escrow' system that "protects" (BECM02) them against non-payment when working through the platform. Conversely, Jellow clients and freelancers can contact each other outside the platform as "a large share of our customers have the subscription anyhow, so it does not matter whether you are communicating directly with each other" (BEMFEX07). Thus, Jellow freelancers

“receive emails from businesses” (BEMF10) when they are selected, they arrange the terms and conditions of their work “independently from the platform” (BEGIGMF12) and get paid directly by clients. However, freelancers have to make sure themselves that they receive payment, as transactions are organised outside the platform:

“There were invoices that really took time. I'm not shy about sending payment reminders, calling or threatening. But that doesn't look good for the next collaboration.” (BEMF14)

Upwork regulates access to work and payment through a system involving ratings (scores from one to five stars and written texts) given to freelancers by clients and vice versa. It also works with a ‘job success score’ calculated on the basis of the number of completed jobs and other metrics, such as worker activity, the size and the value of the completed jobs. ‘Top-rated’ Upworkers are rewarded through reduced commissions, incentivizing them to build up a strong track record which is rewarded internally by the platform. Moreover, the platform suggests ‘top-rated’ Upworkers to clients and grants them the possibility of removing bad reviews from their profiles, hence further improving their ratings. Freelancers also benefit from a higher ranking within their job category, which means that they move to a significantly better position within Upwork as “you don't have to compete anymore with people who have bad reviews” (BECM02). Excelling within the platform's rating system is crucial, as Upwork exposes freelancers to cross-border price-based competition, where freelancers can underbid their peers in order to be selected by clients:

“There are many Filipino freelancers and they work for very low fees. (...) Clients sometimes think that's more interesting of course.” (BEMF15)

Jellow freelancers compete by showcasing their experience (which they gain both on and off the platform), skills and other information relevant for the client on their profiles:

“On Jellow I can say: ‘Look, that's what I do, this is my availability, that's my price, these are my specialisations, that's the kind of clients I want to work with’. That goes beyond Upwork where you just select a general category.” (BEMF46)

Jellow uses freelancers' profiles to attract clients who bring their network of freelancers to the platform. As Jellow is continuously expanding its workforce, freelancers risk accessing relatively few tasks: “I very rarely receive a message from clients” (BEMF12). Whereas the Upwork rating system incentivises freelancers to complete as many platform tasks as possible, Jellow refrains from pushing freelancers to apply for and complete tasks. Jellow freelancers can stay inactive for prolonged periods without jeopardising their ability to compete on the - and on other - platform(s):

“I created a profile but I never received anything. I thought, I'll just wait and see what happens. And suddenly I was contacted via e-mail” (BEMFPI01)

Tables 4.2 and 4.3 provide an overview of the strategies deployed by food delivery and freelance platforms, shedding light on the risks they generate for couriers and freelancers.

Table 4.2 Strategies by food delivery and freelance platforms

Food delivery platforms		Freelance platforms	
Deliveroo	Takeaway	Jellow	Upwork
Platform specifies work process and tracks workers, algorithm assigns orders based on client demand		Platform matches workers and clients online, clients specify work	
Peer-to-peer, self-employed or student self-employed status	Employee status, either hired directly by Takeaway or through a temporary employment agency	Self-employed or student self-employed status	Self-employed or student self-employed status, possibility not to register as self-employed
Piece-rate pay by the platform: fixed fees for peer-to-peer, distance-based fees for self-employed workers	Hourly pay by the platform	Direct payment by the client, client pays subscription fee	Hourly/ per-task payment by the client through the platform, workers pay for 'connects' and 5-20% commission
'Free-login' system: workers can work anytime, provided that orders are available	Platform assigns shifts based on couriers' availabilities (temporary agency workers) or a fixed schedule (Takeaway employees, temporary agency workers with 3 months seniority and good evaluations)	Matching service offered to clients, screening of worker profiles, clients contact workers directly	Workers apply for jobs Billing, monitoring and interactions with clients happen through the platform
Discipline imposed through large number of available workers, piece-rate payment and hiding information on client location from peer-to-peer workers	Discipline imposed through performance evaluation, including statistics and personal assessment of managers	Discipline imposed through 'local' competition from the Netherlands and Belgium, profiles to showcase skills and track record	Discipline imposed through global price-based competition and rating system consisting of client ratings, worker ratings and a 'job success score'
Rewards include bonuses and distance based fees for self-employed workers, higher pay for double orders for peer-to-peer and self-employed workers Sanctions include deactivation from the platform	Rewards include pay raises, promotions, more working hours and better contracts (for temporary agency workers) Sanctions include temporary exclusion from shift-booking or permanent dismissal	No direct rewards or sanctions by the platform	Rewards for 'top-rated' workers include reduced commissions, higher ranking, possibility to remove reviews, being suggested to clients Sanctions include fines, lower ranking, dismissal
Workers can cancel orders, be inactive during prolonged periods of time, 'multi-app'	Work intensification, no possibility to cancel orders Requirement to work at least two shifts per week or to work according to a fixed schedule	No direct pressure to complete or apply for jobs Workers can keep an inactive profile	Incentivizes workers to apply for and complete as many jobs as possible Inactive workers are ranked lower

Source: Own elaboration

Table 4.3 Risks reported by workers in food delivery and freelancing

Food delivery		Freelancing	
Deliveroo	Takeaway	Jellow	Upwork
Income instability		Not finding clients	
<ul style="list-style-type: none"> - Limited availability of orders - Low pay for some orders - Waiting times between orders or at restaurants - No pay when not working or not delivering order to client's location 	<ul style="list-style-type: none"> - Limited availability of shifts - No pay increase: pay remains relatively low 	<ul style="list-style-type: none"> - Limited availability of jobs - Not being selected by client or matched by platform 	<ul style="list-style-type: none"> - Many job applications without being selected
Job unpredictability		Low pay rates and non-payment	
<ul style="list-style-type: none"> - Not knowing how many orders will be assigned - Not knowing when next order will be assigned - Peer-to-peer workers: not knowing clients' location beforehand 	<ul style="list-style-type: none"> - Workers without fixed schedule: Not knowing how many shifts will be assigned 	<ul style="list-style-type: none"> - Client not willing to pay much, asking for free sample work - Client doesn't pay for work 	<ul style="list-style-type: none"> - Client not willing to pay much, asking for free sample work - Underbidding by other workers - Low pay due to paying for connects, commission - When going off the platform: Client doesn't pay for work
Job insecurity		Loosing clients	
<ul style="list-style-type: none"> - Lack of social security and regulation for peer-to-peer workers 	<ul style="list-style-type: none"> - Daily or weekly contracts for temporary agency workers - Permanent or temporary dismissal from platform 	<ul style="list-style-type: none"> - Client stops providing tasks - Losing client when raising price 	<ul style="list-style-type: none"> - Losing clients when leaving Upwork or being deactivated - Losing client when raising price
Safety (physical and material)			
<ul style="list-style-type: none"> - Physical exhaustion from riding a long time - Accidents: bodily injury - Accidents: damage to equipment 			

Source: Own elaboration

4.5.3 Workers shaping a space of control

Food delivery workers engage in platform work in an attempt "to earn some extra income" (BEMF37), but they also find that platforms' operations may constrain their capacity to achieve earnings guaranteeing a living wage. Pay-based control within Deliveroo involves couriers using the 'free login' to increase their income by working whenever it fits their schedule: "I've got 2 hours free now and can just jump on my bike and earn money" (BEMF35). While some

couriers work longer hours to receive as many orders as possible, others prioritise working “weekends, Fridays, Saturdays and Sundays between 6 and 9 pm (when) you always pick up a lot of orders” (BEMF40). Thus, they adapt their work and life schedule to market demand. This is important for them as a way of mitigating assignment unpredictability and income instability resulting from often having to wait a long time before receiving orders.

By contrast, time-based control within Takeaway means couriers plan their shifts themselves, thereby exercising control and enhancing work predictability as “I decide when I am going to work according to my life planning, my appointments, I plan all that.” (BECM05). Couriers with fixed schedules can “work every day from 12-9pm” (BEMF48). Temporary agency workers with daily or weekly contracts can work “the minimum of 6 hours per week” (BECM10) or increase their working hours to secure more income by indicating as much availability as possible, applying for open shifts or contacting management:

“They [couriers] come and say (...) for me that’s really not enough, I need to be able to pay my rent, can I please do 30 hours” (BEMF18).

Under this system, some Takeaway couriers are able to “end the week with 40 hours (...), all paid” (BECM05).

Deliveroo couriers report that “what you earn can fluctuate a lot” (BEMF40), so they sometimes combine their Deliveroo work with other (platform) work. The possibility to ‘multi-app’ allows them to maintain their income at times with little access to orders. Couriers acknowledge that regaining control through ‘multi-apping’ may sometimes delay their deliveries:

“it is technically allowed, but there will undoubtedly be moments where you get two orders at the same time and then you can’t guarantee that the food from both orders will arrive at the customer still warm” (BEMF35).

Moreover, Deliveroo couriers benefit from the possibility to (temporarily) stop working without losing access to the platform: “for example, I didn’t drive for a month and a half because I was finishing my Masters’ thesis” (BEMF37). Conversely, as access to working hours on Takeaway is dependent on their metrics, couriers avoid sanctions (i.e., losing access to work and payment) by closely “sticking to the rules and not wasting time” (BECM10) and making themselves available all the time. By trying to be “one of the fittest and best” (BECM09) couriers, workers strive to improve their metrics to gain a pay raise or to make their job more secure by obtaining a monthly contract. The latter is particularly the case for temporary agency workers, with daily or weekly contracts. Workers also express their ambition “to continue to grow within Takeaway” (BEMF18) by obtaining a promotion to middle-range manager, with the benefits this entails within the platform. In the same vein, self-employed Deliveroo couriers increase their pay by taking advantage of financial incentives inside and outside the platform:

“I work a lot on days when there are bonuses. You get a notification, for example today between these hours you’ll get €1.30 on top.” (BEMF38)

Hourly pay at Takeaway may sometimes be “less than Deliveroo, €10.30, but it’s safe” (BEMF17). Hence, Takeaway couriers take breaks during shifts with few orders (although this rarely happens), thereby enabling them to limit the physical exhaustion resulting from the intensified work pace and long working hours:

“I didn’t get a job for 2 hours, so I went back to my room (...) I ate and chilled and read a book. I got paid for 2 hours without having to work” (BEMF17).

Deliveroo couriers “cycle fast” because “I know that every extra minute it takes, I earn less” (BEMF37). Having experienced that “I earned just €4 because I waited one hour at the restaurant” (BECM08), Deliveroo couriers often cancel orders from restaurants where waiting times are long. This means that they give up getting paid for the assigned order in the hope of receiving an order with a shorter waiting time. Some self-employed couriers accept ‘double orders’ or orders involving a long distance to the client which earn them “two, three or four times more money” (BEMF36) than a short-distance order, even though these orders demand more physical effort due to the longer ride. Deliveroo peer-to-peer couriers with fixed pay rates lack the possibility to make such choices, significantly reducing their possibility to secure higher pay: “It’s annoying that you can’t see the location of the customer anymore” (BEMF40). That is why peer-to-peer couriers sometimes trick the algorithm to protect themselves against the risk of low pay by posts to the app:

“I said that I received my food without getting it so that I could see where I had to go. (...) Then I called the Deliveroo helpdesk and told them that I was going to turn down the order because I saw that I had to go very far (...). I said that I accidentally posted having picked up the food” (BEMF37).

Takeaway couriers shield themselves against drops in their metrics by posting longer waiting times at restaurants or reporting they have arrived at the client’s address somewhat earlier. They also use their personal contacts with middle-range managers to regain control in the case of bad metrics, for example, when “the people at the hub say, you’ve been delayed way too much with the deliveries. Then I can always try to justify myself” (BEMF19) or in case they experience problems with restaurants or clients:

“They’d say ‘be respectful in the restaurants’ and I’d ask ‘will they also be respectful towards us?’ It’s half a joke, half discussion. Then they would said say ‘okay, if you want to talk about it, come inside’” (BEMF48).

Deliveroo couriers “just have to arrive at the clients’ address” (BEMF36) in order to get paid. In the case that clients are not home or don’t open the door couriers use the Deliveroo helpdesk that sometimes “allows you to keep the food yourself (...) certain people would take advantage of that (...) I knew someone who often would say I have a trouble with the delivery (...) that’s how he would get his food” (BEMF16). Others report the delivery of an order by confirming it on their app in order to be paid, even though this may be not true. They achieve

this by communicating with clients when they encounter delivery problems, for instance when the restaurant is closed.

Freelancers use platforms “to look for clients, to do a lot of marketing, to expand my network” (BEMF46). However, they also report that the ability to compete is limited. As Jellow freelancers, for example, report finding only very few clients, they highlight the importance of gaining skills and experience which they can showcase on their Jellow profiles to attract more clients, thereby exerting customer-based control as they stand out from the competition:

“As a freelancer new to the game, you don’t have anything to show. (...) You need to have a portfolio, you need to get customers, so that you have references (...) I make sure that that my profile is always up to date.” (BEMF14)

Likewise, new Upworkers with no ratings on their profile often find no clients for weeks. They, however, persist in their job search and try to access tasks on the platform as a way to gain control, investing significant time and money (by buying ‘connects’) to apply for any kind of job they can find. Upworkers try also to highlight “something making you different from the others” (BEMF15) in their profiles and job applications. For example, they include a customised proposal or “send video proposals, then you get a response because everybody else sends written proposals” (BEMF02). Upworkers can increase their chances of being selected by clients through enhancing their ratings and thereby their position in the platform ranking – which means completing as many tasks as possible on the platform:

“Once you have a certain score, you will see your click-through and conversion rates starting to get much better.” (BEMF02)

Some Upworkers do not register as self-employed and “go directly through the platform and complete tasks” (BEMF41), avoiding the administrative procedures and costs of starting a business. As opposed to Upworkers, Jellow freelancers register on multiple platforms and use other channels such as word to mouth and social media to find clients. Completing “many small projects on several platforms, such as freelancer.be, freelance network (...) also getting many job requests on LinkedIn” (BEMF12) enables them to maintain their income while “not depending on one sole business” (BEMF03), but it also allows to further expand their portfolio, thereby increasing the chances of finding more clients through Jellow. Freelancers also build long-term relationships with clients by offering them an all-inclusive service:

“I want to have more regular clients, so I tell them: “look, I can also do your digital marketing, look for your target group, design your logo, work something out for your social media. (...) These therefore become longer relationships. These customers keep coming back to me” (BEMFPI01).

