

Is anonymity dead?

Doing critical research on digital labour platforms through platform interfaces

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ABSTRACT

Critical research into the gig economy frequently relies on using platform interfaces, platform mobile applications or websites, as intermediaries to contact and recruit participants. Yet, these methods are accompanied by significant ethical implications that are rarely considered. In this article, we look at the organisational features of platform interfaces for research and explore the ways in which, through their intensive knowledge about their users, they present additional challenges to researchers' abilities to (a) conduct independent research – for example by influencing the participant recruitment process and (b) establish and maintain respondent anonymity and researcher transparency. Our analysis is based on an international study of platform

workers which investigates working conditions and fairness in the gig economy in both geographically tethered gig work and cloudwork. We argue that the ethical boundaries of doing research through platform interfaces are shaped not only by researchers, but also by the platforms whose interfaces researchers use. Establishing and protecting the anonymity of research participants provides an acute example of this, as platforms have the potential to scrutinise the activities of researchers on their interfaces, and capture information shared between researchers and participants. The question of anonymity arises also in the reverse order: when platforms share personal information on workers, at a level not required by researchers. After building our argument, we propose a set of suggestions for promoting ethical research in the study of gig economy platforms.

KEY WORDS

digital labour platforms; human research ethics; platform economy; platform labour; informed consent; digital research methods; cloudwork; gig economy; anonymity

Introduction

Over the past decade, digital labour platforms have become a growing area of research as their economic relevance has steadily increased and they have penetrated more and more sectors of the economy. From food delivery to transcription services, and from ride-hailing to image identification to content moderation, platforms have not only transformed existing sectors and jobs, but also created new ones. Yet, as the gig economy grows at orders of magnitude, working conditions on digital labour platforms have become less secure, less protected and present greater health and safety risks for workers.

Digital labour platforms are ‘companies that use digital resources that mediate value-creating interactions between consumers and individual service providers’ (Woodcock & Graham, 2020). This definition focuses on platforms where labour is the main unit of transaction between consumers/clients and workers, though other types of platforms exist where different kinds of transactions take place (e.g. digital marketplaces where goods are exchanged or online content creation platforms).¹ The gig economy consists both of work that is transacted via platforms but carried out in a specific location (geographically tethered platforms) and of platforms that facilitate remote working (cloudwork) (Wood et al., 2019; Woodcock & Graham, 2020). Geographically tethered platforms require work to be done proximately to clients: e.g. delivering parcels from a warehouse, or driving a customer from one location to another. On cloudwork platforms, by contrast, work can be performed from anywhere in the world with an internet connection: e.g., data labelling, transcription or any other form of freelance service.

1 The distinction between digital labour platforms and other platforms may not always be clear cut, as content creation also involves the labour of the creators (e.g. YouTube, OnlyFans) or digital marketplaces might involve the sale of goods the sellers create themselves (e.g. Etsy).

Research that aims to critically study working conditions on platforms² confronts the platform interface, that is, the platform website or the mobile application, as both an entry point and an obstacle. In researching the gig economy, researchers have used platform interfaces to identify and contact research participants, arrange interviews or conduct surveys, as well as compensate workers for their participation in their studies. Although for some researchers the platform interface can be circumvented, for others it is indispensable. In this latter instance, without using the platform interface, it may be impossible to understand *who* works for the platform, *what* they do, *when* they work and *how much money they make*. Unlike many traditional firms, platforms generally have a highly heterogeneous workforce that is not confined to a designated workspace by the company; this makes contacting and engaging with workers challenging. This presents difficulties even in the so-called 'sticky' sectors of the gig economy where network technologies connect workers and clients in person (e.g. ride-hailing and food delivery), but it becomes even more difficult for cloudwork platforms, on which researchers encounter a huge number of geographically dispersed workers.

