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RESEARCH ARTICLE

Resisting algorithmic control: Understanding the rise and variety of platform worker mobilisations

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Abstract

Algorithms are seen as effective for managing workers. Literature focuses mainly on the functioning and impact of algorithmic control on workers' experiences and conditions. The ways in which platform workers have organised collectively to regain control have received far less scholarly attention. This paper addresses this gap by making sense of the mobilisation dynamics of two platformwork categories: crowdwork (Amazon Mechanical Turk) and work on-demand (food-delivery couriers). These are salient mobilisation cases, as these workers have resisted algorithmic control by adopting specific organising modes, action repertoires and collective solidarities. By analysing a combination of extant literature and policy reports concerning each category of mobilisation forms at a global level over 5 years, the study elucidates why and how these workers were able to act without the involvement of traditional trade unions by showing that specific supportive communities and political activism traditions were crucial in the rise and variety of mobilisation.

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KEYWORDS

algorithmic control, *Amazon Mechanical Turk*, food-delivery couriers, political activist tradition, supportive community, worker mobilisations

INTRODUCTION

Digital platforms are one of the most dynamic features of the global capitalist economy, whose emergence and diffusion have spearheaded technological and organisational innovations in an increasing number of economic sectors, transforming production practices, working conditions and cultural consumption patterns. Platforms are technoproductive infrastructures, where value creation is based on data extraction and analysis, intermediating between producers and consumers, enabling exchanges at an unprecedented scale and pace. They are, therefore, intermediaries that bring together various users: customers, advertisers, service providers, producers, suppliers and even physical objects (Howcroft & Bergvall-Kareborn, 2019). Platform work encompasses a working context in which users exhibit a relation of economic dependence on the platform with which they collaborate (Wood et al., 2019).

Although platforms exhibit a significant variety of organisational forms, the common underlying feature is their (relatively) high level of technological innovation in the labour process and workforce management (Gandini, 2019). As Joyce and Stuart (2021, p. 166) put it, 'platform management methods [are] a composite of technological and organisational forms that managers can deploy, in various combinations, in order to organise work and manage workers and to exercise a degree of control over the labour process'. Among these, the most significant is the algorithm, a mathematics-based mode of work control and organisation leading to optimisation mechanisms and performance ratings (Kellogg et al., 2020). Algorithmic control systems optimise the worker-control process by analysing and using workers' performance ratings, metrics and data collected from clients and users to make decisions about the allocation of future tasks and worker retention (Wood et al., 2019). Their introduction has allowed firms to improve their efficiency in terms of decision-making, coordination processes and organisational learning (Kellogg et al., 2020). Scholars in various disciplines have devoted a great deal of attention to how these control mechanisms operate, predicting that their further development will lead to fully automized workforce management (Meijerink & Keegan, 2019; Waldkirch et al., 2021). In such a view, workers' agency is doomed to be negligible or completely absent (Moore & Joyce, 2020). Considering this, platform work is reckoned to be difficult, if not impossible, to organise from a labour union perspective (Kellogg et al., 2020).

However, new forms of labour conflict have recently been emerging and spreading in various platform work sectors (Woodcock, 2021). Challenging platform-enabled algorithmic control, these workers have managed to take various collective actions to demand better conditions in terms of pay, labour rights and employment status (Bessa et al., 2022). Few studies, however, have examined and compared the mobilisation forms deployed by various types of platform workers (for an exception, see Woodcock, 2021). The aim of this study is to explore the specific organising modes, action repertoires and collective solidarities (della Porta & Diani, 2020) that the two main categories of platform work—crowdwork and work ondemand via apps (De Groen & Maselli, 2016)—have adopted to ameliorate their working conditions. In particular, it examines the mobilisation forms of *Amazon Mechanical Turk*

workers, for the crowdwork type and food-delivery couriers, for the work-on-demand type. These platform work categories represent salient cases of algorithmic resistance (Panteli et al., 2020; Woodcock, 2021), as they have embraced specific organising modes, action repertoires and collective solidarities (Fieseler et al., 2019; Joyce et al., 2020), making their comparison particularly worthwhile.

Understanding platform worker mobilisation processes

Scholarly literature agrees broadly on two defining criteria upon which a specific taxonomy of platform work can be built: the work-delivery location; and the skills required to perform it. Regarding location, the distinction is between virtual and physical work delivery. Some activities are both managed and executed online and thus may be delivered to clients anywhere in the world (global). In contrast, other activities are managed online but are carried out offline and, therefore, rooted in labour markets that are spatially and physically localised (local) (Huws et al., 2016). The first type of activity is often referred to as *crowdwork* and the second is work on-demand via apps. Concerning skills, one can distinguish between high-skilled activities (providing creative or IT services) and low-skilled activities (involving short, repetitive routine tasks or click work). Comparison of the above criteria produces a platform-work taxonomy (see Table 1).

How have these different worker categories been able to mobilise? As the aim of this study is to make sense of forms of collective mobilisation, high-skilled platform workers are not considered in the analysis, since there is an absence of reports on their participation in collective organisation. Unsurprisingly, thus far, collective platform work mobilisations have involved mostly low- or medium-skilled workers (Wood et al., 2021). Therefore, this analysis considers only these platform workers' mobilisation forms (Table 1, first row).