When a client on Jellow asks for several tasks, this helps the freelancer to reduce the time s/he spends on searching for jobs and to become more selective regarding the tasks s/he accepts:

“I don’t look anymore because I have enough work. But that doesn’t mean that when I see something interesting in my mailbox, I won’t have a look at it.” (BEMF03)

To avoid losing clients and a large share of income, Jellow freelancers make themselves available and accept “last-minute assignments (...) I get up at 5am to start” (BEMF13). They regain some control over their schedule by directly negotiating deadlines with clients without having to invest much time on the platform. Likewise, Upworkers work long and irregular hours to complete many tasks. As their rating improves, workers move to a better position within the platform that allows them to gain more space to decline tasks, thereby regaining some control over their working time: “the clients are contacting me now instead of me contacting the clients” (BEMF15). Faced with strong price-based competition, Upworkers sometimes consent to non-payment to win over clients:

“In your first month you’re literally so desperate to please everyone that you’ll bend over backwards, you’ll do stuff for free. A lot of clients ask you to do samples and test work for free.” (BECM01)

Upworkers charge “way below the normal price” for their first tasks and “dare to raise my price” (BEMF01) and to negotiate prices with clients once their ratings improve. Upworkers who do not declare their income from platform work can lower their prices as they avoid paying taxes. To avoid paying the platform’s commission, some Upworkers quit the platform, offering clients a price lower than on the platform but still higher than what they would have earned after paying the commission. Although on Jellow “clients often search for the cheapest and fastest freelancer” (BEMF03), freelancers tend “work for the same rate” (BEMF03) as for off-platform clients. Freelancers with high-quality profiles can negotiate pay rates directly with clients without jeopardising their position on the platform, even if inactive on Jellow for a prolonged period. Those with weaker profiles can lower their prices to please recurrent clients: “I often say: ‘I can give you a discount of 10%, because it’s such a big assignment.’”(BEMF13). Upworkers read client reviews to learn something about a client before accepting a task to reduce the risk of low (or no) pay. They also use the platform’s escrow payment system to avoid clients scamming them, which they report as a reason for staying on the platform:

“I do like the platform very much, because (...) I have the peace of mind that clients are going to pay me. So, I wouldn’t leave the platform at all.” (BECM02)

Working outside Upwork may imply a lower ranking or deactivation, therefore some Upworkers leave the platform only after having established a relationship of trust with clients. Others boost their rating score by going off the platform “with first-time customers (...) And then I see how that collaboration goes. If they’re decent people and keep their word, then I agree to continuing via the platform. Because I know they’re going to give me a fair rating” (BEMF02). Jellow freelancers try to avoid scams and non-payment by meeting clients face-to-face: “I find it important to meet that person, because you get a look at how that person thinks and who he is” (BEMFPI01) (see Table 4.4).

Table 4.4 Workers' consent within food delivery and freelancing

Social space Food delivery couriers try to overcome risks by:		Market space Freelancers try to overcome risks by:	
Pay-based control	Time-based control	Customer-based control	Task-based control
Deliveroo	Takeaway	Jellow	Upwork
Accessing as many orders as possible: prolonging working day, working at 'peak hours'	Accessing as many working hours as possible: inserting many availabilities (temporary agency workers without fixed schedule), accessing 'open shifts'	Accessing multiple tasks from the same client: Building long-term relationships with client(s)	Assessing as many tasks as possible on Upwork, including small tasks, underpaid tasks, tasks outside own profession Possibility to access tasks without registering self-employed activity
Combining Deliveroo with different (platform) work	Being available for Takeaway	'Passive' use of Jellow next to other platforms: waiting to be matched	Very 'active' use of Upwork: job applications, completing jobs, purchasing 'connects' or paid account
Self-employed couriers: Working at moments when bonuses are paid	Improving or maintaining performance statistics, aiming for pay raise, promotion or better contract (temporary agency workers)	Self-promotion through Jellow, other platforms, LinkedIn, own website Charging same price as off the platform	Improving rating score Lowering or raising price based on rating Lowering price by not registering as self-employed and avoiding to pay taxes on income
Delivering orders quickly: Riding quickly, purchasing a scooter or an electric bike	Slowing down work rhythm, taking brakes	Working hard for Jellow clients Jellow profile as long-term investment in job opportunities	Applying as quickly as possible, completing many tasks on short notice Using billing tools to secure pay
Accepting orders depending on waiting time at restaurants Self-employed couriers: accepting orders depending on distance to client, 'double order' or not	Delivering all orders assigned by the algorithm	Workers with strong profiles: only accepting few 'interesting' tasks	Accepting any task at first, becoming more selective as rating improves
Tricking the algorithm: falsely reporting problems, food pickup (peer-to-peer couriers) or delivery	Tricking the algorithm: manipulating statistics	//	Tricking the algorithm: boosting rating, going off the platform
Communicating with platform support, clients and restaurants	Communicating and negotiating with middle range managers online and face-to-face	Communicating and negotiating directly with clients, online or face-to-face	Rating clients, looking at client reviews Communicating and negotiating with clients through Upwork

Source: Own elaboration

4.6 Discussion and Conclusion

Our study offers a novel cross-sectoral comparison of the control and consent regime dynamics of labour platforms by using LPT as the theoretical lens. It explores how these regime dynamics unfold via the rules implemented by the platforms to govern labour, and how and to what extent workers use these rules to their own advantage by shaping the dynamics underpinning them, and thereby regaining control over the conduct of their work through creating spaces of control.

Workers have to operate within the constraints of rules set by those who own and control resources. As Ackroyd and Thompson argued, "behaviour in work organisation is directed and controlled in a manner not found elsewhere" (1999: 28). Work is usually supervised through disciplinary mechanisms designed to make workers sufficiently compliant with the rules set to organise production. Even where there "seem to be no specific duties attached to a job, workers are constrained to accept and work within definitions of appropriate conduct" (*Ibidem*: 29). However, the authors understand organisational behaviour not simply as the result of the control and direction imposed on workers. A more appealing argument is put forward, stating that, at the same time as workers are interpreting and adapting these rules, they are also bending them through "orienting their conduct to a conception of informal norms" (*Ibidem*: 29). Although there are a plethora of studies examining the disciplining mechanisms used by labour platforms to direct and govern labour, very few studies to date have combined this perspective with an examination of worker responses within the platform economy.

Our encompassing view of the dynamics of control and consent enhances the study of the platform economy by embracing the dimension of the organisation of consent in relation to the responses that workers develop – and the space of control they attempt to gain - towards the platform's use of systems of governance and control. Here, labour governance signals the combination of the capital and labour relationships within the wider political realm, including both the labour process and the regulatory institutional context. Research reveals that institutions can influence accumulation dynamics in labour process by providing the social conditions within a distinctive market economy (Pulignano et al., 2022b). In so doing, the regime dynamics here define the societal framework which politically positions labour at the heart of the questions about how we understand and approach the platform economy.

The four cases (i.e., Deliveroo, Takeaway, Jellow and Upwork) illustrate how workers' attempt to gain a space of control (i.e., 'social' or 'market') for the organisation of consent unfolds from different platform logics to organise work. Workers in Takeaway and Upwork build a space by having to adhere to an organisational logic which reckons an internal labour market structure in how workers build up a track record as a condition to access paid work. Conversely, Deliveroo and Jellow follow a transactional logic in accordance to which workers

build a space by moving in and out the platform (and the wider labour market) in the attempt to top up pay (Deliveroo) or to build up a clientele (Jellow). This diversity entails differences in the kind of 'games' occurring across the different four platform cases as the former reflects a variety of – often contradictory – conditions underpinning workers' attempts to generate a space of control in each platform (see Table 4.4). For example, workers in Takeaway get control over time (i.e., 'time-based control') due to that the internal labour market organizational logic fosters competition over time as workers need to get enough hours in spite of them being potentially insulated from competition (e.g., Takeaway workers do not have to snap up orders). Inversely, workers on Deliveroo build control over pay (i.e., 'pay-based control') because the transactional logic does not shelter them from competition over pay as workers often report difficulties to access paid work in spite of the freedom to access the platform (e.g., Deliveroo workers can log in via app whenever they decide). Furthermore, freelancers on Upwork organise consent around the platform rating system which incentivizes them to access as many tasks as possible within the platform instead of in the wider market (i.e., 'task-based control'). This is different in Jellow where self-employed freelancers can take advantage of the transactional organisational logic of the platform which allows them to compete for tasks inside and outside of platforms. However, freelancers on Jellow attempt to regain control as the platform restrains their capacity to reach out good customers (i.e., 'customer-based control'). Findings also point to important differences in the 'spaces' created by food-delivery couriers and freelancers. Online self-employed freelancers shape a 'market' space of control by retaining the capacity to compete in an independent and entrepreneurial manner against the behaviour of a platform exposing them to low pay or no pay at all by limiting them either to freely accessing tasks - also outside the platform (Upwork) - or to reach out to a few good clients (Jellow). Conversely, food delivery couriers shape a 'social' space of control by creating protective conditions through either ensuring sufficient orders and income (Deliveroo) or gaining access to a decent number of working hours (Takeaway).

By understanding and locating different modes by which workers shape spaces of control, thereby organise consent while responding to the platforms' strategies of labour governance within a distinctive regulatory setting, our analysis allows "to defetishize exploitation as a first step for building relationships of commonality between workers who are, seemingly, often disparate" (Baglioni et al., 2022: 2), as the case of workers providing their services within the global platform economy clearly illustrates. In so doing, regime dynamics of control and consent analysis exposes the multiple threats linking different workers' struggles both within (and across) different models of digital production and across (and within) different platforms. This is because labour platforms' rules and practices – as is the case with traditional employing organisations – eventually weaken the ability of workers to gain control over the conditions of their work (Grimshaw et al., 2017).

Hence, our study contributes to labour process analyses in the platform economy by applying a micro-level perspective focusing on the rules and practices of platforms as the key antecedents of the nature of the different identified 'spaces' of control. As such, our study shows that dynamics of control and consent unfold from the 'dialectic' produced by the rules used by platforms to govern labour and how the 'self-organisation' of workers (Ackroyd & Thompson, 1999) allows them to gain control over these rules, across (and within) different types of platforms. By basing the study on platforms in different sectors (i.e., on-location food delivery and online freelancing) in Belgium, we shed light on the different rules, such as rewards, sanctions and the use of contractual statuses used by different types of platforms to organise and govern labour. We also show how these rules create both constraints and opportunities for workers to shape the form and content of their work, something we refer to as the space of control – i.e., social and market aimed at sheltering workers – at the basis of any understanding of the organisation of consent within the platform economy.

Previous studies on the platform economy have referred to 'algorithmic management' (Woodcock & Graham, 2020) as the way in which platforms exert control by organising work in a way shifting risks to the workforce. Our study adds to this literature by showing how the different organisational logic of the platform (i.e. internal labour market logic and transactional logic) and its underpinning rules frame the spaces of control, while at the same time revealing that these spaces are not solely prescribed by the platforms organisational logic but they also include how workers organise consent through ensuring the space to regain control over their work conditions. Therefore, we point to the 'space of control' underlying workers' struggles resulting from the dynamics of control from which the 'regimes' (i.e. 'pay-based control', 'time-based control', 'customer-based control', 'task-based control') unfold. In line with traditional theory on autonomy, control and skills, we argue that each space reflects the skills of a (self-employed) workforce providing services within a distinct type of platform (i.e., on-location versus online). We find that food delivery couriers, requiring few skills and classified by the platform as (student) self-employed, peer-to-peer or (temporary) employee, exert control by protecting themselves from the risk of income instability, assignment unpredictability, job insecurity and a lack of physical and material safety which are likely to occur under the diverse rules imposed by food delivery platforms. These rules aim at improving delivery productivity by embracing the classification of couriers as self-employed or temporary agency workers. On the other hand, skilled self-employed freelancers within online platforms exert control by enhancing the space for selling their services as self-employed entrepreneurs. Competition both inside and outside the platform usually indicates how skilled freelancers reduce the risk of not finding clients, of receiving low pay or no pay at all or of losing clients. In other words, skilled freelancers aim at increasing the number of trustworthy clients to whom they can sell their services, both inside and outside the platform. They therefore organise consent by expanding the space for controlling the market competition vis-à-vis the rules of the platform, a process

that conversely tends to restrict their independence as 'real' freelancers. This is particularly the case with Upwork where freelancers' possibilities to access work and high(er) pay are restricted by the platform's rating system within an organisational logic which reckon an internal labour market.

Our findings also raise important implications for those considering platform work as an emerging – and additional – form of insecure and precarious work (Kalleberg & Vallas, 2018), with digital platforms shifting risks to workers by rejecting the traditional employer responsibilities of protecting their employees. Here our study uncovers the mechanisms generating these risks, as they originate from the rules dictated by platforms and leveraging contractual status. It also shows that these risks are not the same, revealing the extent to which skills are important to understanding how workers and freelancers attempt to overcome, circumvent or bend the rules, thereby regaining control. Hence, we claim that core contradictions are revealed in the way in which platforms – within each 'space' – function as potential transmission mechanisms for workers' action. We reveal how platforms shape the interests of different players by examining how platform workers regain control (i.e. shape the space for control) over performing their work. This also helps identify gaps in existing regulatory settings applying to platform work (e.g. protection, possibilities to compete).

Despite our spotlight on the practices of platform workers, the question of whether the platform economy has distinctive features or whether it has more continuities with the past (see Edwards & Hodder, 2022) remains only partly answered. Future research should investigate whether the platforms' rules and practices are fairly new or merely represent the digitalisation of existing ones. As Lomax (2017) points out in his inside view of the translation sector, a platform like Jellow can also be considered as the digitalised version of a traditional secretary-run translation agency. Thus, further research is needed which requires a different macro-level and transversal approach aimed at providing a much more extensive longitudinal view on the phenomenon. Another aspect which may need further investigation is whether and how labour market experiences of digital workplaces shape the organisation of consent (for call centres, see Sallaz, 2015). Our research reveals the importance of skills shaping the organisation of consent across different digital workplaces in one country; however, more cross-national research is needed to determine whether and how different labour market experiences may (and how) matter.