In addition to location, sampling emerges as an important problem. It is not always possible to identify platform workers in labour statistics or obtain a sample of platform workers from official labour surveys, as they rarely capture data on platform work as a distinct economic activity. Moreover, differences in the definition of platform work further complicate the comparability of available statistics. Even when researchers aim to design their own studies, complex subcontracting relationships, contractual arrangements and differences in job types and positions render achieving a representative sample of platform workers virtually impossible. Indeed, researchers have rarely, if ever, gained access to full worker rosters of platforms. These are considered proprietary and platforms have been largely unwilling to make such data public (even when individual worker details are anonymised). Absent this data, researchers are unable to evaluate the representativeness of their sample of workers because they have no reference group with which to compare their findings.

Where platforms have made their data available for research purposes, they have often done so by hiring academics as consultants or as collaborative partners. This approach, however, also raises questions about the integrity of research findings, as a rigorous peer-review process is constrained when research data are protected by non-disclosure agreements or other proprietary data policies. Under these circumstances it is difficult for researchers not immediately involved in the study to scrutinise the data, research methods or findings (Berg & Johnston, 2019; Gigeconomyresearchersunited, 2020). While there are select cases where government officials have legally required platforms to make data about their workforces and their operations publicly available, these cases are rare. Even in New York City, where the open data requirements oblige transportation networking platforms to report on the number of workers, miles driven and income earned, platforms have fervently resisted

2 From this point onwards in the article, platforms refer to digital labour platforms.

the introduction of these types of legislative efforts for sharing data (Kulwin, 2016:20). Other initiatives, be they from academia (Online Labour Index³), international organisations (e.g. the ILO, the OECD⁴) or governments to create general statistics on online labour market activity, suffer from scarce and often regionally biased data and are rarely comparable due to differences in definitions, standards and estimation methods (O'Farrell & Montagnier, 2020). Furthermore, these datasets (where available) are more likely to shed light on the frequency of this type of work, rather than provide information about the structure of the workforce, the working processes on the platforms or determinants of work quality.

As a solution, researchers have tried to utilise platform interfaces to identify and contact research participants. They have also used interfaces to arrange interviews, conduct surveys, distribute information about research projects or to compensate workers for their participation in their study by using the payment systems provided by the platforms (Chen, 2018; Dubal, 2017; Ford & Honan, 2019; Veen et al., 2020). Indeed, many cloudwork platforms have established a business model geared towards the solicitation and generation of data from multiple users which provide a ready-made infrastructure tailored to qualitative and quantitative research, especially survey-based methodologies. Platforms have presented exciting new possibilities for knowledge generation that maximise efficiencies, reduce costs and give researchers a high degree of control. However, they also intermediate the research process in ways which are not always obvious. This research process becomes even more complicated when the platform is both the facilitator and the subject of critical research.

In this article, we problematise the use of the platform interfaces to conduct critical research on digital labour platforms. We look at the organisational features of platform interfaces for research and explore the ways in which, through their intensive knowledge about their users, they present additional challenges to researchers' abilities to (a) conduct independent research – for example, by influencing the participant recruitment process and (b) establish and maintain informed consent and respondent anonymity. Our analysis is based on an international study of platform workers which investigates working conditions and fairness in the gig economy in both geographically tethered gig work and cloudwork. We argue that the ethical boundaries of doing research through platform interfaces get shaped not only by researchers, but are co-enacted by the platforms whose interfaces researchers use. This is especially the case for establishing and protecting the anonymity of research participants, as platforms can find ways to identify not only the research participants, but also the researchers, should they feel the need to do so and in some cases potentially access information shared

3 Online Labour Index (OLI) is the first economic indicator that provides an equivalent of conventional labour market statistics for the gig economy. It measures the real-time supply and demand of online freelance labour across countries and different occupations by tracking the available jobs on online platforms. See further at <https://ilabour.oii.ox.ac.uk/online-labour-index/>

4 There are various initiatives by the OECD, ILO and other initiatives to measure and document the number of workers on digital labour platforms. A 2019 OECD report estimates the size of the gig economy to be modest, between 1 and 3% of overall employment in developed countries and 0.3–0.5% in developing countries (Schwellnus et al., 2019). A more recent ILO report proposes that a wider range of the population, 0.3–22% of the population in Europe and North America, have performed gig work (ILO, 2021).

between the parties. The question of anonymity arises also in the reverse order – when platforms volunteer personal information on workers at a level not required by researchers. After building our argument, we then propose a set of suggestions for researchers studying digital labour platforms.