As highlighted by several scholars applying labour process theory to platform work (Gandini, 2019; Kellogg et al., 2020; Maccarrone et al., 2023; Tassinari & Maccarrone, 2020), an analysis of platforms' labour processes seems a necessary condition to account for the unfolding of collective action processes among these workers. In these authors' view, the labour process within both crowdwork and work on-demand showcases some inherent contradictions that are likely to trigger the emergence of antagonism and worker solidarity. According to Maccarrone et al. (2023, p. 2),

The first [contradiction] is inherent in the process of valorisation adopted by gig economy companies, which aims to minimise labour costs through ever decreasing or fluctuating rates of remuneration and pervasive insecurity and uncertainty over

TABLE 1 Platform work taxonomy

	Online/global work delivery	Offline/local work delivery
	Crowdwork (remote gig economy/ microwork)	Work on-demand via apps (local gig work/digital labour on-demand)
Low-skilled	MTurk	TaskRabbit, Uber, Deliveroo
High-skilled	UpWork, 99Design, CoContest	TakeLessons

Source: De Groen & Maselli (2016).

working time. These practices can lead to shared perceptions of injustice and act as a powerful trigger of antagonism among gig workers. The second relates to the specific 'sociotechnical structures' of managerial control (Anwar & Graham, 2020) in-built in platforms' design, such as algorithmic management and untransparent rating mechanisms. Although these practices vary in their detailed operation depending on platforms' architecture (Lei, 2021), generally they can lead workers to experience asymmetric information vis-a-vis the platforms' processes, perceived opacity in managerial control and exposure to clients' arbitrary behaviours—all factors that can intensify perceptions of subordination and hence breed antagonism.

However, the actual mobilisation forms espoused by these workers have been heterogeneous across platforms and geographical contexts (Vandaele, 2021). In this sense, although the contradictory character of platforms' labour process can be considered as facilitating these worker mobilisations (Tassinari & Maccarrone, 2020), it cannot account for the variation in terms of organising modes, action repertoires and collective solidarities. To understand this diversity, it is, therefore, necessary to look outside the labour process, to the political, social and organisational context within which platform workers are located (Cini et al., 2021; Joyce et al., 2022).

Industrial relations (IR) literature has traditionally emphasised the role of trade unions in initiating worker mobilisation processes (Frege & Kelly, 2004), devoting little attention to alternative forms of organisation and the capacity of workers themselves to play a central role in such processes (Atzeni, 2021). Yet, the categories of platform workers under investigation have been able to take collective action mostly outside existing unions (Bessa et al., 2022) by using political, cultural and identity networks, forged in previous experiences of militant struggles and the broader social environment. Therefore, to understand these mobilisations, one must explore how sociopolitical contextual and agential factors—normally not considered in IR studies—have shaped these mobilisation forms. In line with this view, a growing strand of such studies has recently highlighted how various resources and opportunities for precarious and platform workers' organising can be developed and exploited in their mobilisation efforts outside the traditional union framework and connected with specific features of the sociopolitical context (Joyce et al., 2022). Among these features, the support of local communities, the role of ethnic ties, the presence of rank-and-file unions and labour activists have been seen as key (Alberti & Però, 2018; Ford & Honan, 2019; Rizzo & Atzeni, 2020).

In parallel, social movement studies have similarly considered the importance of resources and organisational structures embedded within the communities where movement participants live and develop their informal networks (della Porta & Diani, 2020). These studies have considered the role of a vast array of actors and the relevance of the noninstitutional sociopolitical context as pivotal conditions explaining social movement formation processes. Factors, such as the protest culture, the informal networks of activists, the presence of social movement organisations and the mobilisation tradition, have been often identified as crucial in spurring mobilisation processes.

Integrating this strand of IR literature with social movement research seems particularly helpful for making sense of platform worker mobilisations, where bottom-up organising forms and social movement types of action have been mixed, giving rise to a new array of labour actors and mobilisations (Joyce et al., 2022). Given the social and political connections that platform workers maintain within the wider environment beyond the workplace, such studies

may offer a useful toolkit to elucidate their mobilisation dynamics. Specifically, through a systematic analysis of this scholarship (see Methodology and Supporting Information: Appendix), I have singled out and 'actively categorised' (Grodahl et al., 2021) two sets of factors, whose adoption—I argue—is crucial to understanding the emergence and variety of platform—worker mobilisations. I call them: *supportive community* and *political activism tradition*. Let me present these in turn.

Supportive community

Work settings have their own logic but cannot be properly understood in isolation from the social relations constituting the conditions for the reproduction of the capital-labour relation itself (Atzeni, 2021). Understanding workers' organising requires an appreciation of the fact that what occurs in the workplace is shaped by what occurs outside it, because the perpetual reconstitution of capital-labour relations is fundamentally shaped by the social contexts within which this occurs (Cini, 2021). In social movement literature, the communities where movement participants live are considered as relevant resources for their mobilisation capacities (della Porta & Diani, 2020). Likewise, critical IR scholars, such as Alberti and Però (2018), have identified the presence of strong, supportive, ethnic communities as important sources for the organisational practices of precarious migrant workers employed in the lowpaid services sector in London. Other critical IR studies have emphasised the support of neighbourhood and solidarity groups in the organisation of mobilisations in delivery and wider logistics sectors in Italy (Cini & Goldmann, 2021). In a similar vein, Korczynski (2003) has shown how the formation of informal 'communities of coping', made up of colleagues and friends, was key in developing processes of solidarity among frontline service workers in four call centres in Australia and the United States. These resources are to be understood in a broad sense, mainly or often consisting in the social contacts that workers have. For instance, for Nowak (2019, p. 26), these may be 'family and communal bonds, neighbourhood contacts, political or social organisations, knowledge of a region or neighbourhood or relations to family members in other regions or countries.'

Identifying the presence of a supportive community means, therefore, that, to account for the current labour mobilisations, one needs to explore the nexus between the workplace dynamics and the surrounding environment. The relevance of the role of specific supportive communities in accounting for the rise and variation in platform worker mobilisation processes may derive from the fact that platform work is still not very institutionalised in IR terms and this feature may amplify the influence of the social context on it.