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5. Workers' contentions over unpaid labour time in food delivery and domestic work platforms in Belgium

This chapter is based on: Franke, M., Pulignano, V., & Marà, C. (2023). Workers' contentions over unpaid labour time in food delivery and domestic work platforms in Belgium. *Work in the Global Economy*, 3(1), 6-30.⁴

Abstract

This article examines how platform workers providing food delivery and domestic services in Belgium engage in contentions over unpaid labour time. Drawing on theories of organisational misbehaviour around the 'wage-effort' bargain, we explore how workers reclaim some control over their income by contesting their exposure to unpaid labour time. Based on a qualitative analysis of two labour platforms, the article illustrates how platforms' systems of time control expose workers to unpaid labour time through work extensification (that is, food delivery) and work intensification (that is, domestic work). It also indicates how workers contest platforms' control over unpaid labour time by developing various practices around platforms' systems of control. Food delivery couriers increase their income by cutting down on unpaid idle time, while domestic workers try to improve their access to clients, jobs and pay which sometimes implies to intentionally prolong their unpaid labour time. Thus, we argue that examining workers' contentions over unpaid labour time contributes to a better understanding of how workers can develop a sense of agency in a context of exploitative platform work by actively navigating and purposefully using their exposure to unpaid labour time to regain control over their income.

Key words

platform work; unpaid labour; working time; control

⁴ Part of the research was also published in: Franke, M., & Pulignano, V. (2023). Workers' experiences of unpaid platform labour as intentional action. *Friedrich-Ebert-Stiftung - Trajectories of Platform Capitalism and Platform Work*. Berlin: PhD Summer School 2022. Available at: <https://library.fes.de/pdf-files/bueros/bruessel/20792.pdf>

5.1 Introduction

Workers' capacity to contest platforms – here defined as digital intermediaries for the exchange of paid labour between clients and individual service-providing workers (Graham et al., 2020) – remains a highly debated subject in current research on platform work. Platform workers are often classified as independent and autonomous self-employed contractors (Josserand & Kaine, 2019; Shapiro, 2018). At the same time, however, platforms exert control on working time by organising work based on shift systems (Heiland, 2022) or by deploying algorithms to track, evaluate and sanction worker behaviour (Kellogg, et al., 2020; Rosenblat & Stark, 2016). Heiland (2022) argues that working time regimes in food delivery labour are “an organisational form of control” because they serve “not only the efficient allocation of labour, but also the temporal control of the labour process” (*ibidem*: 1825). Importantly, there is an agreement in the literature that unpaid labour time, which is time spent on productive but unremunerated activities that contribute to accessing and/or completing platform tasks (Pulignano et al., 2022) is part and parcel of platform work in different sectors of the platform economy (Pulignano & Marà, 2021; Pulignano et al., 2021). Platforms expose workers to unpaid labour time by paying workers by the task and inducing them to conduct unpaid activities in order to build an on-platform reputation that facilitates access to paid work (Moore & Newsome, 2018; Pulignano et al., 2022). Thus, platforms undermine the traditional ‘wage-effort bargain’ as they refrain from compensating the risk of unpaid labour time workers bear by divesting themselves of responsibilities to provide security through the wage relation (Pulignano & Morgan, 2022). Whereas it is well known that platforms organise work in such a way that portions of labour time are unpaid, less knowledge exists on how workers in diverse sectors of the platform economy deal with and make sense of their exposure to unpaid labour time. Hence, we ask: how do workers engage in a contention over unpaid labour time in food delivery and domestic platform work?

Broadly speaking, contentions over working time are conceptualised as a dimension of ‘organisational misbehaviour’, which indicates a constant disagreement over the “appropriation of time spent on work” between employers and workers (Ackroyd & Thompson, 2022: 30). This contention is characterized by a wide array of practices which consist of compliant as well as non-compliant worker behaviour. These practices are understood as secondary adjustments of the ‘wage-effort bargain’ as they define customary levels of work effort required in exchange for wages, which is continuously contested due to internal conflicts of interest at the workplace (Ackroyd & Thompson, 2022; Thompson, 1989). Research on the platform economy has widely mapped workers' expressions of agency and oppositional behaviour with regard to working conditions (e.g. Sun & Chen, 2021; Tassinari & Maccarrone, 2020; Wood et al., 2018b; Wood & Lehdonvirta, 2021a). Studies have illustrated that platform workers do not passively undergo the rules imposed by platforms but try to regain control over

their work and time by developing (non-)compliant practices around those rules (Anwar & Graham, 2020; Pulignano & Franke, 2022). In so doing, workers challenge platforms' organisational arrangements by actively negotiating contradictions between 'independent' (i.e. self-employed) work and experiences of dependency and control by the platform (Reid-Musson et al., 2020).

This article deals with contentions over unpaid labour time in food delivery and domestic work platforms in Belgium. We show how platform workers navigate the exposure to unpaid labour time by developing practices in order to 're-appropriate' (i.e. reclaim control over) time, thereby manipulating the wage-work exchange through misbehaviour. Thus, we explain how misbehaviour stems from workers consciously and purposefully using and limiting their unpaid labour time by regaining a sense of control over their work and income. Importantly, we consider the diversity of platform organisations (Azzellini et al., 2022; Schor et al., 2020) and examine the different forms workers' contentions take within these organisations. Our findings indicate that platforms differently blur the boundaries between dependency and autonomy typical of traditional forms of dependent employment and self-employment, which shapes workers' contentions over unpaid labour time.

In particular, our study focuses on two on-location platforms that organise work in fundamentally different ways. The selected food delivery platform (i.e., *Deliveroo*) sets pay and digitally tracks and specifies the work process, while the domestic work platform (i.e., *Ring Twice*) allows workers to set their pay but regulates access to work through a rating system and by limiting worker-client interactions outside the platform. Findings reveal that workers on both platforms engage in contentions over unpaid labour time by navigating their exposure, aiming to maximize their income. As we illustrate, food delivery and domestic workers develop different practices around platforms' control systems. These practices consist of contesting the extensification (food delivery) and intensification (domestic work) of their work by engaging with unpaid labour time to create some space for agency. Thus, our central argument is that experiences of exploitation in platform work intersect with those of empowerment, with workers carving out possibilities to recover some control over their income.

The article proceeds with a review of the literature on working time control, unpaid labour time and worker contentions in platform work. This is followed by a presentation of the research context and methodology and of the main findings. The discussion and conclusion critically reflects on the main contributions of the research and considers potential limitations and issues for further research.

5.2 Working time control in digital labour platforms

Working time control is a key dimension of the wage-effort bargain which is subject to disagreement and potential dispute between workers and employers (Thompson, 1989;

Thompson & Smith, 2009). It is an organisational instrument employers use to manage the 'double indeterminacy' of labour power (Heiland, 2022) as workers can limit the work effort invested in exchange for wages (effort power) and leave to sell their labour power to another employer (mobility power) (Smith, 2006).

In the platform economy, working time control plays out in a different way. Platforms reduce labour indeterminacy by circumventing the regulation surrounding the employment contract and shifting demand-related risks to 'independent' workers, matching them with clients (Barratt et al., 2020; Woodcock & Graham, 2020). Several platforms compensate workers on a piece-rate basis, which enables them to exclude 'unproductive' labour time from payment (Moore & Newsome, 2018). However, indeterminacy continues to pose a challenge to platforms. In particular, platform workers have a high degree of mobility power as they can register on multiple platforms and shift their activity from one to the other (Gerber & Krzywdzinski, 2019). Platforms' organisational models rely on intermediating and coordinating between spatially distributed users and workers, hence regulating labour supply (Drahokoupil, 2021; Franke & Pulignano, 2021; Heiland, 2021). Platforms implement working time regimes that have both a controlling and a coordinating effect, enabling the efficient allocation and reliable use of their workforce (Heiland, 2022). Platforms can therefore be considered as organisations that adopt an active role in structuring the labour process and limiting the freedom of movement of workers (Gerber & Krzywdzinski, 2019).

Research on platform work and working time points to labour platforms providing some flexibility for workers to choose when and how much to work, while at the same time imposing structural constraints on workers' time use (Holtum et al., 2022; Shevchuk et al., 2021; Wood et al., 2018a). Platforms may devolve decisions around schedules and working hours to workers, while still exerting control over time by regulating other aspects such as pay and pricing (Joyce, 2020; Vallas & Schor, 2020). For example, Uber's technique of 'surge pricing' incentivizes drivers to work at times when client demand is highest through financial nudges (Rosenblat & Stark, 2016). As platform workers often face high levels of job insecurity, they encounter pressures to extend their working day as they constantly need to look for work and be available for clients to access sufficient income (Berg et al., 2018; Walker et al., 2021; Wood et al., 2018a). Moreover, algorithmic controls such as performance evaluations steer workers' time use. These can contribute to the intensification of work by stipulating targets around work pace and performance (Rosenblat, 2018) and by creating motivation and commitment through a process of gamification (Krzywdzinski & Gerber, 2021). Within piece-rate payment labour platforms, additional time spent on work is not compensated by income and hence remains unpaid (Pulignano et al., 2021). Platforms reconfigure the wage-effort bargain by limiting workers' access to income and social protections (Moore & Newsome, 2018). This requires workers to engage in significant unpaid 'work-for-labour' (Wood et al., 2019). Hence, our analysis starts from an in-depth account of the ways in which platform systems of time

control relate to workers' exposure to unpaid labour time by both 'work extensification', which refers to an increase in the hours of work required in a job, and 'work intensification', which indicates the increased work effort or work pace (Green, 2001).

How and to what extent working time is controlled can be expected to differ between platforms. Some platforms enforce tight controls on work pace and schedules, while others leave more discretion to workers (Griesbach et al., 2019). Hence, this article provides an in-depth account of time control and unpaid labour time in two platforms in diverse sectors such as food delivery and domestic work. Working time control in food delivery work has been addressed in other studies, pointing to digital tracking, financial incentives and precise instructions by platforms as forms of control that enable 'just-in-time' intermediation between workers, clients and restaurants (Franke & Pulignano, 2021; Galière, 2020; Heiland, 2021; Veen et al., 2019). Much less is known about working time control in domestic platform work, which is more complex and cannot be directly monitored and specified. Yet, domestic work platforms might implement rating systems making access to clients and income conditional on workers' rating score (Pulignano et al., 2023; Ticona & Mateescu, 2018). Analysing how these different systems of control impact on workers' possibilities to navigate their exposure to unpaid labour time is key in our empirical investigation of labour platforms in Belgium.

5.3 Unpaid labour time and workers' contentions within digital labour platforms

Recent studies on platform work have revealed that workers spend a significant share of their time on labour platforms without receiving any financial compensation for it, for example when waiting and applying for work, building online profiles, or interacting with clients (Pulignano & Marà, 2021; Pulignano et al., 2022). Scholars point to processes of labour commodification and 'algorithmic insecurity' as underlying unpaid labour within paid platform employment (Wood et al., 2019, Wood & Lehdonvirta, 2021b), rendering unpaid labour a precondition for accessing income in contexts of precarious platform work (Pulignano & Morgan, 2022). Studies indicate that platforms' systems of time control contribute to workers' exposure to unpaid labour time. Both how platforms allocate tasks (Shevchuk et al., 2021) and how they manage and monitor worker performance (Pulignano et al., 2022) have been identified as drivers of unpaid labour.

Workers can strive to improve their material conditions in the platform economy (Barratt et al., 2020), including unpaid labour. Workers approach platforms with a view to making an income (Dunn, 2020) and consciously trade off the benefits and costs of their time investment in platform work (Maffie, 2022; Weber et al., 2021). As they often lack social protection and are only paid for completed work, platform workers' contentions over the wage-effort bargain are likely to differ from those of workers in traditional contexts who can be absent from work as a way to limit work effort during their paid hours (Harrison & Martocchio, 1998; Paulsen, 2011).

Therefore, we ask what practices platform workers develop to gain control over their lost income from being subject to unpaid labour time.

To answer this question, we draw on Ackroyd and Thompson's (2022) concept of 'organisational misbehaviour'. The concept indicates a "contention and struggle over a small number of overlapping material and symbolic resources" (*Ibidem*: xix) that arises from conflicts of interests between the major groups of agents at the workplace. It involves smaller-scale oppositional behaviour by workers that is aimed at actively manipulating the wage-effort bargain by adapting, interpreting and challenging the rules imposed within an organisation. We focus on the "appropriation of the time spent on work" (*Ibidem*: 30) as a key dimension of organisational misbehaviour. This signals the active non-cooperation by workers who contest the amount of time spent on work, giving rise to a continual struggle to appropriate and re-appropriate time as a relevant material resource.

Reid-Musson et al. (2020) illustrate the usefulness of studying misbehaviour in self-employed platform work as a tool to bring to light workers' struggles over their lack of control and autonomy. In this article, we examine contentions over unpaid labour time that are crucial to explain how workers might lose (Pulignano & Morgan, 2022) or regain control over their work and income when providing their services through platforms. Contentions over unpaid labour time entail an element of challenge to platforms' way of work organisation (Richards, 2008) as they enable workers to reclaim control over their income and to ameliorate the unpaid elements of the wage-effort bargain. Thus the focus of our analysis is on the "dynamics of control and resistance" at the "micro level" of the workplace where workers defy platform controls (Ackroyd & Thompson, 2022: 22). We illustrate that misbehaviour "is not just about rule braking but also about rule making" (Barnes & Taska, 2012: xvi) as platform workers actively make sense of and establish their own practices around unpaid labour time. This involves managing the tension between 'independent' (i.e. self-employed) platform work and control and exploitation by actively defining limits to and/or using unpaid labour time to their own advantage.

The (non-)compliant practices that workers develop as part of this contention likely differ according to platforms' organisational arrangements. While some platforms stringently regulate working time, others leave more discretion for workers to choose their hours and schedules (Griesbach et al., 2019). Depending on the rules adopted by platforms, food delivery and ride-hailing workers may use the possibility to refuse work (Galière, 2020) or to (temporarily) exit the platform to find other sources of income (Maffie, 2022). Anwar and Graham (2020) illustrate that remote platform workers can earn and sustain their livelihoods by developing everyday 'resilience', 'reworking' and 'resistance' practices (after Katz, 2004), such as filtering jobs, leaving negative feedback for clients and negotiating working hours and pay with clients. Moreover, depending on the nature of the different rating and 'matching' systems adopted by platforms, workers may devise practices such as everyday interactions

with customers to adapt platform rules to their own advantage (Cameron & Rahman, 2021b). Hence, we examine how platform workers actively carve out 'spaces of control' (Pulignano & Franke, 2022) to navigate their exposure to unpaid labour time. We argue that this helps workers to make sense of their exposure to unpaid labour time, as their experiences of exploitation by platforms blend with experiences of empowerment and agency gained when consciously developing practices around platform rules. Studying these practices in food delivery and domestic platform work is at the heart of our empirical analysis.