Doing research on platforms with the help of platforms

Despite their imposed power relations, there are various advantages to using platform interfaces for participant recruitment when conducting research about platform use, worker demographics and working conditions. Three of these are particularly notable. First, the interface provides a single point of entry to contact and engage with even the most geographically scattered workforce. Platform systems make communications easy and straightforward. Second, researchers can be fully confident that their respondents are bona-fide platform workers. In some cases, additional statistics provided by the platform can support sampling by highlighting different levels of engagement and activity, geographic location, sector and customer focus. Lastly, some platforms provide a payment infrastructure that can be used to compensate respondents for their time and contribution.

The developers and executives of digital labour platforms narratively position platforms as neutral intermediaries between workers and clients, providing the virtual space in which market transactions can occur. However, their role in economic relations in fact goes far beyond the digital manifestation of the traditional market square or yellow pages. Digital labour platforms produce, shape and govern markets and labour relations (Langley & Leyshon, 2017; Srnicek, 2017). Using algorithmic levers, the developers of platforms make decisions about how work is performed, valued and compensated, and how transactions take place. These decisions have far-reaching consequences for the distribution of power. The algorithmic management of labour may be more geographically protracted, less personal and less obvious, but its management is not (Moore & Joyce, 2020; Wood et al., 2019). Moreover, platform infrastructures are socially and institutionally embedded within existing dimensions of inequality – for instance the structural vulnerability of racialised workers, workers from the global South and women workers – and can serve to exploit and accentuate them (Cook et al., 2018; Dicken, 2015). Design decisions around platform infrastructures intersect with social conditions in specific ways. For instance, platforms' usability and accessibility to individuals from different backgrounds with different internet and technology literacy, their functionalities for filtering workers or users and their data privacy and security mechanisms all influence the social relations that they facilitate. Thus, interactions between workers and consumers, workers and platforms, and workers and researchers transpire, not on an objective and equitable technological terrain but within a hierarchical socio-technical structure of dependencies. It is these dependencies that we seek to investigate in this article, alongside their ethical implications for research.

While platforms present opportunities for researchers, using platform interfaces for conducting research on labour conditions on platforms can pose severe disadvantages and even risks for platform workers. Some of these risks have already been discussed in the literature. For example, Alex Rosenblat, in her book *Uberland*, highlights how using platforms to identify and compensate workers for critical research or journalistic

purposes can make them identifiable to the platform (Rosenblat, 2018). In engaging in labour market transactions, platform researchers enter the marketplace as clients, and become imbued in the labour relations they are studying, in a position of relative power. This compounds well-established and unequal power dynamics between respondents and researchers (Mullings 1999). By interviewing workers while they perform their jobs, and indeed as part of their jobs, researchers may unintentionally coerce workers into participating. Moreover, managerial infrastructures, including ratings systems, can serve to skew participants' answers – and ultimately dictate their future access to work or even to the platform entirely (Attoh, Wells & Cullen, 2019; Berg et al., 2018; Rosenblat, 2018; Waheed et al., 2018). The risk to worker-respondents may be greater for those who provide services concurrently to the interview, such as transportation, as participating in an interview while driving a researcher around may constitute emotional labour requirements that exceed the demands of the job for which they are paid (Glöss, McGregor & Brown, 2016). In cloudwork, where data collection has relied primarily on surveys, the surveys themselves become the tasks for which workers are hired to complete (Berg et al., 2018).

Alongside the inherent power relations of approaching workers as a client-researcher, uneven power relationships between platforms and user-researchers who study them critically also exist. Although a power imbalance between the researcher and the researched is also present when the researcher requires access to the space, networks, tools or other resources of the research target, platforms can magnify this. If the researcher uses the platform interface to conduct her research, the platform has the immediate resources and capacity to identify and track her activities, and to intervene in the relationship researchers establish with the workers they study, including in ways that the researcher might not be aware of. This surveillance capacity makes conducting research via platform interfaces unlike doing so in non-digitised settings where a researcher could potentially recruit participants, for example outside of a factory, leaving managers unaware of who participated in the research, when or where it took place; or even who the researcher was. Instead, when participants are recruited via a platform interface, all this information can be easily tracked and accessed by the platform.