Political activism tradition

A second (and related) factor, identified by these studies at the intersection between social movement research and critical IR literature, appears to be relevant for making sense of platform worker mobilisations and their variation globally: the political activism tradition in the context in which these mobilisations occur (Nowak, 2019). Such tradition entails 'both the political activists and their backgrounds, their experiences of activism ..., as well as the "social movement infrastructures" (e.g., collectives, social spaces, associations, etc.) embedded in the respective context of mobilisation' (Cini et al., 2021; p. 7). Social movement scholars have

effectively depicted how this tradition operates within a specific context, when analysing the 1960s movements and their enduring effects on specific movements' mobilisation forms in various countries (della Porta & Diani, 2020). For instance, McAdam (1982) highlighted how the 1960s American civil rights movement strongly shaped the organising modes, action repertoires and collective solidarities of all ensuing US social movements. Put differently, the legacy and experience of past struggles create a political tradition of activism in a given context on which the next generations of activists and rank-and-file leaders draw to sustain their mobilising efforts. In this sense, particular mobilisation forms may arise in specific periods and then evolve and spread across time and space.

The role of this tradition seems particularly relevant for understanding platform worker mobilisation dynamics and their diversity. As most of these workers do not share a physically delimited workplace and do not have formal channels of institutional representation, their mobilisation forms appear dependent on the political activism tradition in these workers' broader context. As highlighted by Maccarrone et al. (2023, p. 6) in their study on food-delivery-worker mobilisations, such a tradition may 'shape both the opportunity to activate solidaristic relationships that can support gig worker mobilisation; as well as the organisational attitudes, resources and expertise that gig workers themselves can draw on.' More broadly, the distinct political activism traditions in platform workers' (online or onsite) context may provide them with different abilities, scripts and resources to employ in their mobilising efforts. Such diversity of traditions may, in turn, account for the variation in their mobilisation forms.

To sum up, integrating IR scholarship on platform workers' organising with insights from social movement literature is particularly helpful for identifying and making sense of the mobilisation forms of the platform workers under investigation. This integrated approach seems better able to capture the actual 'processes (rather than ... predetermined, unquestioned forms)' (Atzeni, 2021; p. 2) underpinning their mobilisation dynamics, which have been mostly outside the traditional representation channels and have involved resources outside the working environment.

In the empirical analysis, the relevance of specific *supportive communities* and *political activism traditions* for interpreting the rise and variety of mobilisations of *Amazon Mechanical Turk* workers and food-delivery couriers globally will be analysed and discussed, focusing on three mobilisation dimensions that social movement research sees as key (della Porta & Diani, 2020): organising mode, action repertoire and collective solidarity.

METHODOLOGY

The overall logic of my case selection is exploratory (Grodahl et al., 2021). I did not adopt any *ex-ante* criteria of comparison; rather, I focused on two distinct cases of platform work identified in a systematic review of the scholarly literature as instances of manifest resistance: *Amazon Mechanical Turk* workers and food-delivery couriers. The two cases share important commonalities in some dimensions, whilst differing in others. In the analysis, I considered the role of such similarities and differences in shaping the observed outcome (i.e., their mobilisation). The main difference between the two cases relates to their labour process, that is, the work delivery site, online for *Amazon Mechanical Turk* workers, onsite for the food-delivery couriers: this feature has contributed to shaping their collective resistance differently. The main similarities relate to the mobilisation context: in both cases, the support of traditional

unions and their resources was negligible. Therefore, the relevance of other factors was postulated.

To identify these factors and develop an explanation suitable for the two cases examined, I have drawn on a building-theory qualitative approach (especially Corbin & Strauss, 1990; Grodahl et al., 2021), whereby 'hypotheses are constantly revised during the research until they hold true for all the evidence concerning the phenomena under study' (Corbin & Strauss, 1990; p. 11). This iterative process enabled me to build a theoretical model accounting for the two distinct categories of platform workers.

The empirical material used in this study comes from a systematic collection of scientific publications and policy reports over the last 5 years (see Supporting Information: Appendix). This material was collected according to the purposeful-sampling criterion (Corbin & Strauss, 1990). The aim was not to provide statistically representative evidence of the phenomenon investigated, but rather 'to build a theoretical explanation by specifying phenomena in terms of conditions that give rise to them' (Corbin & Strauss, 1990; p. 9). My purpose was to gather all the relevant material specifying the conditions giving rise to platform worker mobilisations in the global context. Regarding the practical collection and analysis of the material, I undertook three sequential steps:

First, I started searching *Google Scholar* for the most cited works (journal articles, books, book chapters and policy reports) concerning platform worker mobilisations over the timeframe 2017 to July 2022 (at least 50 citations). This period was chosen assuming that the first scholarly works on these mobilisations dated to 2017, as the first journalistic accounts were in 2016. This initial screening revealed nine studies (seven journal articles, one book, one policy report). During this phase, the saliency of food-delivery and *Amazon Mechanical Turk*-worker mobilisations emerged. Therefore, I decided to investigate these two cases. At this stage, I also formulated my initial explorative hypothesis on traditional trade unions' marginal involvement.

Second, I looked more closely at all publications cited in the nine studies to gather more material on the two chosen cases. Another nine items (five policy reports and four older journal articles) were identified and included in the data set. With this additional material, I tried to specify alternative hypotheses on the rise of these mobilisations in the absence of traditional labour actors. The relevance of social movement actors and resources was advanced. Therefore, I inserted the 18 items collected on *Google Scholar's* search engine to find more recent publications looking at non-trade-unions-led mobilisations, resulting in another 25 items (three policy reports, two book chapters, 17 journal articles, three books).

Third, I commenced this study phase by carefully analysing all the material gathered concerning the alternative hypotheses. This 'active' and 'theory-building' analysis of the material—resembling Grodahl et al.'s (2021) 'active categorisation' process—enabled me to further specify the conditions and actors giving rise to the mobilisations examined and, thus, formulate the following explanation: specific supportive communities in which these workers are embedded and related political activism traditions shape the rise and variety of their mobilisations (see Figure 1).

Understanding how these features, also impacting on the work setting (and vice versa), were exploited by *Amazon Mechanical Turk* workers and food-delivery couriers in their efforts to adopt and develop specific organising modes, action repertoires and collective solidarities is the focus of my empirical investigation.