5.4 Research context: on-location platform work in Belgium

While the size of the platform economy in Belgium remains relatively small in comparison to other European countries, the number of on-location platforms has significantly increased over the past few years (FOD Financiën, 2022). On-location labour platforms in Belgium are present in a broad range of sectors, with transportation, food-related and household services being the most popular ones (EC Flash Eurobarometer, 2018). Food delivery platforms expanded their business and workforce in the aftermath of the Covid-19 pandemic. For example, Deliveroo doubled its turnover in 2020 and expanded its workforce from 2.500 to 3.000 couriers (Cardinaels, 2021). The domestic work platform Ring Twice grew from 6.000 service providers and 10.000 users in 2018 to 36.000 service providers and 40.000 users in 2021 (Ring Twice, 2022). The growth of the Belgian platform economy has been fuelled by deregulatory measures aiming to stimulate employment. Most notably, the 2016 'De Croo' Law allowed officially registered platforms such as Deliveroo and Ring Twice to hire workers under the so-called 'peer-to-peer status', exempting individuals providing services to clients from tax and social contributions for earnings up to €6.340/year between 2018-2020. Since 2021, a 10,7 percent tax rate applies because the Belgian Constitutional Court overturned the tax-free scheme (Franke & Pulignano, 2021), while still maintaining the exemption from social contribution payments, thereby depriving workers of any access to social protection. The existence of a separate status for platform workers is a specific feature of the Belgian labour market. This status has been used by platforms to rapidly expand their workforce, while externalising tax and social security costs and circumventing the encompassing system of collective bargaining and social protection present in Belgium (Pulignano & Van Lancker, 2021). Moreover, whereas court cases in countries such as the Netherlands and the United Kingdom have established, for instance, that Uber drivers are to be seen as employees, platforms in Belgium also retain the possibility to hire workers as self-employed contractors. In addition, Belgium offers a 'student self-employed' status, allowing students aged between 18 and 25 to earn up to €7.000/year from self-employed work without paying taxes or social contributions. Thus the Belgian system has so far encouraged a two-tier platform workforce consisting of self-employed and peer-to-peer contracted workers facing different conditions regarding social rights and the amount of

income earned from platform work. A similar division of the platform workforce can be found in Italy, where platform workers can opt for traditional self-employment or, in case of earnings below around €6.000/year, for 'occasional work contracts' that resemble the peer-to-peer status with regard to the lower tax wedge and social contribution exemptions (Marà & Pulignano, 2022). In February 2022, the Belgian government introduced a 'new labour deal' that establishes a legal presumption of employment for platform workers as of 1 January 2023 and obliges platforms to provide accident insurance to self-employed, but not to peer-to-peer and student self-employed workers. For the majority of workers, platform work is occasional and supplements other earnings, although a small percentage relies on platform work as their main source of income (Drahokoupil & Piasna, 2019).

5.5 Research design and methodology

A qualitative case-study research design (Eisenhardt & Graebner, 2007) of two labour platforms in Belgium was chosen to gain insights into similarities and differences in contentions over unpaid labour time within and across platforms. Aiming to create variation regarding the experiences and forms of unpaid labour time, we selected platforms featuring different occupations (Pulignano & Marà, 2021) and skill-level related to the complexity of the work (Vallas, 2019). The two selected platforms organise work in radically different ways. First, we selected the *food delivery platform Deliveroo* that hires couriers under the self-employed, student self-employed and peer-to-peer statuses, with the majority being peer-to-peer and around 20% self-employed couriers, according to the platform management. Deliveroo sets couriers' pay and pays couriers only after the order has been successfully delivered to the client. Self-employed couriers receive a distance-based fee, while peer-to-peer couriers earn a fixed fee per order⁵. While previously using a shift-booking system to which couriers would get prioritized or delayed access depending on their performance statistics, Deliveroo switched to a 'free login system' in 2020, allowing all couriers to log in to their apps whenever they want and to access orders when these are placed by clients. To ensure efficient deliveries, Deliveroo coordinates services between clients, restaurants and couriers according to a 'just-in time' system. To this end, the platform deploys an algorithm assigning orders to couriers based on their location and expected pickup times at restaurants. Couriers are tracked during the entire delivery process and receive precise instructions around food pickup and delivery. The second platform selected is the *domestic work platform Ring Twice*, which provides diverse services such as babysitting, gardening, house repairs, IT-services and many others. Ring Twice

⁵ Deliveroo deploys differently structured fees for peer-to-peer couriers because the Belgian tax authorities challenged the platforms' use of peer-to-peer contracts. By fixing the fees and showing that clients can know upfront how much they will pay for the delivery, Deliveroo was able to justify the continued use of the peer-to-peer status.

workers are mostly peer-to-peer (around 80%, according to management) or self-employed (20%) and access work by applying to job posts on the platform. Workers set their pay themselves when applying for a job, they can propose either an hourly rate or a fixed rate, and then bill additional costs (such as costs for tools and materials) to the client. Clients are asked to deposit the payment on the platform, which only releases the payment upon completion of the job and confirmation by both the client and the worker. The platform charges a monthly subscription fee from clients as well as a 3-5% commission on workers' total earnings. Ring Twice leaves workers and clients to arrange the methods and process of work for themselves. To ensure that service provision is reliable and of high quality, Ring Twice ranks workers according to 'experience levels'. These levels are determined based on client ratings (1-5 stars and written comments), identity verification, number of recurrent clients, jobs completed and seniority on the platform. Highly ranked workers are rewarded by reducing the commission charged on their earnings (from 5% to 4% or 3%). The platform also calculates a 'realisation percentage' that measures the proportion of workers' accomplished relative to accepted jobs.

We conducted 23 qualitative narrative interviews with platform workers and three semi-structured interviews with platform managers between spring 2020 and autumn 2021. To gain a comprehensive insight into platforms' organisational arrangements, the interviews were complemented with desk research (platform websites in particular). Conducting narrative interviews allowed us to capture workers' experiences of unpaid labour time throughout their platform career – including both the actions they undertake and the meanings they attribute to them – and to relate these experiences to the way in which platforms organise control over workers' time. We used a purposeful sampling strategy, diversifying respondents regarding gender, age, employment status and the extent to which they relied on other sources of income. The majority of respondents are peer-to-peer workers and male, although we also interviewed five female workers in both food delivery (1) and domestic work (4). Food delivery couriers are between 18 and 43 years old, with most of them being in their 20ies, whereas domestic workers are between 35 and 75 years old. This reflects the composition of the selected platforms' workforce in terms of contractual arrangements as well as the socio-demographic characteristics of the food delivery platform workforce in Belgium that mostly consists of young male workers (Drahokoupil & Piasna, 2019). Little is known about the socio-demographic characteristics of domestic platform workers, although Ring Twice workers report in their interviews that professions such as repairing and gardening are largely male-dominated whereas women are more present in professions such as babysitting. A detailed overview of the respondents can be found in table 5.1 The aim of our sampling strategy was not to be statistically representative, but to generate as many insights as possible with regard to the key concepts in our research question, which we examined in our data analysis.

Table 5.1 Overview respondents

Platform	Pseudonym respondent	Occupation on platform	Gender	Age	Employment status	Other (platform) work and income
Deliveroo	Mehdi	Food delivery	Male	29	Peer-to-peer worker (hereafter PtP)	Other food delivery and ride-hailing platform work, work through a temporary employment agency
	Aaleks		Male	20	PtP	Other food delivery platform work, financial support from parents
	Hans		Male	23	PtP	Financial support from parents
	Bashar		Male	43	Self-employed (hereafter SE)	Other job as full-time employee
	Senne		Male	26	PtP	Financial support from parents
	Brenda		Female	23	Student SE	Other student job
	Dieter		Male	18	Student SE	Financial support from parents
	Max		Male	22	PtP	Financial support from parents
	Deliveroo management interview					
Ring Twice	Andreas	Gardening, repair and installation work	Male	48	PtP	Other job as full-time employee
	Thomas	Baking, event planning	Male	43	PtP	Other job as full-time employee, recently unemployed
	Michael	Repair work	Male	64	PtP	Receives pension
	Gary	Cleaning, gardening, repair and moving work	Male	35	PtP	Receives unemployment benefit
	Moussa	Electro-mechanical and repair work	Male	39	PtP	Other job as full-time employee
	Jeff	IT work	Male	36	SE	Other job as a teacher, running own IT enterprise
	Marie	Hairdressing, make-up	Female	55	PtP	Other job as full-time employee
	Roberto	Repair work, cooking, tutoring	Male	74	PtP	Receives pension, other jobs on the side
	Erwin	Renovation, construction	Male	62	PtP	Receives pension, other jobs on the side
	Eric	Electro-mechanical	Male	60s	PtP	Receives pension

		and repair work				
Eva		Babysitting, pet sitting, ride-hailing, translation, IT & copy-editing work	Female	47	PtP	Other job as full-time employee, other platform work
Gaby		Babysitting, ironing	Female	75	PtP	Receives pension, other platform work
Arthur		Gardening	Male	38	PtP	Other job as full-time employee, receives temporary unemployment benefit
Kris		Installation and repair work	Male	54	SE	Other job as employee, self-employed IT-worker
Nele		Translation, care work	Female	59	PtP	Receives unemployment benefit, other platform work
Ring Twice management interview 1						
Ring Twice management interview 2						

5.6 Data analysis

The data was analysed and encoded following the Gioia method (Gioia et al., 2012), which we combined with an abductive approach, moving iteratively between data and extant theory (Blaikie, 2007). We started from the broad question about how and why platform workers engage in unpaid labour time, informing the 1st-order analysis that consisted of coding forms of unpaid labour time (e.g. 'additional unpaid tasks', 'waiting time'), the reasons workers stated for engaging or not engaging in unpaid labour time (e.g. 'limited number of tasks', 'needing income', 'getting a good rating', 'retrieving information on tasks or clients') and how they describe their unpaid labour time (e.g. 'as an investment', as 'lost time'). We then considered the array of informant-centred codes, asking ourselves whether they suggested emerging themes that might help us describe and explain unpaid labour time. We found differences between food delivery work where workers expressed a strong aversion against unpaid labour time and mostly sought to reduce their exposure by cutting down on idle time; and domestic work where workers sometimes intentionally engaged in unpaid activities to improve their position on the platform. Unpaid labour time is understood as stemming from platforms' interests towards the efficient allocation of work, including specifically the control over working time (cf. Heiner, 2022). We analysed both worker and management interviews to get a deeper understanding of these working time control systems in food delivery and domestic work. We clustered the reasons mentioned by workers to try to limit or engage in unpaid labour time into the 2nd-order codes 'time control by the platform', 'benefits of

engagement in unpaid labour time' and 'limits to unpaid labour time', leading to a data-structure with 1st and 2nd order themes. We started thinking about unpaid labour in terms of workers' practices, as we found in our data that workers actively navigate their exposure to unpaid labour time by complying with or defying platforms' rules. We considered the dynamic interrelationships between our topics and themes in terms of time control imposed by platforms that contribute to workers' exposure to unpaid labour time, and workers contesting their exposure to unpaid labour time by limiting or actively engaging in it, in turn influencing the way in which they make sense of unpaid labour time.

5.7 Findings

5.7.1 Unpaid labour time and work extensification in food delivery

Deliveroo's management reports that the 'free login system' allows couriers to "log in to work whenever you decide to and wherever you decide" (Deliveroo management). Deliveroo thus refrains from imposing working hours and schedules on couriers, however, the platform steers working time and elicits unpaid labour through a competitive and non-transparent order-assignment system. When clients place an order, an algorithm "allocates the order to the courier best placed to complete that delivery" (Deliveroo management), based on couriers' location and data on expected preparation times at restaurants. By increasing the workforce and allowing couriers to log in anytime, Deliveroo creates situations where "there are lots of riders (...) all have to wait to be assigned an order" (Max, 22, PtP), which exposes couriers to unpaid labour time due to piece-rate payment: "You get paid per order that you deliver to the customer, so if you only get one order per hour, you earn very little" (Hans, 23, PtP). This implies that couriers encounter pressures to extend their working day, making themselves available whenever they can to snatch up orders. The platform encourages couriers to work at moments and in locations when there is a lot of client demand by presenting to couriers who log in to their applications a 'heat map' that signals which areas are the most busy. Workers are therefore prompted to ride to locations where client demand is highest, which requires a further time investment that remains unpaid. However, even moving to busy areas does not offer any certainty of being assigned paid work, because couriers experience that the "order assignment system is non-transparent, you never know who will be assigned an order" (Brenda, 23, student SE). Therefore, while the conditions generated by the free login system induce workers to spend more time on the platform, a significant share of this working time actually consists of unremunerated idle time that workers have to endure while waiting to receive an order: "you are working but you are not being assigned an order so you don't earn any money" (Hans, 23, PtP). Hence, differently from traditional conceptions of idle time

as an oppositional practice by workers, Deliveroo couriers resent this imposition because they are excluded from payment:

“You just stand there and do nothing. That’s really annoying.” (Max, 22, PtP)

Per-order payment in Deliveroo doesn’t account for potential delays during delivery, as couriers only receive the amount initially calculated by the platform. Our interview data points to frequent and sometimes long delays in the process of food preparation at restaurants, so that couriers might find themselves obliged to “wait one hour in a restaurant” (Mehdi, 29, PtP) without being paid. This generates feelings of frustration among couriers for the mismatch between time worked and earnings:

“I once worked for two hours and earned €4, it was really annoying. Two hours of my time wasted for nothing.” (Max, 22, PtP)

Moreover, despite the tracking system used by the platform to monitor and guide workers, inaccuracies regarding clients’ premises can further lengthen the delivery process:

“For example, the client is located at point A and asks to deliver to his home at point B, he makes a mistake with the address. So we take the order, we go to point B, but eventually the person is not there and asks us to deliver to point A.” (Medhi, 29, PtP)

Couriers are provided with clients’ contact details and are expected to invest time in solving problems during delivery themselves (e.g. by calling and/or texting the client), although the platform provides a live support system available to couriers through their applications. Deliveroo is able to allow couriers to accept or to reject assigned orders, as the platform’s algorithm assigns any rejected order to another courier who receives the payment only when completing the delivery. While self-employed Deliveroo couriers receive financial incentives such as ‘bonuses’ (i.e., increased payments when there are too few available couriers relative to orders) and distance-based fees, peer-to-peer couriers receive a fixed fee, independently of how long they have to ride to reach the client. This is why Deliveroo prevents peer-to-peer couriers from rejecting long-distance orders by hiding the client’s address until they have received the food in the restaurant. Hence, peer-to-peer couriers are unable to estimate how long they will have to work for their pay, which increases their exposure to unpaid labour time due to additional time spent on completing the delivery and riding back afterwards without financial compensation:

“You have to guess whether or not to accept an order because it could be all the way on the other side of the city and then you’ll spend half an hour riding home.” (Dieter, 18, Student SE, prior PtP)

5.7.2 Unpaid labour time and work intensification in domestic platform work

Ring Twice devolves decisions around working hours and schedules to workers and clients, but steers workers’ time use through a competitive ‘matching’ and rating system. Aiming to offer

“the largest database of reliable domestic workers in Belgium” (Ring Twice management) to clients, Ring Twice asks workers to create comprehensive platform profiles where they give detailed descriptions of themselves and specify the job categories (e.g. gardening, baby-sitting) and the kilometre radius in which they are willing to look for work. Domestic workers are automatically notified about jobs posted by clients in their job categories and ‘bid’ for these jobs by proposing their application and a pay rate (either an hourly or a fixed rate per job) to clients. As Ring Twice limits the number of worker applications to six per job post, domestic workers have to be very quick to apply, otherwise “it can happen that there are already too many applications and you can’t apply anymore” (Marie, 55, PtP). The need to quickly apply for work was intensified as Ring Twice recruited around 3000 service providers per month at the moment when we collected our data, meaning that “the competition became huge” (Eva, 47, PtP) for domestic workers. This is why workers report that they “must continuously keep an eye on the app, to get notifications about what clients need” (Kris, 54, SE), accounting for an additional effort spent on job search. Working hours on Ring Twice are unpredictable and fluctuate due to the platforms’ on-demand character, as explained by the Ring Twice management:

“We never guarantee anything for the service provider. It will depend on the region where he lives, whether a lot of services are requested there. (...) It will depend on the need of our users.” (Ring Twice management)

This means that domestic workers need to adapt to clients’ needs in terms of timing and location of the work, which can contribute to unpaid labour time invested in commuting. Additional unpaid labour time can arise from clients cancelling or rescheduling work on short notice: “some clients say, I want to postpone this job, others cancel, (...) others want it done as quickly as possible” (Andreas, 48, PtP). The rating system deployed by Ring Twice incentivizes workers to complete as many tasks as possible to achieve a higher ‘experience level’, which determines their ranking on the platform and the percentage commission charged on their income - amounting to 5% for workers with the lowest and 3% for those with the highest ‘experience level’. Ring Twice leaves decisions on the work process and methods to clients and workers. However, the platform incentivizes workers to maximize their work effort through client reviews (1-5 stars and written comments), inducing workers to “do all their best to get positive reviews because they know that getting a few negative reviews means they’re never going to get hired by new clients” (Ring Twice management). This is why Ring Twice clients can ask workers to “go faster or to work in the way they want” (Gary, 35, PtP), or to carry out additional unpaid tasks that workers feel obliged to complete to maintain a good rating: “when we are with the client, we know that we will be evaluated right after, so our margin of negotiation is much smaller” (Jeff, 36, SE). Pleasing clients is all the more important as workers’ rating based on ‘experience levels’ also takes into account the number of recurrent clients. Additionally, by calculating a ‘realisation rate’ that measures the rate of accomplished

relative to accepted jobs, Ring Twice induces workers to complete all jobs they were selected for:

“When I accepted a contract, I can't say at that I don't want to do it (...) My realisation rate will decrease, so I'll be looked down upon.” (Eric, 60s, PtP)

To secure the commission charged on workers' earnings and clients' monthly subscription fee, Ring Twice prevents workers from taking their client relationships outside the platform by prohibiting and sanctioning the exchange of contact details until the worker has been selected for a job. Therefore, communications between clients and domestic workers before selection happen through the platform. For example, workers can ask questions to clients about posted jobs through a chat function, visible to all workers. Nevertheless, domestic workers report that job descriptions are often unclear, so that completing the job might involve more effort than foreseen:

“The job add said: ‘place a faucet’, but I found out that the faucet was inaccessible, I had to dismount two pieces of furniture to reach it. I thought it would take two hours but it took me four.” (Michael, 64, PtP)

5.7.3 Workers' contention over unpaid labour time: reducing idle time in food delivery

Couriers contest Deliveroo's organisational arrangements by reducing idle time during which they remain unpaid: “The most important thing to avoid as a Deliveroo rider is waiting, not doing anything” (Hans, 23, PtP). In the first place, couriers deploy a number of practices with regard to the daily time slots when they log in to work. Working on ‘peak hours’, that are usually meal times, and avoiding to log in at other times allows couriers to reduce idle time by maximizing the number of deliveries assigned to them while working:

“I never work during the day because it is not worthwhile. I prefer to work during the peak hours, on Thursday and Friday nights because then I get the most orders.” (Senne, 26, PtP)

Couriers report that working on ‘peak hours’ to access as many orders as possible often involves a sacrifice in terms of free or private time, which they try to mitigate by logging in to work whenever their schedule permits:

“I squeeze in work everywhere. For example, I once went to a restaurant with my family, I took my Deliveroo bag with me so that I could work immediately after.” (Max, 22, PtP)

To secure an income during hours of the day when Deliveroo doesn't assign many orders, some couriers stay available on other delivery apps at the same time. Such ‘multi-apping’ allows couriers to complete as many deliveries as possible as they avoid waiting for Deliveroo to assign the next order, but it can also create situations “when you receive orders from two platforms at the same time and you can't guarantee that the food from both orders arrives warm at the customer” (Hans, 23, PtP). Self-employed couriers report making their working time

“much more worthwhile” by “riding during the hours when bonuses are paid” (Brenda, 23, Student SE) and limiting their availabilities at other times, hence increasing their income relative to the time they spend on the platform. Because during peak hours and when bonuses are paid “the faster you go, the more orders you get, the more money you earn” (Mehdi, 29, PtP), many couriers invest additional effort in driving up their speed of delivery. Some couriers buy or rent motorcycles or electric bikes to increase the speed of delivery, enabling them to “work longer because it takes less effort” (Max, 22, PtP).

Our evidence shows that self-employed couriers develop various practices around accepting and cancelling orders when to navigate exposure to unpaid labour time. For instance, while some couriers “accept all orders to be busy constantly” (Bashar, 43, SE), others mainly accept short- or long-distance orders. The latter consciously weigh the income earned for a delivery and the (physical) effort required for it:

“I think about whether I spend half an hour on one order of, say, €9,50, or whether I spend it on two, three small orders and then I also have €9,50, sometimes a bit more. It depends on how I feel physically, I've been driving a lot in the last few days, that takes a toll on you.” (Brenda, 23, Student SE)

Because peer-to-peer couriers cannot see their final delivery address when accepting an order, they cannot decide which order to accept and which one to reject. Yet, peer-to-peer couriers also find ways to circumvent this constraint and to reject an order that they deem too far and therefore not worthwhile. They do so by confirming the food pickup at the restaurant before actually receiving the food (as they should do according to platform rules), this allows them to see the end delivery address. If the address is further than acceptable, they either cancel the order or pretend to experience a problem during delivery and give the food back to the restaurant:

“I took the order from the restaurant, but then I saw that the client was very far away. (...) I went back to the restaurant, and I said ‘here, you can take this one back. I have trouble with my bike and I can't deliver anymore.’” (Aaleks, 20, PtP)

Cancelling an order at the restaurant is a practice frequently used by both self-employed and peer-to-peer Deliveroo couriers to reduce unpaid waiting time at restaurants' premises. This implies that the courier forgoes payment for one order in the hope of receiving another order with shorter a waiting time. Couriers stress the importance of cumulating experience about waiting times at specific restaurants by going through a trajectory of ‘trial and error’ and drawing their most efficient and income-maximizing practices from it:

“In the beginning I was delivering all orders and after a while you notice that it sometimes takes really long. I once had to wait 1,5 hours in a restaurant. After a while you know that you shouldn't come back there.” (Dieter, 18, Student SE)

To shorten the time spent due to delays during the delivery process, couriers develop practices such as “contacting the client and asking the client to come to your location” (Senne, 26, PtP)

when they are close to the client's address but can't find the building right away. Finally, some couriers find ways to avoid completing the delivery process when they feel that it takes too long, for example by contacting the platform support and "saying 'I fell' or 'I have problems with my bike' and then keeping the food" (Aaleks, 20, PtP).

5.7.4 Workers' contentions over unpaid labour time: prolonging unpaid labour time in domestic work

To reduce their exposure to unpaid job applications and job search, domestic workers try to increase their chances of being selected by clients by investing time in making attractive profiles in which they promote their experiences, competences and personal traits:

"In my profile, I say that I am an empathetic woman, that I love to take care of animals and that I have experience with animals, I have cats myself. I also say things about myself, what I personally like to do." (Nele, 59, PtP)

Aiming to stand out in their job applications, domestic workers sometimes look at other workers' profiles and at the questions asked in the public chat which helps them to sell their services to clients "because you can see what others offer and how they phrase it. You can learn from each other which questions to ask" (Marie, 55, PtP). To access enough work and income, Ring Twice workers frequently prolong their working day. For example, they schedule additional jobs after their working hours or in some cases even take time off from their other (full-time) jobs to complete tasks through the platform: "there is an interesting job offer on Friday afternoon so I will take leave from my other job" (Kris, 54, SE). Finding recurrent clients helps domestic workers to limit the effort invested in job search through the platform and provides them with some income stability:

"I knew that the client wanted me to come to his house every month to maintain the garden. So I had some income security as I knew that every time I would earn between €100 and €150." (Arthur, 38, PtP)

Therefore, domestic workers strategically invest unpaid labour time in pleasing and building trust with clients, for example by making themselves available outside the agreed working hours: "a Ring Twice client can call me whenever he wants" (Jeff, 36, SE) or by agreeing to work unpaid overtime without registering the additional hours through the platform. To avoid a drop in their 'realisation rate' they sometimes take more time or even ask help from others outside the platform to complete a Ring Twice job, as illustrated by the experience of Erwin who worked together with his wife:

"The two of us worked for two days. We were both exhausted and she was so mad at me. (...) But we got through it and delivered it to the client." (Erwin, 62, PtP)

As ratings are essential to access work, domestic workers try to prevent bad client reviews by offering to “come back for free if the client isn't happy with the work” (Michael, 64, PtP). Others try to obtain good reviews by not charging for all hours worked:

“I said: ‘Look, I will stick with the original price, I won't count the time I used to re-brick that wall’. The client gave me five stars.” (Erwin, 62, PtP)

Domestic workers benefit from high ratings as the platform charges a lower commission, hence granting them more control over their income. The possibility to set their pay themselves is strategically used by workers who lower their pay rate at first with a view to getting access to more clients and reviews, enabling them to subsequently increase their pay rate again:

“What's interesting when starting at Ring Twice is to lower your price, you won't earn much at first but it doesn't matter. It's about getting clients and good reviews. (...) And then gradually you increase your price.” (Eva, 47, PtP)

Domestic workers also report charging more or less depending on the kind of work, for example “if I know beforehand that it is a really hard job where I will come home exhausted, I will set a slightly higher price” (Kris, 54, SE). Hence workers reclaim some income in exchange for the work effort invested. Moreover, they try to manipulate the wage-work exchange to their own advantage by filtering jobs based on how straining or difficult they are. In doing so, they define limits to the amount of work they do in exchange for pay and avoid a drop in their ratings by “only taking on work when I know I can ensure a properly done job. My ratings prove it, I have five stars for all completed jobs” (Roberto, 74, PtP). To avoid unforeseen exposure to unpaid labour time, Ring Twice workers engage in communications and information exchange with clients and sometimes “pay a non-paid visit to the client to see what needs to be done” (Moussa, 39, PtP) before accepting a job. Others try to negotiate working hours and pay with clients, or “refuse to work for a fixed rate per job” to make sure that all hours are paid: “I always put an hourly rate... it will take as long as it takes” (Michael, 64, PtP). Finally, some workers trick the platform by only declaring parts of the hours worked and then continuing their work outside the platform, giving them some space to complete the job without facing the pressure of being rated:

“I tell the client: ‘You can pay the minimum on Ring Twice, put a positive review and then we no longer go through the platform.’ That way I don't have to worry, because as soon as I get a positive evaluation, I can work more comfortably. If the client is not respectful, I can stop without facing a penalty.” (Jeff, 36, SE)

Table 5.2 and table 5.3 provide a summary of the findings in food delivery and domestic work.