In instances where platforms have partnered with researchers, making, for example, worker data or some portion thereof available, this too can present an ethical dilemma. Specifically, the concept of informed consent, a cornerstone of university research ethics, can be transcended by platforms who, given their expansive knowledge about their workforce, may reveal to researchers excessively personal information. Sometimes platforms overshare because they do not have the time (or interest) to sift through the high level of information and curate it according to the researchers' needs, but sometimes it may well be the case that platforms attempt to 'drown' the researchers in data to stall their research or direct researchers' attention elsewhere. When this oversharing happens, researchers end up in the possession of data belonging to individuals who did not consent to participation and who may be unaware that they are included in the study. In instances where platforms indicate that they will, or have, informed their workers about the study, this would still indicate 'implied consent' rather than given consent, which is also problematic considering the quintessentially unequal relationship between the platforms and the workers.

In the following sections, we draw on our experience from Fairwork, an international, multi-year study of working conditions on digital labour platforms across a range of sectors, to discuss the ethical issues encountered in using platforms as a tool to conduct critical platform research. We focus on issues of power imbalance between researcher and worker, informed consent and platform surveillance. Since 2018, our project has embarked on evaluating platforms in more than 25 countries against five principles and ten thresholds of fair platform work that have been co-produced by workers, platforms and researchers. We use a range of methods to conduct our research, including on- and off-platform recruitment, semi-structured interviews carried out both in-person and virtually and surveys. Our methods are adapted to specific risks participants encounter in different local and sectoral contexts. Building on our identification of ethical issues for this type of research, we present contingent mitigation strategies we have developed, which can serve to inform best practice in the field. In the following section we focus on the on-platform recruitment and data-gathering process and its implications for transparency and consent, suggesting mitigation strategies for geographically tethered work and cloudwork. We then discuss platforms' influence on the degree of data protection and privacy in the research process, before drawing conclusions on the possibilities and pitfalls of doing critical research on labour platforms.

Recruitment and data collection

Anonymity of research participants, confidentiality of research data and transparency of research aims are three of the most basic tenets of research ethics and informed consent, often stated in research ethics guidelines without much problematisation or further thought. For instance, University of Oxford's Code of Ethics reads that the University requires 'that people are fully informed about the purpose and intended possible uses of the research, what their participation involves and details of any risks' and 'observing the confidentiality of information provided by participants, and where appropriate, respecting their anonymity' (University of Oxford, 2019). Similarly, the American Sociological Association's Code of Ethics reads that 'information is confidential when an individual can reasonably expect that the information will not be made public in a personally identifiable manner. This is especially critical when the public release of the information could be harmful to the person to whom it refers' (American Sociological Association, 2018:10) 'Sociologists do not deceive research participants about significant aspects of the research that would affect their willingness to participate, such as physical risks, discomfort, or unpleasant emotional experiences' and they 'generally disclose their identities to research participants' (American Sociological Association, 2018:14). Although there are exceptions to when researchers can break confidentiality clauses or can conceal their real identities or the true aims of their research, these generally have very specific justifications relating to the nature of the study topic, context or methods, and they frequently reflect a need to accommodate physical or other risks to the researcher for conducting the research (e.g. conducting political studies in a politically unstable context). Usually, though, it is considered necessary that the anonymity of research participants is protected, that information participants disclose to researchers is kept confidential and that the researcher introduces the research project in full detail as

part of the consent process before the participant shares any information. This usually requires researchers to strive to meet the highest standards of transparency and accountability, and to ensure participants have full information about what it means for them to participate in the research in order to consent to entering the research *before* it takes place (University of Oxford, n.d.).