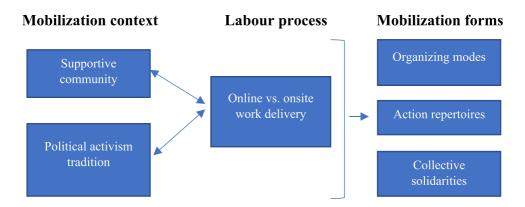


FIGURE 1 Understanding the rise and variety of platform worker mobilisations [Color figure can be viewed at wileyonlinelibrary.com]

ANALYSIS

Understanding the rise and variety of mobilisation forms

In attempting to make sense of how these categories of workers have been able to mobilise, this section presents and discusses, how *Amazon Mechanical Turk* workers and food-delivery couriers took collective action and adopted specific mobilisation forms. In the analysis of the cases, the roles played by particular supportive communities and political activism traditions—the paper's theoretical argument—are highlighted and assessed.

Amazon Mechanical Turk workers

Amazon Mechanical Turk is an online platform created and provided by Amazon. It operates as an online marketplace connecting workers to clients to perform several types of online microtasks, such as identifying specific content in an image or video, writing product descriptions or answering questions (Bergvall-Kåreborn & Howcroft, 2014; Fieseler et al., 2019). A peculiarity of this study is that Amazon Mechanical Turk clients can refuse to pay workers if they are not satisfied with the workers' task performance. Consequently, Amazon Mechanical Turk workers often perform these tasks for free (Altenried, 2020). Dispersed across the globe, although mostly based in India and the United States (Jones & Muldoon, 2022), Amazon Mechanical Turk workers have limited opportunities for sociality, and, thus, little propensity to collective action, given the online nature of their work activity.

Despite these challenges, various forms of collective action have emerged over the past years (Moore & Joyce, 2020; Woodcock, 2021). Scholarly analysis has converged on two factors, unconnected to traditional labour actors and resources, that have enabled these workers to act collectively. These factors are the presence of *online communities*, where workers can exchange ideas and information about their work, express their outrage and even organise collective action (Panteli et al., 2020); and the support of *a political network of engaged academics and activists* and more experienced workers who are able to lead these workers' mobilising efforts (Irani, 2015). Albeit presented and discussed separately for analytical ease, these factors are

intimately related and have jointly shaped *Amazon Mechanical Turk* workers' organising modes, action repertoires and collective solidarities.

Online communities

The first factor identified as pivotal for these worker mobilisations falls within the *supportive community* element of the theoretical framework. Lacking the physical proximity of colleagues with whom to share grievances or a union to ask for support, *Amazon Mechanical Turk* workers turned to their closest or most familiar communities to find help: the universe of social networks and online forums (Wood et al., 2019). By creating and joining such forums for mutual support, these workers were able to get to know one another, share their working experiences and socialise and plan future actions to take against bad clients and *Amazon* (Fieseler et al., 2019). Some of these workers turned such spaces into a kind of political site for collectively voicing their collective outrage (Kellogg et al., 2020). Indeed, once part of these spaces, many found that they had similar grievances to share with other workers and, thus, started enjoying the comradery and the support of their digital colleagues (Maffie, 2020). They, therefore, developed a sense of group identification and collective solidarity, both of which constitute the emotional pillars for the organisation of any kind of political action (Cini & Goldmann, 2021).

One of these worker-run web forums was *Turkopticon*, a browser plugin for and created by, some of the more experienced *Amazon Mechanical Turk* workers along with engaged academics and political activists. *Turkopticon* enables these workers to share advice with one another, negotiate work norms and strive to establish more interactive and participatory relationships with employers (Kassem, 2022; Panteli et al., 2020). In this forum, the most committed and knowledgeable workers helped newer workers aboard and provided them with support (Joyce & Stuart, 2021). More notably, through *Turkopticon*, *Amazon Mechanical Turk* workers were able to build and develop collective solidarity and, on occasions, coordinate campaigns of work refusal, thereby engaging in an innovative form of (digital) strike action (Woodcock, 2021).

Turkopticon was also relevant for undertaking another set of coordinated actions against the Amazon Mechanical Turk platform, that is, reversing the information asymmetries characterising the online market. Indeed, this platform incorporates only a one-sided evaluation mechanism: only clients can evaluate workers and not the other way around. Turkopticon offered a counter-review system, allowing workers to rate requesters. Consequently, Amazon Mechanical Turk workers were able to evaluate their pay, speed of payment, fairness of their work review and quality of communication. These ratings were displayed by Turkopticon directly on the platform beside the requests, with bad ratings highlighted. Turkopticon thus provided a place for workers to help one another with information and their experiences about employers, avoiding requesters with a bad reputation (Irani, 2015).

More importantly, this alternative rating system allowed *Amazon Mechanical Turk* workers to make their relationships with the platform visible and to call it to account (Altenried, 2020). *Turkopticon*, thus, represents an internal and specific voice opportunity for these workers, who from time to time have been able to orchestrate brand-shaming campaigns against *Amazon* to some success. These successes sparked an interest among some *Amazon Mechanical Turk* workers in developing a higher level of politicisation, open to potential forms of proto-unionisation (Salehi et al., 2015). As reported by the main organiser of *Turkopicon*'s brand-shaming campaign against *Amazon*:

When we first began *Turkopticon*, the reaction workers had was: 'We don't want to be in a labour union. Is this going to turn into a union thing?' *Turkopticon* is not a labour union and was not founded with formal unionisation in mind. But over the years, it seems workers have become more open to how unions can help them. They see how recalcitrant *Amazon* has been on making changes. (Irani, 2015; p. 226)

Consequently—as highlighted in these studies—*Amazon Mechanical Turk* workers were more likely to develop a form of shared collective identity and a willingness to political action if they joined and participated actively in this forum outside their work setting (Kassem, 2022; Panteli et al., 2020). More broadly, interworker communication via digital technologies seems to have partly replaced traditional forms of worker organising, such as trade unionism, leading to the development of a peculiar form of networked solidarity among spatially and temporally fragmented workers, in turn facilitating their politicisation process (Wood et al., 2021). Spurred by this process, several of these workers have also begun to see the platform for which they provide their services, *Amazon*, as a protest target (Salehi et al., 2015). In brief, the platform itself with its opaque form of algorithmic control has become a specific target of their actions.