Table 5.2 Summary: Work extensification, unpaid labour time and workers' contentions in food delivery

Work arrangements producing work extensification	Unpaid labour time	Workers' contentions: Reducing idle time
<ul style="list-style-type: none"> • 'Free login' system: couriers can login in any city anytime, algorithm assigns orders • 'Heat map' incentivizing couriers to be available at times and in areas where client demand is highest • Competition between couriers for limited number of orders • Limited information on number and timing of orders and on preparation times in restaurants • Instructions on delivery process and geo-temporal tracking of couriers during delivery • Possibility for couriers to accept or reject assigned orders • Financial incentives for self-employed couriers: bonuses and distance-based fees • Peer-to-peer couriers: fixed fees and client address kept hidden until food-pickup at restaurant 	<ul style="list-style-type: none"> • Waiting time to be assigned an order • Waiting time at restaurant • Waiting time at client's address • Searching time (in case of error) for (wrong) client address, closed restaurant, etc. • Time invested in communications with platform support, clients and restaurants • Peer-to-peer couriers: additional time spent on delivering long-distance orders • Travel time to and from work 	<ul style="list-style-type: none"> • Working only during peak hours to increase chances of receiving orders • 'Multi-apping' to access orders from multiple platforms • Readiness to 'squeeze in work everywhere' in private life • Self-employed couriers: working when bonuses are offered • Riding quickly • Investing in faster vehicles (e.g. electric bikes, scooters) • Self-employed couriers: accepting all orders to always stay busy or accepting long/short distance orders • Peer-to-peer couriers: tricking the platform to learn about distance to client • Cancelling orders during delivery when waiting time at restaurant is too long • Contacting clients when the address cannot be found • Simulating problem or accident to avoid completing delivery

Table 5.3 Summary: Work intensification, unpaid labour time and workers' contentions in domestic work

Work arrangements producing work intensification	Unpaid labour time	Workers' contentions: prolonging unpaid labour time
<ul style="list-style-type: none"> • Workers create profile, apply for jobs, client selects worker • Competition for limited number of jobs posted by clients • Limited number (six) of applications per job, incentivizing workers to apply quickly • Limited information on number of jobs, job content, timing and duration • Work specified and sometimes supervised by clients • Rating system: 'Experience level' (based on client ratings, identity verification, recurrent clients, jobs completed and platform seniority) and 'realization rate' • Rewarding higher 'experience level' with reduced commission • Sanctions when working outside the platform, possibility to contact clients through platform chat, to exchange contact details after being selected 	<ul style="list-style-type: none"> • Time invested in making and maintaining platform profile • Job search: Constant monitoring of job offers • Job applications • Constant availability for clients • Time invested in rescheduling work • Time lost due to job cancellations • Additional unpaid tasks to increase or maintain rating • Unpaid communications and negotiations with clients • Additional unforeseen time needed to complete work • Travel time to and from work 	<ul style="list-style-type: none"> • Creating and maintaining rich and up-to-date profile to stand out from competition • Getting insights from other workers' profiles and internal chat to improve profile or job application • Adapting to clients' time requests, also when it implies working overtime or taking leave from other job to make them recurrent clients • Working overtime to maintain a high 'realization rate' • Not charging for all hours worked to receive high rating • Lowering pay rate to find clients and receive ratings, then increasing pay rate • Charging more for 'straining' jobs • Only applying for 'feasible' jobs to keep realization rate high • Negotiating working hours and pay with clients • Visiting client before executing work • Working outside the platform to avoid being rated

5.8 Discussion and conclusion

This article has investigated how platform workers contest their exposure to unpaid labour time resulting from platforms' organisational arrangements that exert control on their working time. Findings on one food delivery and one domestic work platform in Belgium reveal that workers can intentionally use their exposure to unpaid labour time to increase their income from platform work. Whereas unpaid labour time is part and parcel of work on digital labour platforms (Pulignano & Marà, 2021; Pulignano et al., 2021), it is also strategically used by knowledgeable workers to regain control over income. Platforms expose workers to significant unpaid labour time without providing income security or social protections. Workers seek to limit unpaid labour time by sometimes accepting and (in the case of domestic workers) even prolonging their unpaid labour time when they expect this to translate into future earnings. Hence, our research enhances knowledge on how the contested wage-effort bargain is being

reconfigured in the platform economy. Platforms constrain access to work and income through piece-rate payment and competitive and non-transparent task-assignment or rating systems. This is continuously contested by workers who develop practices around unpaid labour time to maximize their returns from platform work.

Our study contributes to debates around control and agency in the platform economy by illustrating how experiences of exploitation intersect with those of empowerment and agency gained when navigating exposure to unpaid labour time. While other contributions have examined the collective mobilisation of platform workers (e.g., Leonardi et al., 2019; Tassinari & Maccarrone, 2019), we focus on lower-scale oppositional behaviour that doesn't confront platforms openly but subverts working time control by buying into the unpaid labour time created by platforms. Our findings indicate that platform workers can create new contexts for contestation through their engagement with unpaid labour time. Their practices can involve different agents such as clients or restaurants and extend beyond the execution of work, happening before, during or after a task is completed (Cameron & Rahman, 2022a). Hence we contribute to literature that investigates the ways in which platform workers create spaces of control and capacity to manifest agency (Anwar & Graham, 2020; Pulignano & Franke, 2022; Reid-Musson et al., 2020). In particular, we show how platform workers actively carve out possibilities to regain control over their income by manipulating the wage-work exchange to their own advantage.

Findings illustrate how workers' contentions over unpaid labour time unfold from the different ways in which platforms organise work in diverse sectors of the platform economy. The two cases (i.e., Deliveroo and Ring Twice) can be thought of as occupying different positions on a continuum between management controlled 'employment' and market-facing 'self-employment' that is blurred by the platforms. Deliveroo provides some discretion for couriers who can in turn choose when and where to work, and which orders to accept. At the same time, however, the platform sets workers' pay, assigns orders, monitors and provides precise instructions to couriers during the entire process of delivery. Therefore, couriers' experience of the labour process is relatively closer to that of management controlled and dependent employees, notwithstanding their official classification as peer-to-peer and self-employed workers. The platform deploys components of time control that expose couriers to unpaid labour time through work extensification as they have to prolong their hours to access sufficient orders. Peer-to-peer couriers face more constraints than self-employed couriers because they receive a fixed fee and are prevented from cancelling long-distance orders by hiding the distance to the client until they receive the food at the restaurant. In contrast, Ring Twice provides a platform for domestic workers to sell their services at the price they decide upon. Yet, Ring Twice constrains the access to work through a rating system and by limiting the number of applications and prohibiting the exchange of contact details before workers'

selection. The platform fosters unpaid labour time through work intensification, with workers making additional efforts such as completing extra tasks for clients to obtain a high rating. Hence, food delivery and domestic workers develop different practices to contest their exposure to unpaid labour time. Food delivery couriers primarily challenge platform-imposed to reduce unpaid idle time. While self-employed couriers accept or reject orders based on information about the distance to the client relative to the pay offered, peer-to-peer couriers can devise tactics to access this information before receiving the food at the restaurant by 'tricking' the platform. In contrast, domestic workers seek to limit unpaid labour time by improving their relations and contracts with clients. They invest time in advancing their market-position on the platform, for example by working unpaid overtime to boost their rating. Building good relationships with clients is key to regain control over their income as it enables workers to increase their prices, to find recurrent clients or to avoid paying commissions by moving their client relationships outside the platform. Thus, while food delivery couriers maintain a strong aversion towards unpaid labour time which is apprehended as 'lost' time during the delivery process, domestic workers more readily accept exposure to unpaid labour time when they can use it to get some income control back in the end. While confirming the relevance of relations of employment for understanding labour process experiences and worker responses (Cohen, 2010), our findings illustrate that platform workers' experiences differ from those of truly self-employed contractors and employees. In both cases, albeit in different ways, platform workers try to reconcile experiences of autonomy with exploitation and control by platforms. They do so as they purposefully engage with unpaid labour time by renouncing to payment or working additional hours unpaid.

Our findings raise several implications. First, workers' tactics around unpaid labour time are more than coping or 'sense-making' strategies (Bucher et al., 2021; Josserand & Kaine, 2019; Purcell & Brook, 2022) as they involve an active struggle over the amount of time gone unpaid when performing platform work. Second, workers don't merely consent to platforms, because they re-appropriate time in a way that is effective for themselves. Literature has highlighted that platform workers engage in revenue-maximizing 'making out' games (Burawoy, 1979) by increasing their productivity (Cameron, 2022; Chan, 2019; Rosenblat & Stark, 2016). Our research points out that workers act upon and define limits to control and exploitation by platforms. For example, couriers can limit their availabilities at times when there are few orders and domestic workers can filter jobs or leave the platform with clients. Hence, we move beyond assumptions that participation in workplace 'games' conceals the exploitative social relations of capitalist production and thereby dissipates inherent conflict rather than directing it against the employer (Burawoy, 1979). Indeed, workers implement practices that challenge platforms' way of work organisation by using unpaid labour time to reclaim control over their income. Third, our findings point to the continued relevance of misbehaviour in the platform economy. To reap the benefits of the independent contractor classification, platforms must

leave to their workers a certain degree of autonomy (Shapiro, 2018). Therefore, they are unlikely to correct misbehaviour by for example imposing working hours and schedules, which opens possibilities for workers to develop various practices to reclaim some control in these areas.

The question of the relationship between individual strategies and collective mobilisation arises from our study but requires further investigation in the context of physically isolated and remotely controlled platform work (Gandini, 2019). Misbehaviour might be used by platform workers to “compensate for their weak associational power” (Anwar & Graham, 2022: 1271), but might also coexist with other forms of resistance. In addition, studying the contested wage-work exchange in other platform organisations deploying different contractual arrangements, for example those hiring workers as employees or through temporary employment agencies, may help deepening knowledge on worker contentions in the platform economy. Finally, as our results illustrate, workers' contentions over unpaid labour time might require them to temporarily renounce to income, a possibility that cannot be afforded by all workers. Therefore, future research may take into account workers' limited and unequally distributed financial resources and examine how this affects the way they navigate exposure to unpaid labour time.

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6. Conclusions and discussion

6.1 Summary and main conclusions

This thesis has explored platform strategies, worker practices and unpaid labour within platforms in Belgium. It presents a nuanced account of unpaid labour by linking it both to the way in which platforms establish control and exploit workers and to the practices of misbehaviour developed by workers. Specifically, the thesis sheds light on platforms' strategies for control across a variety of food delivery, online freelancing, domestic and care work platforms. Workers on platforms create spaces of control around these strategies. They actively navigate unpaid labour by limiting and/or engaging with it. This thesis therefore empirically addresses the question how unpaid labour unfolds from platforms' strategies for control and workers' practices of misbehaviour in Belgium.

The analytical approach developed to tackle this question was built upon labour process theory and theories on 'organisational misbehaviour'. Labour process theory provides valuable insights into commodification and control as important preconditions for valorisation on platforms and offers useful tools for examining the intricacies of production relations in platforms. This allows to study the rules that platforms impose, the way in which workers develop consent around these rules and the emergence of specific control regimes that also consider the institutions surrounding production (cf. Burawoy, 1979; 1985). Making use of a variety of contracts and circumventing economic and social protections, platforms have the ability to shift risks and costs to workers, undermining the traditional work-effort bargain through their digitally mediated models. The transfer of these risks and costs can be understood as means by which platforms intensify the exploitation of unpaid labour—first by placing workers in vulnerable positions and then appropriating value or effort from them in various ways (Avent-Holt, 2015). Theories on organisational misbehaviour shed light on how this exposure to unpaid labour is fundamentally contested, with workers consistently attempting to reclaim the time and effort invested in platform work.

To investigate the dynamics of control and exploitation, multiple case studies were conducted in food delivery, online freelancing, domestic and care work in Belgium. This allowed insights into various sectors of the Belgian platform economy. A qualitative design was chosen to gain an in-depth understanding of unpaid labour and the dynamics of control, consent and contentions within labour platforms, consisting mainly of semi-structured and narrative interviews.

Taken together, the empirical chapters of this thesis depict a convergence in platform operations, reflecting emerging capital-labour relationships. Platforms exert control and exploit workers, while workers strive to reclaim control and to reappropriate their time and income. The thesis shows how this dynamic, present in traditional firms as well, plays out in the specific and novel context of platforms deploying digital technologies to organise work and to

establish control. This results in distinct contradictions, as workers, often classified as independent contractors while facing control, actively reproduce and resist platforms' digital-based strategies. The thesis demonstrates variations in how platforms apply technology in each case, leading to differences in control, consent and contentions across platforms. The empirical chapters collectively contribute to understanding how unpaid labour unfolds from platforms' strategies and worker practices, although each chapter focuses on a particular aspect of this overarching question.

To understand how platforms can establish control and exploit workers, it was first necessary to study how they commodify relationships between users and workers. This is the focus of chapter 2 that examines the relationships between a food delivery platform, clients, restaurants and couriers. It sheds light on what we call the empowerment and disempowerment cycles, revealing how the platform leverages digital data and technology to increase transaction efficiency while at the same time creating dependency through withholding information. The simultaneous occurrence of empowerment and disempowerment underpins the complexity of commodification in platforms and enhances platform's ability to control and valorise. Chapter 3 elaborates on these findings by looking not only at platforms' digital intermediation business but also paying specific attention to the way in which platforms enter labour markets and welfare structures in Belgium. The chapter is based on a contrasting case of platform work, namely domestic care work. As this contrast shows, both food delivery and domestic care platforms streamline transactions and boost competition, while also shifting risks to workers. However, the way in which this happens is different in both cases. The food delivery platform analysed in chapter 2 uses the 'peer-to-peer' and self-employment regulation in Belgium, while the domestic care work platforms break completely with the existing regulations, resulting in a process of informalisation that dismantles many of the rights and protections enjoyed by regular care workers. Interestingly, domestic care platforms appear to lower transaction costs to such an extent that workers and clients chose to go through platforms instead of relying on the Belgian service voucher system or local institutions for personal care services, enabling platforms to establish themselves in the market by offering increased flexibility to participants.

The analysis of platform strategies is carried on in chapters 4 and 5. The chapters comparatively analyse the precise rules platforms implement to govern labour across different platforms and sectors. The findings align with the discovery of simultaneous empowerment and disempowerment where platforms grant some autonomy while at the same time withholding information, blurring the boundary between freedom typical to 'self-employment' and control as experienced by employees, although in distinct ways (cf. chapter 5). The chapters demonstrate variations in the extent and nature of control across platforms. While some platforms leverage extensive control over aspects such as payment, task-assignment, the specification and the evaluation of work, others refrain from interfering in these aspects. While

some platforms organise work based on a 'transactional' logic, others follow a more 'organisational, internal labour market' logic, according rewards to workers and enabling progression within the platform (cf. chapter 4). Chapter 4 also expands insights into the various ways in which platforms engage with the regulatory setting by illustrating the different contractual arrangements used, with platforms relying on 'peer-to-peer', (student) self-employed, temporary agency, directly employed, or unregistered workers. Workers, as a result, find themselves exposed to different risks stemming from platforms' distinct labour governance strategies. Hence, *sub-question 1 'What strategies do platforms use to achieve control?'* can be answered by referring to the way in which platforms use digital technology to commodify relationships between users and workers, to shift risks to participants by evading protections and regulations surrounding work, and to impose a combination of mechanisms for labour control, that may differ in each case.