As we have shown, labour researchers increasingly find it necessary to work within the digital interfaces of platforms in order to conduct critical research. In terms of the recruitment process, this can involve booking a ride, ordering food, a beauty treatment, a cleaning or another type of domestic service. In these geographically tethered interactions, the worker is engaged in face-to-face contact with the researcher without knowing they are a researcher or that the researcher has sought their services not for the anticipated and specific task made available via the platform interface, but for research. In this transactional environment, the worker is then invited to participate in a research interview, either immediately (during the time they are engaged in a service relationship with the researcher, or later). Ultimately, however, the initial interaction with the researcher is not a fully transparent one, and platform workers do not have a chance to review or consent to being approached for research.

On cloudwork platforms, the line between what is work and what is research participation is especially blurred, as researchers can post their studies as jobs on the platforms, or their information is presented on the platform interfaces as a client. Here, another trade-off emerges between transparency, participant protection and consent through anonymity. Providing complete and explicit information about the aims of the study and identity of the research organisation – in other words, being transparent about the intentions of using the platform interface – may draw additional attention to the researcher and, in turn, could result in increased surveillance of the interactions between the researcher and platform workers. Since all interaction happens through the platform, preserving anonymity can be difficult. When platforms are able to identify the researcher, they can also identify who they have spoken to or who completed the jobs they posted. If the resultant academic outputs are critical of the platform, there is a risk of retaliation against those who participated in the research, endangering the ethical imperative of protecting research participants from harm.

Platform workers, especially cloudworkers, enjoy notoriously little protection under labour, privacy and other commercial regulations. They are vulnerable to wage theft by platforms and clients, discrimination, penalties and ultimately exclusion from work opportunities through loss of status on the platform, or account suspension or termination (Johnston & Silberman, 2020; Silberman et al., 2018). These vulnerabilities are in addition to the other barriers they might be facing in their local labour markets. As such, they have few opportunities for seeking legal protection, and are frequently required to waive their rights to reasonable legal recourse by the onerous terms and conditions or terms of service of the platforms. These are the precise reasons that platforms are a popular subject for labour scholars interested in exposing and ultimately improving working conditions in the digital economy. However, they are also the conditions which render workers vulnerable to retaliation from platforms. Against this background, it becomes even more imperative for ethical research to protect participants' anonymity, and thus protect them from retaliation. This, nevertheless,

entails an important trade-off: when using the platform interface to recruit participants, protecting participants' anonymity to some extent means masking the identity of the researcher and the research organisation, as well as the purpose of the research from the platform (and hence from the platform worker).

This also raises the question of limits to informed consent when using platform interfaces. When researchers post their research as jobs on platforms (e.g. surveys on cloudwork platforms) or request services on geographically tethered platforms, workers might be compelled to take part in research to fulfil their daily targets for jobs or simply not want to miss out on potential income. Similarly, they might not want to reject or cancel the job offer, as cancelling transactions or not responding to clients often carries monetary or reputational penalties (i.e. their ratings might be lowered algorithmically). The lines between researcher and client become even more blurred if researchers also use platform interfaces to pay worker-participants. When research tasks are posted on the platform interface as jobs, they are paid through the interface as any other job would be and workers apply, get allocated or compete for tasks as they would for other job postings. Workers might consequently feel coerced to participate in research or deceived about its intentions or implications, with little power to counteract the researcher's actions.

Researchers also need to ensure that they do not induce workers to breach platform terms and conditions by participating in their study, as this could have significant adverse impacts on their access to the platform and their job security and could potentially have other ramifications. Although platforms do not, and technically speaking cannot, tell their workers not to participate in research, they might have clauses in small print which require them not to share any confidential or proprietary information with third parties. This might be interpreted as sharing worker contracts for instance with researchers or screenshots of their apps or payment pages. Even though workers might consent to sharing this information, when platform interfaces are used to share them, the risk to the worker increases, as platforms can identify which worker shared what information and with whom. Even when other sharing options are used (e.g. email, WhatsApp or direct transfer), it remains impossible for researchers to know what data traces are left on the workers' platform interface from this sharing activity, to what extent these would be accessible to the platforms and if the platforms could/would use them against the workers. Moreover, platform terms can often include requirements to keep all communications with clients on-platform; however, as we have discussed, researchers are often motivated to move communications off platform for reasons of data protection and confidentiality.