A political network of engaged academics and activists

In this more conflictual (and political) orientation vis-à-vis the company, the support of a political network of engaged academics and activists played a key role (Irani, 2015). This network of people operates as an emerging tradition of activism globally-although based mostly in the United States (Panteli et al., 2020)—on which Amazon Mechanical Turk workers can draw and build to develop their forms of collective action. These political experiences of online activism, involving a joint effort of both activists and academics, are not completely new. Their rise dates to the late 1990s with the appearance of forms of cyber-activism and the emerging hacker culture associated with the mobilisations of the global justice movement and its goal to free the Internet from takeover by corporations (della Porta & Diani, 2020). This factor can be seen as the online and global translation of what I have called the political activism tradition. In short, it falls within the second set of factors identified as relevant for platform workers' mobilising efforts. More notably, this network of people, with progressive political leanings and previous experiences of participating in struggles involving online workers (Altenried, 2020), has provided Amazon Mechanical Turk workers with logistical and political know-how-such as collaborating in designing and setting up online forums and politically guiding the discussion—fundamental to their various collective actions. These activists and engaged academics were able, together with the most experienced and politically involved Amazon Mechanical Turk workers, to co-organise specific public campaigns to improve these workers' conditions with the aim of denouncing corporate platforms' misbehaviour to the global public (Irani, 2015).

An example of joint action between activists and *Amazon Mechanical Turk* workers was the establishment of *Dynamo*, 'a platform for the creation of [*Amazon Mechanical*] *Turker* publics that aim for action and change' (Salehi et al., 2015; p. 1630). To date, this platform has successfully targeted the global public in two campaigns. In 2014, a group of *Amazon Mechanical Turk* workers and researchers developed 'guidelines for academic requesters on the platform *Mechanical Turk*' (Berg et al., 2018; pp. 97–98). The guidelines explained how to create 'good' microtasks and what fair pay should look like. The purpose of these guidelines was not only to help *Amazon Mechanical Turk* workers develop better conditions with their clients but

also, and more importantly, to sensitise public opinion about bad practices enforced by the company (Jones & Muldoon, 2022). *Dynamo*'s second campaign directly targeted Jeff Bezos, the Amazon CEO and head of the *Amazon Mechanical Turk* platform. Workers were asked to write a personal letter 'to let Jeff Bezos... and the rest of the world know... that *Turkers* are not only actual human beings, but people who deserve respect, fair treatment and open communication' (Salehi et al., 2015; p. 1628). The campaign was widely reported in various media outlets. This initiative was 'primarily aimed at the public sphere to exert pressure on the platforms, appeal to their corporate social responsibility and achieve an improvement in working conditions' (Heiland, 2020; p. 47). More specifically, this campaign, espoused predominantly by Indian workers, succeeded in making *Amazon Mechanical Turk* change its payment mode from cheque to direct payment. This success generated further collective identity and support for the campaign on the forum (Panteli et al., 2020).

Overall, these various and diverse experiments organising the *Amazon Mechanical Turk* workers exemplify these workers' noticeable capacity to address some shared concerns about their working situation and to fight back, without the support of traditional unions (Joyce et al., 2022). These workers have instead formed and relied on various social-media-based communities, a sort of 'communities of coping' (Korczynski, 2003), where they could find advice regarding problems with their platforms, deal with difficult clients as well as late and nonpayment and resist unpaid labour. More importantly, involvement in such communities helped these workers to develop a shared feeling of solidarity, which, in conjunction with the key intervention of movement activists and engaged academics capable of turning such spaces of mutual aid into spaces of politicisation, has been pivotal in spurring their collective actions (Wood et al., 2021).

However, no study on *Amazon Mechanical Turk* workers appears, thus far, to have ascertained whether and how these workers have been able to use online communication to go beyond the virtual space and set up physical and localised forms of gathering or association. Their work's web-based nature means they are unlikely to convene within a shared physical space and support one another by organising their discontent (Kassem, 2022). In short, *Amazon Mechanical Turk* workers seem limited to mostly online actions. Even to address issues related to specific geopolitical contexts, such as the successful campaign to change Indian workers' payment system (Panteli et al., 2020), no locally based form of organisation was created. This circumstance represents a clear obstacle to the rise of a more stable collective identity and the development of a more political action repertoire.

Food-delivery couriers

Deliveroo, Foodora and Glovo are delivery platforms that offer last-mile urban delivery services for food products. More specifically, these platforms operate as urban coordinating networks, which rely upon apparently contrary logics of decentralisation and recentralisation (Cant, 2020). They articulate networks of food-service production through restaurants and recentralise relationships between those networked sellers and consumers via the platform interface through a projection of real-time measures of the delivery route. This is how the vertical and centralised nature of algorithmic control operates in the sector (Griesbach et al., 2019).

However, this form of control has been contested since the early days of such platforms' establishment (Lei, 2021). Food-delivery couriers have, in fact, been able to organise a vast array of collective actions globally in recent years to improve their working conditions,

especially focusing on pay and employment status (Stuart et al., 2020). Traditional unions have been involved in only a minority of cases; in the global South, their involvement has been even lower (Bessa et al., 2022). Their mobilisation forms have been characterised by great heterogeneity, both across and within countries. At least in this early phase, such variation seems to have depended more on specific characteristics of the social context of mobilisation than on the traditional features of the IR system (Heiland, 2020). Like the case of *Amazon Mechanical Turk* workers, the scholarly literature reviewed showcases how noninstitutional sociopolitical factors (Joyce et al., 2022), such as the role of *various communities of support* and the presence of *specific traditions of political activism*, appear to have had a great influence on couriers' mobilisation forms. I address each factor separately.