As to *sub-question 2 'How does unpaid labour unfold from platforms' strategies for control'*, important insights are provided in chapters 3 and 5. Chapter 3 shows how platforms' strategies exacerbate the vulnerability of workers by making jobs more casual and bereft of social protection, and pay unpredictable and unreported. Digital-based employment arrangements expose workers to risks (e.g. non-payment, harassment by clients) that platforms make no attempt to mitigate. The chapter highlights that unpaid labour is an essential part of transactions on platforms as workers need to bear 'sunk' costs resulting from these risks to access or complete paid tasks. Chapter 5 discusses the specific impact of working time control on workers' exposure to unpaid labour, steering both the amount of time spend on work and the level of effort exerted. As findings across the chapters show, workers face different kinds of unpaid labour in different platforms, with domestic workers mainly being exposed to work intensification, while food delivery couriers face work extensification, and domestic care workers shoulder numerous uncompensated costs due to falling outside protective regulations and labour market intermediaries. Notably, social costs, related to the interpersonal nature of client interactions, are particularly important in domestic care work and are exacerbated by platforms' risk-shifting strategies, leaving care workers vulnerable to abuse by clients. All these insights combined provide a rich picture of how unpaid labour unfolds both from risk-shifting and the specific strategies of labour control used by platforms. These strategies weaken the ability of workers to control the conditions of their work, heightening their exposure to unpaid labour.

Having discussed the key elements of platforms' strategies and how they contribute to unpaid labour, chapters 4 and 5 shift the focus to platform workers and examine *what practices platform workers develop to organise consent around and/or contest platforms' strategies* (cf. *sub-question 3*). Chapter 4 examines the organisation of consent across different kinds of platforms. It explores how workers engage with platforms' rules, manipulating them to their own advantage and creating distinct 'spaces of control'. These spaces reflect the way in

which workers shield themselves from the specific risks associated with work in different platforms. Some similarity in the nature of spaces created by workers within the same sector can be observed, with food delivery workers prioritizing protective conditions and online freelancers aiming for independent competition. Chapter 4 reveals how workers interacting with platform rules accounts for wider 'regime dynamics', leading to different control regimes across platforms. Chapter 5 builds on these insights, focusing specifically on the practices of misbehaviour platform workers develop around time control. Importantly, chapter 5 adds illustrations of worker practices in domestic platform work. Together, the results from the two chapters elucidate that the practices workers develop are aimed at carving out spaces of control and differ in each platform because they interact with platforms' rules, which workers adapt, challenge, or engage with to maximize their returns from platform work. Practices of misbehaviour reflect the concrete interests workers seek to protect around the wage-effort bargain and underpin experiences of empowerment in platform work.

Finally, having established the active role of workers who strive to improve their conditions in platforms, the question arises *how unpaid labour unfolds from platform workers' practices of misbehaviour (cf. sub-question 4)*. Chapter 5 contributes to answering this question, providing a nuanced account of unpaid labour as both created by platforms and fundamentally shaped by workers. Based on the insights from chapter 4, it considers the diversity of platform organisations and examines different ways in which workers respond to unpaid labour. The chapter shows how platform workers navigate their exposure to unpaid labour, thereby manipulating the wage-work exchange. Workers contest the extensification (food delivery) and intensification (domestic work) of their working time by engaging with and/or limiting unpaid labour. This exposes the fundamentally contested nature of unpaid labour within platforms, where workers strive to maximize their income and reclaim control.

Two findings stand out from the present work.

The first remarkable finding is that platform workers are aware of and consciously navigate unpaid labour. The kind of unpaid labour examined in this PhD is rooted in the domination and control of platforms that carve out possibilities to exploit workers. Yet, workers are found to have significant literacy on how much and what kind of unpaid labour they engage in and for what return. They actively weigh the costs and benefits of their exposure to unpaid labour, taking into account, for example, potential future returns such as receiving more work from clients. Platform workers consciously and actively seek to improve the material conditions of their work. They are aware of and have an aversion to the 'sunk' costs required to perform platform work. Hence it is not the case that exploitation passes unnoticed or is not completely obscured in the platform economy. Although workers appreciate the limited autonomy and flexibility offered by platforms, this is not sufficient to ensure worker compliance. As chapter 4 and 5 of this thesis illustrate, workers seek a larger portion of the value they generate, which

also comes forward in food delivery couriers' attempts to secure more protection. Workers' actions in this pursuit can be more or less threatening for platform profits. While some workers regain control by actively engaging in unpaid activities, others have devised practices to effectively limit the exploitation of their unpaid labour, at times by circumventing or substantially reducing the time they spend on the platform. These are powerful practices opposing platforms' revenue extraction methods and their efforts to maintain a large pool of available workers for clients.

The second notable finding concerns the differences between platforms and platform workers within and across sectors. Unpaid labour and platform control are experienced and acted upon very differently by workers in food delivery, domestic work, care and online freelancing platforms. For food delivery couriers, the major issue is that they are deprived of income and protection that they would normally be entitled to in a standard employment relationship. In contrast, online freelancers experience the constraints imposed by platforms on their ability to control their own work as a major problem. Freelance platforms are changing the rules of competition, for example through the use of rating systems. In contrast to what these platforms claim themselves, they are not promoting competition but constraining it through their algorithmic management systems. This leads to workers feeling hampered and restrained by the platform, as illustrated by their attempts to circumvent or leave platforms with clients. These findings illustrate that the increased exposure of workers to unpaid labour on platforms cannot solely be attributed to platforms reducing costs by undermining job security through the wage relation. It is also rooted in platforms restricting workers' freedom and autonomy (cf. Pulignano, 2019). Freelancers outside platforms also encounter unpaid labour, such as unpaid self-promotion, however, platforms amplify their exposure by establishing new mechanisms that foster dependency. Importantly, the extent to which platforms constrain workers through their rules varies among the platforms examined in this study. Some platforms rigorously regulate and control workers' behaviour, while others afford more discretion, even within the same sector (cf. chapter 4). The choices of various strategies have important effects on workers' exposure and responses to unpaid labour. Depending on the specific rules imposed by platforms, workers have different possibilities to create spaces of control and to leverage unpaid labour to their own advantage.

6.2 Theoretical implications

Based on the main conclusions discussed above, several implications for the study of platform work and worker practices can be derived.

To begin with, the finding that platform workers actively contest their exposure to unpaid labour by re-appropriating time and hence income calls attention to the need to consider the material reality and interests of platform workers. Pay is at the core of worker contentions

examined in this thesis, illustrating how workers actively struggle over the amount of time that goes unpaid. This highlights the important role of monetary rewards as pivotal motivators influencing the practices of platform workers. Burawoy (1979) already pointed to the significance of increased pay in securing worker consent and productivity gains in the 70ies. His empirical work demonstrates that factory workers earned substantial sums of money from participation in workplace games, a key motivational factor for pushing themselves to work harder (Clawson & Fantasia, 1983). Monetary rewards may be especially vital in platform work where pay tends to be low, task-based and unpredictable, making unpaid labour more evident for workers. In this context, gamification alone may not suffice to obscure the exploitation of unpaid labour.

Relatedly, the discourse characterizing platform work as a flexible, free and fun activity (De Stefano, 2017; Morales & Stecher, 2022), although powerful, doesn't appear to guarantee worker consent. This is because platform workers notice a contradiction between their expectation of entrepreneurial freedom based on the norms and moral vision shaped by platforms and the actual material conditions of their work (Haidar & Keune, 2021; Purcell & Brook, 2022). This contradiction can result in resistance when workers refuse to endure unpaid labour. These findings correspond with Umney et al.'s (2023) observations on platform labour struggles over value distribution. Umney et al. (2023) indicate that a primary driver for worker protests is the pursuit of a greater portion of the generated value, manifesting through objections to pay levels, working hours, and costs. The present thesis illustrates how this happens through more covert practices of misbehaviour, distinguishing it from studies that concentrate on overt and collective forms of protest (e.g. Chen, 2018; Tassinari & Maccarrone, 2020; Vandaele, 2021). Interestingly, even the platform workers in our sample not fully dependent on platform income showed an aversion to unpaid labour. Having other sources of income (e.g. other employment, financial support from parents) might shield them from immediate material deprivation (cf. Schor et al., 2023), but these resources can also be used to contest their exposure to unpaid labour, for example being able to decline low-paid work or additional tasks from clients. This points to unpaid labour as a key contradiction in platform work and a significant catalyst for workers' engagement in resistance practices.

Furthermore, the findings underscore the importance of considering unpaid labour in platform work as rooted in asymmetrical power relations and in platforms' strategies for control and exploitation. The nuanced account of unpaid labour in this thesis highlights the potentially multifaced nature of exploitation. As pointed out by earlier work on exploitation, the capacity of employers to offload work-related costs to workers, for example by obliging them to provide their own equipment and excluding them from social security, all while decreasing their pay, can be understood as intensified exploitation (Smith, 2016; Wilson, 2020). Examining unpaid labour through this perspective adds to other accounts that concentrate on the exploitation of 'free' digital labour while stressing its liberating potential (Terranova, 2000).

Our findings also emphasize the ongoing importance of misbehaviour in the platform economy as a powerful challenge to platforms' way of work organisation (Mumby et al., 2017). Platforms aiming to benefit from the independent contractor classification must grant to workers at least a minimal space for discretion (Shapiro, 2018), which workers can leverage to reclaim control. Studying practices of misbehaviour helps to make visible the prevailing exploitative structures and the sometimes relatively hidden acts of resistance by workers. Despite not openly confronting platforms, the prevalence of worker practices reveals that the organisation of work by platforms is susceptible to some subversion.

Moreover, the findings carry implications for research on labour platforms. It is important not to approach platform work as a single, unified phenomenon, but to take into account the heterogeneity of labour platforms (Pulignano et al., 2023b; Prassl & Risaktt, 2016). Platforms actively adopt distinct business strategies, which can vary even among platforms operating within the same sector (Pulignano et al., 2023a). This means that, in principle, alternative models for organizing labour platforms are imaginable that could overcome some of the constraints identified by workers such as information asymmetries (Silberman & Irani, 2016). As the prevalence of unpaid labour on platforms indicates, platforms seem to have little incentive to lower transaction costs for workers and clients in a symmetric way. This is because platforms aim to attract clients by offering a large and flexible workforce that can be quickly adjusted to their needs (Woodcock & Graham, 2020). Within this model, platforms may always be interested in withholding some information from workers as a key mechanism behind their power to control and valorise (Silberman & Irani, 2016). Yet, studies should be attentive to the specific features of platforms, which foster power imbalances to varying degrees.

A significant question raised by the results concerns the purported newness and distinctiveness of platform work. Platforms have strongly lobbied for recognition as groundbreaking, disruptive business models to avoid classification under existing regulations (Vallas et al., 2022). However, as the empirical evidence illustrates, some platforms exhibit features reminiscent of traditional employment relationships, while others bear resemblance to digitalised matching agencies. It is important that research on the platform economy takes into account these parallels and does not consider platforms as an entirely unprecedented phenomenon. What emerges as a specific feature of platforms is their distinct organizational structure and governance mechanisms, enabling them to match supply with demand by realizing and acting upon digital data (Sutherland et al., 2020; Vallas & Schor, 2020). While holding limited assets and externalizing the value-creation process, platform organisations also restrain the freedom of workers in some respects, resulting in workers typically having less autonomy than truly self-employed freelancers (Kornberger et al., 2017). These tensions between autonomy and dependence arising from platform work require further exploration.

Finally, as platforms become increasingly prevalent across various sectors, a crucial inquiry revolves around how platforms interact with and affect the regular labour market. To

comprehend the impact and evolution of platform work, it is essential to consider the wider economy and labour market in which the platform economy is nested (Bayurgil et al., 2024). Risk-shifting to workers and downward pressure on wages are common in other forms of flexible and precarious work as well, that have recently surfaced in a number of industries (Doellgast et al 2018; Kalleberg, 2009; Schor et al., 2020). Therefore, to investigate the motivations and practices of workers in the platform economy, it is important to take into account the working conditions in sectors where platforms are emerging, including the levels of pay, social security and flexibility offered by conventional employers in these sectors. Platforms may exacerbate trends towards deteriorating working conditions, providing employers with new options and techniques to transfer costs to workers and to install insecure work arrangements in a range of industries (Graham et al., 2020). Importantly, the boundaries between the platform economy and the conventional economy have begun to blur (Vallas, 2023). Platforms are gradually infiltrating in and converging with established institutions and organisations (Van Dijk et al., 2018). For example, algorithmic controls such as monitoring and rating systems are no longer confined to platform work, having become ubiquitous across the wider economy (Noponen et al., 2023; Wood & Lehdonvirta, 2023). The platform regime of work organisation could introduce new 'imbalances' in the labour market and economy, enjoying a competitive advantage by free-riding on existing welfare schemes and conventional employers (Cingolani, 2022; Schor et al., 2020). This is particularly the case in Belgium where the government has endorsed platform work as a side-activity, refraining from regulating it as a fully-fledged job and establishing the 'peer-to-peer' regime that grants benefits to platforms at the expense of taxpayers and worker welfare (ETUC, 2022). This might exacerbate existing divisions and inequalities in the labour market, such as those between unprotected platform workers and the relatively well-protected employee population.

6.3 Limitations and recommendations for future research

The current study brings together many elements to provide a rich picture of unpaid labour as unfolding from platforms' strategies for control and workers' practices of misbehaviour. It adds to the scarce knowledge on platform work in Belgium. However, the study has some limitations which point toward the need for future research.

First, the results are based on data collected from a limited number of platforms in Belgium and lack statistical representativeness. Although the findings indicate some applicability across platforms and align with other empirical studies that have revealed similar practices and strategies (e.g., Anwar & Graham, 2020; Heiland, 2021; Maffie, 2024; Popiel, 2017; Veen et al., 2020), they cannot be generalised to all platforms and platform workers, nor to the broader economy. This calls for quantitative research to statistically test the results. A main output of the qualitative research conducted with the ERC and FWO projects, of which this PhD is a part,

is to develop a survey instrument to quantitatively measure unpaid labour. This will enable to test the extent to which the phenomena discovered in the qualitative research can be found in the wider working population, including mapping the prevalence of various forms of unpaid labour across different economic sectors. The quantitative research will also be able to statistically analyse the impact of factors impacting unpaid labour such as the different contracts used by employers.