Additionally, some platforms remove tasks that are requests to participate in research. Some platforms might have algorithmic filtering in place which blocks sharing of phone numbers, email addresses or website links which researchers might use to advertise their research on the platform. It is also possible that they might automatically or directly filter ads, if researchers post their research invitations as jobs on the platform.

Hence, using platform interfaces for conducting critical research on platforms introduces important limitations to researcher transparency, participants' anonymity and protection and informed consent. These limitations essentially entail that platform

interfaces co-enact research ethics, as they shape, structure and form the studies researchers can design and implement, and intervene in meaningful ways in the ethical conduct of research. In the next section, we will offer some potential mitigation strategies for best practice in critical platform research, given the limitations we have highlighted so far.

Mitigation strategies

There have been some attempts to mitigate the unequal balance of power arising between researcher-clients of platform services and platform workers. For example, Attoh and others, in their research with Uber drivers in Washington, DC, noted that while they first identified the drivers by requesting rides as a client, they took steps to facilitate informed consent and instead of interviewing workers there and then during the ride, they requested to follow up with them at a later time to reduce the pressure they put on participants to agree to the research (Attoh, Wells & Cullen, 2019). This additional step in the research process ensured that the workers were given the time and space to think through whether or not they were willing to participate in the research. In workers' follow-up with the researchers, they would certainly know the aims of the research study, and the research interests of the researchers.

To minimise the possibility of platform retaliation against workers, we have utilised several evolving mitigation strategies in our project. These strategies have often been different across geographically tethered and cloudwork platforms, due to differences in the conditions of the interaction between the researcher and the worker, and different risks and vulnerabilities of workers.⁵ We therefore separate our discussion of mitigation strategies below along these two categories.

Geographically tethered platforms

For geographically tethered platforms, one possible mitigation strategy is to rely on alternative recruitment methods, instead of the platform interface. An alternative we have used in our research has been to recruit workers offline by giving out leaflets explaining the research project and the interview details in places where these workers gather and asking workers whether they would be interested in taking part. Workers can then freely decide whether they would like to participate or not and the interview can then be carried out on the spot or arranged for a later time and date. In a similar vein, food delivery riders can be recruited at 'hotspots' in the city centre or in other areas with a high concentration of restaurants and food outlets. In some contexts, takeaway restaurant hubs have emerged, where restaurants that only cater for takeaways conglomerate. These hubs are also useful for accessing food delivery riders, and also understanding multi-apping practices, as workers that work for multiple apps at the same time can be observed to be picking up orders from the hub restaurants. In the case of parcel couriers, hotspots may be outside warehouses, whilst in the case of

⁵ An important ethical question to be considered with respect to recruiting platform workers for research is whether researchers decide to pay them, and whether or not they use platform interfaces for payment. This, however, pertains to a larger research ethics question than using platform interfaces, and due to space limitations, we have not been able to explore it in this article.

ride-hailing drivers they may be near major transport interchanges such as airports or bus/train stations. Another similar strategy for recruiting participants is utilising the established networks of third parties, such as trade unions, grassroots representative organisations or worker collectives, and attending workers' rallies, demonstrations or meetings (in-person, online or via WhatsApp, Facebook groups or similar). However, this approach might introduce important biases to the research project in terms of the overall experiences documented in the study, especially in contexts where worker collectivisation is rare, and only workers who are unsatisfied with their experiences on the platforms join these organisations.

Additionally, a major limitation of the offline recruitment strategy is that some categories of platform workers, especially in the domestic and care sector, do not have offline gathering spaces or they tend to be less collectivised than other groups of workers. Additionally, it might not always be possible to identify, for instance, where the warehouses are located for a particular platform (e.g. for courier workers). Complex subcontracting relationships in the operational structure of platforms also make it difficult to locate specific warehouses workers might be working from.