Specific traditions of political activism. Europe has been the hotbed of couriers' mobilisations in the first years of labour conflicts against the transnational food-delivery platforms (Woodcock, 2021). Most of these mobilisations were supported by rank-and-file unions, social movement organisations and far-left parties (Stuart et al., 2020). In this sense, even in an area with an established IR tradition such as Europe (Nowak, 2021), the role of nontraditional labour actors—referred to as the political activism tradition in the theoretical framework—has been pivotal in the emergence and variety of couriers' mobilisations (Bessa et al., 2022). The distinct traditions of collective organising, related to couriers' various mobilisation contexts, have shaped these workers' organising modes, action repertoires and collective solidarities in specific ways. Where such tradition is influenced by social movements and their organisational culture, self-organisation has been dominant, whereas, where it is dominated by rank-and file-unions and far-left parties, a radical form of union organising has been more common.

Workers' self-organisation was a relatively typical pattern in the first years of courier mobilisations in Italy, Belgium and France (Heiland, 2020). Almost all the protests and strike actions that have taken place thus far in these countries have, in fact, been organised by informal collectives of workers. In making sense of this specificity for the Italian context, Cini and Maccarrone and Tassinari (2021) hypothesised that the existing protest culture based on social movement organisations led couriers to opt for self-organisation, meaning, the formation of informal worker collectives in interaction with the local activist scene. This was the form of organising that reflected the tradition and resources with which these workers were more familiar. Indeed, the first food-courier mobilisations were executed by the workers themselves, organised in collectives and informal unions with the key supporting role of political activists and social centres, in the cities of Milan (Deliverance), Turin (Deliverance Project) and Bologna (Riders Union). All these mobilisations were organised as a proto-strike, combining logging out of the app with mass pickets and an online campaign on social media. Similar dynamics of influence in the political tradition of (self)organising courier mobilisations were manifest in France and Belgium. In France, food couriers' self-organised protests to contest the opacity of platforms' algorithms have been frequent over the last years. One of the most politically significant contestations was a strike staged by the self-organised collective of workers, Collectif Livreurs Autonomes de Paris, during the 2018 Football World Cup final to affect platforms' profits during one of their most profitable weeks (Heiland, 2020). In Belgium, workers founded the Collectif des coursier-e-s/KoeriersKollectief and organised couriers across different platforms, set up a strike pot and held several protests in 2017 and 2018.

By contrast, in Spain, Germany and the United Kingdom, food-delivery couriers' collective mobilisations have been organised mostly by rank-and-file unions, giving rise to radical forms of unionism (Joyce et al., 2022). In these countries, such unions, with a long-standing presence and a political, class-struggle orientation, have, in fact, been able to intervene in the

food-delivery sector and attract the consensus of several courier groups in their organising efforts (Cini et al., 2021). In Spain, *Deliveroo* couriers went on strike in Barcelona and Madrid in July 2017, organised by various rank-and-file unions and after further disputes some of the protesters set up an alternative cooperative delivery platform. In Germany, *Foodora* couriers mobilised by relying upon the independent rank-and-file union *Freie Arbeiterinnen und Arbeiter Union*, with an anarcho-syndicalist orientation. In 2017, this union took direct action by organising various protests in the form of flying pickets in front of the company's offices, where hundreds of couriers gathered to raise their claims for improved working conditions (Heiland, 2020). In the United Kingdom, couriers have been organised since 2016 by the *Independent Workers of Great Britain* (IWGB), a rank-and-file union that in earlier years managed to organise precarious migrant workers in sectors such as cleaning and security (Cant, 2020). When protests started at *Deliveroo*, IWGB organisers went down to offer workers their help in coordinating the formulation of demands and negotiating with management, to avoid victimisation of individual workers.

The role played by specific activism traditions in shaping these mobilisations has also been central in several countries of the global South, especially in Latin America and Southeast Asia (Stuart et al., 2020), where self-organisation processes have been common. In these regions, informal coalitions of workers and social movement activists have proved essential resources for couriers' mobilisation. Since 2020, these coalitions have organised wildcat strikes and street demonstrations against *Uber Eats*, *Glovo*, *Rappi* and *iFood* in Costa Rica, Guatemala, Brazil, Mexico, Ecuador, Chile, Peru and Argentina (Basualdo et al., 2021). The strikes were called in protest at working conditions, particularly following the global Covid-19 pandemic. They built on demands being made in various countries that demonstrate a familiar pattern: higher wages (including a minimum rate), protective equipment for workers, improved terms and conditions, lack of accountability and deactivation by the platform, as well as justice for attacked or killed workers (Bessa et al., 2022).

Various communities of support

The role of various communities of support surrounding couriers' work environments has been another important—and related—factor facilitating their mobilisations (Alberti & Però, 2018). This support has been evident in all couriers' mobilisations across Europe (Heiland, 2020). It materialised, for instance, in logistical help from the social centres, occupied spaces and neighbourhood organisations in the couriers' urban environment to hold and organise meetings and protests—a 'militant urban space' (Cini & Goldmann, 2021)—or in the affective and organisational backing of the couriers' ethnic communities—a 'community of struggle' (Però, 2019).

The centrality of these communities in the organisation of couriers' mobilisations has been even more pronounced in the global South (Nowak, 2019). In most of these countries, employment relations are, in fact, marked by informality and vulnerability, the IR system is generally scarcely formalised, and, consequently, traditional trade unions play a marginal role (Atzeni, 2021). Therefore, a pivotal role is played here by various community and neighbourhood organisations operating in the localities and able to provide logistical and organisational support to the couriers in their mobilising efforts (Basualdo et al., 2021). In this sense, it was couriers' reproduction space—their local communities' social webs—that became the centre of political organisation (Cini, 2021).