Second, even though the sample of platform workers in each of the studied platforms included respondents diverse regarding socio-demographic characteristics, as well as characteristics such as seniority and income dependence on the platform, explicit comparisons between different groups of workers were not the focus of the PhD research. Prior research has investigated differences in the experiences of migrant and non-migrant platform workers (Holtum et al., 2021) and of those more or less reliant on income from platform work (Schor et al., 2020; 2023). Future research in Belgium could focus on the specific group of undocumented migrants working on platforms who do not feature in the current sample due to ethical constraints. This group is likely to be in a particularly vulnerable position and might provide additional insights into issues related to unpaid labour and exploitation.

Third, the quickly changing nature of the platform economy as well as the dynamic interaction between worker practices and platform strategies suggest the usefulness of a longitudinal approach. Platforms rapidly adjust their functioning, reacting both to worker misbehaviour and regulatory changes (Aloisi, 2016; Cini, 2023b). In turn, workers can adapt their practices to the changing rules imposed by platforms (Rosenblat & Stark, 2016). The narrative approach adopted in this thesis helps to contextualise workers' experiences and practices surrounding platform work within their broader life and work experiences over the course of their career. However, several questions remain, such as whether practices of misbehaviour eventually develop into wider resistance against platforms and to what extent workers can significantly reduce their exposure to unpaid labour over time - aspects that could be explored with a longitudinal approach. There is a need for continued research on the platform economy in Belgium, monitoring especially the impact of new regulations, such as the Belgian labour deal and the recent reclassification of food delivery couriers as employees.

Finally, more extensive research could be done on the role and perspective of platform users, who are important players in platforms' control systems (Maffie, 2022). This investigation could encompass both individual clients and business organisations using platforms to recruit larger groups of workers.

6.4 Policy implications

The findings on unpaid labour and control in this thesis raise a number of policy implications. In the first place, a clear need for regulating platform work follows from this thesis. In Belgium, platforms can subject workers to unpaid labour precisely because they circumvent existing regulations while maintaining control over workers. The Belgian peer-to-peer regulation has expanded platforms' possibilities to exploit cheap labour and has sometimes been abused, providing a 'loophole' to avoid awarding workers a real status reflecting their actual relationship with the platform (ETUC, 2022). Numerous platforms, including those that clearly interfere in the client-worker relationship and for example control payment and task-assignment, have utilized this regulation. The thesis was written in a period marked by a strong public debate and multiple legal disputes regarding the employment status of platform workers. Across Europe, food delivery platform workers have been reclassified, with courts in countries like France, the UK, Italy, the Netherlands and Spain establishing their status as employees (Aloisi, 2022). Belgium recently followed suit, after a 4-year long court case. This is expected to have implications for other platforms in Belgium, as the court case could set a precedent for other workers contesting their status (Carpentier, 2023). While the reclassification of food delivery couriers as employees represents an important step forward to curb unpaid labour, much still needs to be done to improve the working conditions of platform workers. Importantly, at the time of writing the thesis, European regulation for the platform economy is absent. The EU platform work directive, introduced by the European Commission in December 2021, aimed to provide a legal presumption of employment, allowing the reclassification of self-employed platform workers if a clear subordination link existed. However, the directive, which initially included clear criteria for subordination, was significantly watered down due to resistance from certain member states and eventually discarded the criteria (Bourgerie-Gonse, 2024a). After over two years of negotiations, the proposal has been shelved, leaving platform workers in Europe without a unified framework for their contractual status (Bourgerie-Gonse, 2024b). This poses a concern because more than 5 million platform workers in the EU are still believed to be misclassified, lacking access to crucial rights, such as minimum wage, collective bargaining, work-time limits, health insurance, sick leave, unemployment benefits, and retirement pensions (Liboreiro, 2024). EU-level regulation would also offer a reply to threats of platforms regarding a potential withdrawal from Belgium in the event of reclassification (Clout, 2023; De Morgen, 2020). As of now, the Belgian labour deal, which establishes criteria for classifying platform workers as self-employed or employees, has not resulted in any reclassification and faces criticism for its ineffective enforcement (Cardinaels, 2023). Moreover, regulatory efforts in Belgium have so far predominantly been targeted at food delivery and ride-hailing work, neglecting the heterogeneity of work and working conditions in the platform economy. Strong employer-based control is evident in some platforms, while

others accord considerably more freedom. While reclassification is likely to improve conditions for food delivery couriers, other initiatives are needed for self-employed freelancers and platform workers in domestic care. Mangan et al. (2023) suggest that extending the regulatory framework on working conditions and broadening the scope of occupational safety and health regulations to all platform workers, regardless of their contractual status, would help mitigate the risk of unpaid labour for self-employed freelancers falling outside the legal presumption of employment. The obligation for platforms to provide an insurance for physical damage to self-employed workers, stipulated in the Belgian new labour deal, is an important step forward, but it has been criticized for insufficient application (ETUC, 2022) and does not entirely prevent platforms from offloading costs to workers. An essential demand voiced by online freelancers interviewed in this PhD research is to safeguard their ability for independent competition – reducing the costs and unpaid activities necessary on platforms to secure clients. Enforcing rules regarding labour intermediation and thereby limiting the costs that platforms can impose on workers for accessing work could help address these concerns (Mangan et al., 2023).

Regarding domestic care platform work, an important point of action in Belgium appears to be the enforcement of existing regulations. Domestic care workers operating through the regulated voucher system or the local authorities do not need to carry out unpaid tasks such as job searches and job applications, and they benefit from job descriptions that protect them from undertaking excessive risks in their work. Platforms entering this sector have disregarded the extant legislation completely and have not engaged with the present intermediaries. This calls for an active role of the state and trade unions to re-embed platforms in the regulatory system, for example by enforcing legislation and collective agreements. Besides, the finding that platforms can establish themselves in the domestic care sector in Belgium may point to the need to make regular domestic care work more attractive for workers and clients. This could involve improving working conditions by raising pay or offering more flexible working hours. It could also involve increasing efficiency in transactions, making soliciting care work through the regular system more appealing for clients.

Finally, unpaid labour is an expression of the highly asymmetrical employment relationship constituting platform work. To rebalance this relationship, giving workers greater freedom to organize and union rights is of paramount importance (Dundon et al., 2020). Work in platforms often falls outside the scope of collective sectoral agreements, resulting in a lack of protections and collective voice (ETUC, 2022). There are several good examples of trade union action in Belgium, although the unionisation process for workers through digital labour platforms is difficult and much remains to be achieved. Importantly, attempts at collective representation have so far been more successful in food delivery (Vandaele, 2018). Unions in other sectors, such as domestic care work, should equally actively engage with the platform workforce.

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Appendix

Appendix 1. Scientific summary – in English

Scholarly interest in platform work – i.e., paid work mediated via online and location-based labour platforms - has surged in recent years. A significant strand of literature has examined the various ways in which platforms establish control through the use of digital technology and algorithms. More recently, researchers have also started to explore the active role of platform workers, pointing to various forms of engagement with and resistance to platform control. This thesis is part of the ERC project 'ResPecTMe' (grant agreement n° 833577) and an FWO project on digital work (n° G073919N) and examines unpaid labour – i.e., unremunerated activities that contribute to accessing and/or completing paid platform tasks - at the intersection of platforms' strategies for control and the practices developed by platform workers. The overarching research question is 'How does unpaid labour unfold from platforms' strategies for control and workers' practices of misbehaviour in Belgium?'. Unpaid labour is conceptualized through the perspective of exploitation and valorisation in platform capitalism. Drawing on labour process theory, the thesis considers platforms' strategies for control as comprising the way in which platforms commodify labour, establish labour control and shift risks to workers. Workers' practices of misbehaviour are understood as underpinning both the generation of consent and contentions on platforms, drawing on insights from labour process theory and theories on organisational misbehaviour. A qualitative multi case-study design is adopted to answer the research question, consisting mainly of semi-structured and narrative interviews with platform workers, managers and (in one case) platform users. The study covers a variety of platforms in food delivery, online freelancing, care work and domestic work in Belgium.

The thesis is based on four publications, each of which answer a part of the overarching research question. The first publication (cf. chapter 2) examines commodification and control within a food delivery platform. The study sheds light on the complexity of commodification by exploring connections between the platform, its users, and workers. It highlights that control and commodification are based on platforms simultaneously empowering and disempowering participants. Platforms facilitate access to transactions by fuelling competition while at the same time fostering dependency by withholding information, enhancing their power to control and to valorise. The second publication (chapter 3) delves into the digitally mediated provision of domestic care services through platforms. It discusses how platforms' strategies for control disrupt existing regulations, thereby informalizing work arrangements in domestic care work. The study illustrates how this leads to a process of individualising risks and explains unpaid labour as a cost of the risks borne by workers. In the third publication (cf. chapter 4), the discussion centres around the practices workers develop to regain a 'space' of control over their work. A comparative analysis of food delivery and freelancing platforms reveals different regime types, such as 'pay-based control' and 'time-based control' for food

delivery, and 'customer-based control' and 'task-based control' for online freelancing, which are shaped by the dynamic interplay between platforms' control strategies and workers' attempts to organise consent by navigating the rules governing their labour. Publication four (cf. chapter 5) explores contentions over unpaid labour among platform workers providing food delivery and domestic services. The study illustrates workers' agency in actively navigating and purposefully using their exposure to unpaid labour to regain control over their income. The study argues that contentions over unpaid labour enable workers to regain a sense of empowerment, demonstrating the fundamentally contested nature of exploitation in platform work. The concluding chapter of the thesis highlights the main findings and the implications for theory and policy-making, as well as paying attention to the limitations of the thesis that may be addressed in future research.

Appendix 2. Scientific summary – in Dutch

Wetenschappelijk interesse in platformwerk – d.w.z. betaald werk bemiddeld via digitale platformen - is de laatste jaren sterk toegenomen. Een aanzienlijk deel van de literatuur heeft onderzocht hoe platformen controle uitoefenen door het gebruik van digitale technologie en algoritmen. Meer recentelijk verkenden onderzoekers ook de actieve rol van platformwerkers, wijzend op diverse vormen van betrokkenheid bij, maar ook weerstand tegen de controlestrategieën van platformen. Dit proefschrift maakt deel uit van het ERC-project 'ResPecTMe' (grant agreement nr. 833577) en een FWO-project over digitaal werk (nr. G073919N). Het onderzoekt onbetaalde arbeid – d.w.z. onbezoldigde activiteiten die bijdragen aan het verkrijgen en/of voltooien van betaalde platformtaken - op het snijvlak van de controlestrategieën van platformen en de praktijken ontwikkeld door platformwerkers. De overkoepelende onderzoeksvraag luidt: 'Hoe ontvouwt onbetaalde arbeid zich uit de controlestrategieën van platformen en de praktijken van wangedrag van platformwerkers in België?'. Onbetaalde arbeid wordt geconceptualiseerd vanuit het perspectief van uitbuiting en valorisatie in het platformkapitalisme. Op basis van labour process theory beschouwt het proefschrift de controlestrategieën van platformen als bestaande uit de manier waarop platformen arbeid commodificeren, controle over het werkproces uitoefenen en risico's verschuiven naar werkers. Praktijken van wangedrag liggen aan de basis van zowel instemming als weerstand door platformwerkers, volgens inzichten uit de labour process theory en theorieën over organisatorisch wangedrag. Het proefstuk voert een kwalitatieve multi-case studie uit om de onderzoeksvraag te beantwoorden, bestaande voornamelijk uit semigestructureerde en narratieve interviews met platformwerkers, managers en (in één geval) platformgebruikers. Het onderzoek omvat verschillende platformen in maaltijdbezorging, online freelancen, zorgwerk en huishoudelijk werk in België.

Het proefschrift is gebaseerd op vier publicaties, die elk een deel van de overkoepelende onderzoeksvraag beantwoorden. De eerste publicatie (zie hoofdstuk 2) onderzoekt commodificatie en controle binnen een platform voor maaltijdbezorging. De studie belicht de complexiteit van commodificatie door de verbindingen tussen het platform, zijn gebruikers en de platformwerkers te verkennen. Controle en commodificatie berusten op tegelijkertijd 'empowerment' en 'disempowerment'. Platformen vergemakkelijken de toegang tot transacties door concurrentie aan te wakkeren, maar tegelijk maken ze deelnemers afhankelijk van het platform door informatie achter te houden. De tweede publicatie (hoofdstuk 3) richt zich op huishoudelijke zorgdiensten via platformen. De studie bespreekt hoe de controlestrategieën van platformen bestaande regelgeving verstoren, waardoor informele werkregelingen ontstaan. De studie illustreert hoe dit leidt tot een proces van individualisering van risico's en verklaart onbetaalde arbeid als de kost van de risico's die werkers dragen. In de derde publicatie (zie hoofdstuk 4) draait de discussie om de praktijken die platformwerkers ontwikkelen om een 'ruimte' van controle over hun werk te herwinnen. Een vergelijkende analyse van maaltijdbezorging en freelancen onthult verschillende regime types, zoals 'betaalgebaseerde controle' en 'tijdgebaseerde controle' voor maaltijdbezorging, en 'klantgebaseerde controle' en 'taakgebaseerde controle' voor online freelancing, die worden gevormd door de dynamische wisselwerking tussen de controlestrategieën van platformen en de pogingen van werkers om instemming te organiseren rond de opgelegde regels. Publicatie vier (zie hoofdstuk 5) onderzoekt conflicten over onbetaalde arbeid onder platformwerkers die maaltijdbezorging en huishoudelijke diensten verrichten. De analyse illustreert hoe platformwerkers onbetaalde arbeid actief beperken en doelbewust gebruiken om controle over hun inkomen te herwinnen, wat hen een gevoel van empowerment geeft. Dit toont de fundamenteel betwiste aard van uitbuiting in platformwerk. Het afsluitende hoofdstuk belicht de belangrijkste bevindingen en de implicaties voor theorie en beleidsvorming, en besteedt ook aandacht aan de beperkingen van het proefschrift die in toekomstig onderzoek kunnen worden aangepakt.

Appendix 3. PhDs in Social Sciences and in Social and Cultural Anthropology

<http://soc.kuleuven.be/fsw/doctoralprogramme/ourdoctors>