Online recruitment through social media could also offer an alternative recruitment strategy. Paid advertising is one possible avenue (Griesbach et al., 2019). Additionally, over the past few years, online groups of platform workers have mushroomed on major social media platforms, including Facebook, WhatsApp groups and Reddit. Although not all these groups allow researchers to advertise calls for interviews, in our research we found that at least some do, especially once we explain to the group moderator the purpose of the interviews and the not-for-profit nature of the research project. This recruitment strategy improves the transparency of the research, as the purpose of the study is communicated to the workers from the outset. It also empowers the workers to make an informed decision whether to respond to the call for interviews. Recruitment via social media also offers other benefits. Particularly, it allows the recruitment of a more geographically diverse workforce, as online groups tend to include workers from an entire country or city, thus overcoming the geographical limitations of recruitment directly through the platform, which tends to be constrained by the researcher's location. Nevertheless, as in the case of offline recruitment, not all sectors in the platform economy are well represented on social media, with groups of platform workers in domestic and care services again being less present and harder to reach.

Though online recruitment through social media presents the above-mentioned benefits, it is not without drawbacks. The most relevant of these is the risk that the recruited workers might not genuinely work for the platform of interest, as usually this method yields a high number of applications for the interviews (especially if compensation is offered in the advertisement). There are several ways that this issue can be overcome. First, the worker can be asked to send a screenshot of their platform dashboard to prove they work for the platform. Should the worker be unwilling to send screenshots, the researcher can alternatively verify the information through the interview process by, for instance, asking specific questions about pay and incentive structures, or onboarding and training processes, which can arguably be answered only by someone with detailed knowledge of the work, which should minimise the possibilities for deception.

Alternatively, labour platforms can offer offline recruitment opportunities for researchers by posting an invitation to participate in the study. In our project, some platforms cooperated with our researchers and hosted these kinds of ads, including information about our study, direct contact details of the researchers leading the project as well as the study's intentions. Because, through these ads, workers can get in touch directly with researchers, the transparency of researchers and informed consent of participants are protected because the research aims can be specified in the ad, and workers can get in touch with researchers after reviewing these aims. This method also provides the possibility to protect the anonymity of the research participants, especially if they can reach the researchers off the platform, e.g. via email.

Finally, employing a snow-balling recruitment strategy, by relying on workers' word-of-mouth, can also help minimise transparency concerns. Regardless of the initial recruitment strategy employed, utilising a snowballing strategy allows the researcher to be introduced to interviewees by other fellow-workers, who can help provide the necessary information about the interview process and the research more broadly. This strategy also enables the worker to refuse to be interviewed ahead of the meeting with the researcher, thus reducing the risk of the worker feeling coerced into being interviewed.

Cloudwork

While some cloudwork platforms, such as Prolific Academic, were created with the explicit purpose of helping researchers to recruit study participants, other remote working platforms operate as freelance marketplaces, facilitating high-end knowledge or creative services. There are also platforms which offer crowdsourcing work, breaking up and distributing large data-intensive tasks such as training machine learning systems. Across the cloudwork landscape, many platforms are able to host surveys or facilitate research interviews, even if this is not their explicit purpose. For reasons discussed earlier in this article, many cloudwork platforms are, in certain ways, ideally designed to facilitate research about their own working conditions. Cloudwork researchers can thus generate useful insights about platform work by operating within the platform interface. Notably, Prolific Academic allows workers to opt in to deceptive research, if there is a scientific rationale for deception.

In cloudwork, all interactions with clients are electronic, in contrast with face-to-face gig services. Platforms guard their managerial systems and proprietary algorithms closely, and as researchers we are unable to know or anticipate the level of platform surveillance over our communications and transactions with workers when they take place via the platform interface. For precautionary reasons, we thus assume a high level of surveillance, even if that may not be the case. Assuming that human managers of cloudwork platforms have a vested interest in monitoring critical research that takes place on their platforms, we aim to move our interactions with research participants off the platform as quickly as possible after a worker indicates that they are interested in participating in our study. Typically, until the communication is moved off the platform, we withhold details about the identity of the researcher and the research organisation. This identity masking is achieved by referring to the task or job posting only as part of a 'university research project'. This is because, ultimately, platforms may

be able to sift through all messages sent to their workers with a basic text search and identify researchers by using specific keywords such as ‘research’, ‘rating’, ‘fair’, ‘ethics’ and so on. It is rarely the case that the messages between workers and clients are end-to-end encrypted and not readable by the platform.