In some South American countries, such as Brazil, Argentina, Peru and Chile, combative segments of this workforce have been able to carry out disruptive actions and resist various

food-delivery corporations, especially *Glovo* and *Deliveroo*, with the help of their local communities, including friends and families (Bessa et al., 2022). These organisations have, indeed, operated as a key organisational infrastructure for couriers in terms of both material supply (food, legal assistance) and political support (strategies, tactics for action). Similar mobilisation dynamics have occurred in some Asian and African countries (Joyce et al., 2020). In Indonesia, for instance, the creation of grassroot community organisations of app-based transport drivers and neighbourhood members has provided these workers with political support regarding their work-related problems and broader social issues. Combining online tactics, such as brand-shaming, with onsite tactics, such as street demonstrations, in a kind of proto-strike, these organisations have been prominent in these worker mobilisations against transport platforms, at the expense of traditional union organising (Ford & Honan, 2019). Likewise, in Tanzania, similar grassroot organisations, consisting of solidarity groups rooted in the local community, have been crucial in the mobilisation of precarious workers in Dar es Salaam's delivery sector, by providing these workers with both infrastructural help and political backing (meeting spaces, legal and political assistance) (Rizzo & Atzeni, 2020).

Overall, these mobilisation cases across the globe seem to indicate that the political activism traditions and the local communities where couriers are based have been fundamental in the emergence and variety of mobilisations. Specifically, the variation in terms of organising modes seems to have depended on specific configurations of these two factors. For instance, a social movement kind of tradition seems to have led couriers to opt for self-organisation in some countries, other traditions to forms of grassroots unionism in other countries; some mobilisations have been supported by a peculiar urban militant environment, others by their community of care. However, their mobilisations have also shown some commonalities globally. Unlike *Amazon Mechanical Turk* workers, these workers have, for example, been able to perform (relatively) more conflictual action tactics and more enduring forms of solidarity. As discussed below, this might derive from the onsite nature of their work, providing them with some physical proximity and a solid embeddedness in the local context, seen as relevant conditions for these processes of militant mobilisation to occur.

DISCUSSION

Analysis of the scholarly literature has shown how both *Amazon Mechanical Turk* workers and food-delivery couriers have been able to stage innovative forms of action by relying on unconventional actors and resources. In this respect, the study is part of the emerging scholarly tradition at the intersection of radical IR studies and social movement research, examining the innovative forms of labour conflict involving precarious, migrant and platform workers occurring outside the traditional IR context (Joyce et al., 2022; Però, 2019; Rizzo & Atzeni, 2020; Tassinari & Maccarrone, 2020; Wood et al., 2021; Woodcock, 2021). In line with this tradition, the analysis has, indeed, stressed the relevance of two specific factors, unrelated to the IR institutional context, whose copresence is seen as pivotal to the rise of these workers' collective action: a supportive community (either online or local) and, along with/within it, the presence of grassroots organisations and political activists of various kinds. Whereas such communities helped these workers to build a sense of comradery and develop a feeling of solidarity—a necessary condition to overcome labour individualisation and fragmentation—the active intervention of various politically experienced actors enabled workers to transform these mutual aid spaces into political organisation sites. Specific constellations of movement activists,

grassroots unionists or simply engaged academics equipped these workers with resources, scripts and abilities—such as *Amazon Mechanical Turk* workers' capacity to coordinate an online forum and run a brand-shaming campaign on social media or food-delivery couriers' capacity to lead a political meeting and stage a 'proto-strike'—that proved crucial in spurring and sustaining their mobilisation efforts. Consequently—as also confirmed by several studies on non-union-led mobilisations (Cini et al., 2021; Però, 2019; Rizzo & Atzeni, 2020)—this activist tradition provided these communities with a cohesive collective voice, able to orientate workers politically and enhance their power vis-à-vis specific opponents. Put otherwise, although the support of their community proved to be a necessary condition for these workers to develop a sense of solidarity, it was only the active intervention of a specific constellation of more politically experienced actors that turned such solidarity into actual action.

However, the analysis has also stressed significant differences between the two categories of workers in terms of mobilisation forms. The existence of a locally based workplace, in which to convene and, potentially, organise, was key in determining the differences in such forms. The comparison indicates how the type of work delivery—local/offline versus global/online—strongly affects the actual expression of these workers' organising modes, action repertoires and collective solidarities (see Table 2).

Regarding organising mode, the main difference between the two categories is the capacity (or lack thereof) to build an onsite collective association. Whereas Amazon Mechanical Turk workers have thus far managed only to organise virtual communities (online forums), fooddelivery couriers have been able to integrate digital coordination tools with the offline organisation (local labour organisations or informal collectives). Although Amazon Mechanical Turk workers have demonstrated their ability to actively use online communication channels to create mutual help groups—communities of coping (Korczynski, 2003)—and, thus, initiate a process of digital organisation, they have also been facing several challenges in developing more stable organising forms, given their globally dispersed nature (Bergvall-Kåreborn & Howcroft, 2014). Although these innovative experiences of the online organisation have shown that these workers are far from totally isolated, the individual isolation characterising such a working environment (mainly home-based) can, for the time being, be considered a clear obstacle to the rise of a durable association (Kassem, 2022). Food-delivery couriers, on the contrary, have been able to build and develop various forms of enduring offline organisational networks and communities. This onsite capacity seems to stem from the physical proximity of their work delivery. Such proximity has, in fact, allowed these workers to transform their online networks and communities into localised and physical forms of organisation. Furthermore, the online and offline dimensions of their organising have reinforced each other over time: the one has nurtured the other and vice versa, in a virtuous circle of organising building.

In terms of action repertoires, the main difference between the two cases is identified in the degree of disruptiveness that their mobilisations exhibited. Whereas *Amazon Mechanical Turk*

TABLE 2 The mobilisation forms of Amazon Mechanical Turk workers and food-delivery couriers

	Amazon Mechanical Turk	Food-delivery couriers
Organising modes	Online	Offline
Action repertoires	Cooperative	Disruptive
Collective solidarities	Ephemeral	Enduring

workers have adopted mostly noncontentious tactics (public letters and campaigns), food-delivery couriers have integrated these tactics with more conflictual actions (strikes, demonstrations and blockades). In this sense, the existence of a physical workplace, potentially allowing for the creation of spaces for sociality and direct communication among couriers, seems to have played a relevant role in strengthening their collective mobilisation and making it more disruptive. Indeed, the physicality of their working location may have increased the mutual trust among workers, creating cohesive communities of struggle (Però, 2019) capable of adopting collective strategies and minimising the free-rider problem, which might be more pronounced in the case of *Amazon Mechanical Turk* workers. The vast and radical array of actions taken to date by the couriers across regions seems to confirm such a hypothesis.

Finally, regarding the formation of collective solidarities, these two platform-worker categories display another relevant difference. Although the adoption of digital communication tools was important in both mobilisation cases to forge and develop relations of trust among colleagues, the physicality of the daily interaction among couriers, sharing also a common workplace (the urban space), seems once again to have been key in the creation of enduring forms of solidarity. The experience of living in a physically shared working condition with other colleagues may have led to the formation of a relatively more stable collective identity among the couriers. By contrast, given the merely virtual nature of their interaction, a similar process of collective identity formation has not yet occurred in the case of *Amazon Mechanical Turk* workers. In their online mobilisations, these workers have established more ephemeral and unstable relations and this may have prevented them from developing a more cohesive and enduring form of solidarity.

CONCLUSIONS

The absence or the marginal intervention of traditional labour actors notwithstanding, new forms of conflict have been arising within the algorithmic control-led world of platform work. The present study contributes to this body of research by comparing and analysing the mobilisation forms of *Amazon Mechanical Turk* workers and food-delivery couriers. The paper contributes to this strand of IR literature in two respects, one empirical, the other theoretical.

Empirically, the analysis has highlighted how the specificities of organising modes, action repertoires and collective solidarities are strongly dependent on the type of work delivery—online for *Amazon Mechanical Turk* workers, onsite for food-delivery couriers. Although far from unexpected, the analysis underscores how locally based workers appear to have more solid roots for developing mobilisation capacities over time and space than online workers. The presence (or the lack) of physical social interaction among the workers themselves appears to be crucial in explaining such differences. The comparison presented here allows for a certain degree of generalisation, even if it is far from exhaustive of the complexity of platform work. Future studies are urged to further disentangle this complexity by exploring a wider range of sectors and workers.

Theoretically, this study has developed an analytical explanation that goes beyond the 'usual' IR factors to stress the centrality of alternative constellations of actors and resources. In line with other scholars combining social movement and radical IR studies to discern new forms of worker power (Bessa et al., 2022; Joyce et al., 2022), two factors were considered as key for understanding the mobilisation processes of *Amazon Mechanical Turk* workers and food-delivery couriers: specific communities where these workers could meet and share similar

concerns; and particular traditions of political activism on which they could draw to organise their collective action. The communities helped them build a sense of solidarity and identification and the traditions provided them with political scripts and resources, as well as the self-confidence needed to transform such solidarity into action. Both factors together facilitated the emergence of a new kind of 'associational power' (Silver, 2003), alternative to traditional trade unions. In both cases—and especially among food-delivery couriers—peculiar configurations of these factors, rooted in particular geopolitical contexts—played a critical role in shaping the variety of such power in terms of mobilisation forms.

However, this study also exhibits some limitations. It is important to bear in mind that mobilisation processes are by no means static phenomena and their characters change rapidly across time and space in unpredictable ways. Consequently, whether the theoretical model developed here can help to explain future mobilisations in these and other sectors is a question that can be answered only in the fullness of time.

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CONFLICT OF INTEREST

The author declares no conflict of interest.

ENDNOTE

Labour studies' classical explanation of why high-skilled workers rarely exert collective power at workplace level relates to the specific power that these workers are normally likely to exert to advance better professional conditions. I espouse Beverly Silver's distinction (2003) between workers' marketplace bargaining power and workplace bargaining power to clarify this point. Workers possess marketplace power in the labour market in terms of skills and competencies; it is normally exercised individually by a single worker to obtain better contracts and more favourable professional conditions. In contrast, workplace bargaining power is the power that specific groups of workers possess and exercise collectively to bargain with their employer. For example, traditional professionals, such as architects and lawyers, used to exhibit high levels of market power (their unique skills that they deploy with their clients to establish the price of their services), but relatively low levels of workplace power (their low willingness to organise collectively). In contrast, assembly-line workers exhibit low levels of market power (relatively low individual job skills to be valued and sold on the labour market) and relatively high levels of workplace power (their ability to organise collectively and disrupt the production process in their work setting). Furthermore and relatedly, high-skilled workers are often associated with entrepreneurial or managerial positions, that is, with jobs at firms' top hierarchical level and/ or equipped with full autonomy in terms of decision-making and control over work. Low-skilled workers are characterised by a very low level of control over work and the means of production (see Olin Wright, 1979, for an extended classical discussion). The degree of control over the labour process and the means of production seems to affect workers' bargaining strategies. Applying these insights to platform work, one might assume that high-skilled workers, who normally perform freelance or entrepreneurial activities, possess a high level of marketplace power and tend to use it at an individual level to obtain better jobs or conditions (see also Wood et al., 2021). In contrast, low- or medium-skilled workers, such as microtask workers or drivers with low levels of control over their work, are more geared towards collective organisation to improve their working conditions. For a valuable exception concerning the collective power of high-skilled platform workers, see Tarnoff (2020) on the rise of the tech-worker movement. In 2018, *Google* workers rose in more than 50 cities worldwide to protest against harassment, discrimination, racism and the abuse of power experienced in their work settings, a working situation that they identified as a toxic work culture. Although relevant in terms of organising capacities, such mobilisation had a different political goal from those investigated in this study: more to do with sociocultural issues than with issues related to economic conditions and algorithmic control (although emerging dynamics of workplace conflicts have been more recently observed in various high-tech companies across Europe and the United States: for a comparative perspective, see Rothstein, 2022).

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