To those workers who express an interest in participating in research on the initial platform job post, we provide a survey link to move them off the platform. For data collection, we use a third-party software (Qualtrics). The first page of the survey provides full information about the researcher and research organisation to ensure complete informed consent and to initiate data collection. Workers are asked to provide the researcher with a unique completion code at the end of their survey. This ensures that the worker recruited via the platform and the respondent who has completed the survey are the same person. Workers who accept the job via the platform are typically paid via the platform’s infrastructure. However, there are cases where we have paid workers independently of the subject platform, via PayPal or Google Pay.

It is important to note that, in this research process, contrary to traditional research ethics discussions, we opt not to obtain informed consent at the earliest stage of the interaction with research participants because it poses greater risk to them. Instead, we choose to obtain partial consent wherein workers can indicate their initial interest, and then to later provide full information once they are away from the platform interface but before we collect any data. We emphasise at every step that they are free to withdraw at any time.

Other aspects of on-platform masking of researcher identity have included the use of multiple accounts, to make it more difficult for platforms to trace researchers publicly connected to the research project. This may involve linking client accounts to generic and less traceable email addresses. Similarly, we have also used general firm-like names instead of the names of real researchers. This is because, by identifying the researcher, platforms can identify the complete list of workers who have spoken with that researcher. While these practices enhance protections for the worker, such measures do raise questions about researcher transparency and informed consent, as they involve some level of deception to the participants.

Finally, scalability arises as a key element in protecting research participants from platform surveillance. Depending on the platform type, we anticipate that the number of workers in a sample may influence the ways in which platforms might respond. For instance, if the sample is large (meaning the researcher is posting a prominent ‘job’ on the platform and hiring a high volume of workers), the researcher may be more easily identified by the platform. This is particularly true for platforms that facilitate design or translation work, where hiring practices are more individualised than they are for data-intensive or machine learning tasks. Although large samples may pose additional risks to workers, they may also provide additional protections. For example, it might be more difficult for the platform to retaliate against workers who participated, especially if researchers initially corresponded with a larger group, not all of whom ended up providing data. By contrast, if the sample size is small, it might be difficult for platforms to identify the researcher, but if they do there is a higher risk to the workers, as they may all be expected to have taken part in the study. The strategic use of sample size partly as a way to shield workers from platform surveillance then will depend on the

specific platform context, the type of information required in a job posting and the methods of work allocation on the platform. It is important to note that, in the absence of knowledge about platform surveillance, these mitigation strategies outlined will very rarely entirely prevent the possibility of highly motivated platform managers from identifying the researcher or the research participants. However, it is usually possible to ensure the security of the research data provided by storing it only on a secure server, and delinking personally identifiable information from survey data.

A contradiction also emerges here for researchers interested in working conditions and worker protections. Our research often leads us to advocate, both for geographically tethered and cloudwork platform workers, measures to protect them from key risks to their privacy and well-being posed by clients. Platforms take steps to prevent users taking interactions outside the platform interface primarily due to concerns about solicitation and competition, and the need to guard their proprietary systems. However, in best practice cases, platform surveillance systems can also function to reduce asymmetry in worker–client power relations. Platforms may institute systems of digital enclosure to ensure the worker is protected from clients acting discriminatorily or in bad faith – for example that interactions are recorded in case disputes arise, that there is recourse to specified terms and conditions in the case of disputes, that payments can be managed securely and guaranteed (for instance through escrow systems) and that there is a layer of privacy between the worker and the client.

By moving interactions off-platform as quickly as possible to better protect the worker from platform surveillance of critical research, we may also be circumventing platform measures that we would be in favour of in most other scenarios, that are designed to mitigate client power and unfairness. It is then incumbent on the researcher to think carefully about risks posed to workers in agreeing to interact outside the platform, and to also mitigate those risks – for example by developing and communicating clear policies about payment methods and timeframes, and by providing an appeal process to a relevant research ethics body should the worker have concerns about the conduct of the research.

Discussion and conclusion

The past few years have seen a growing body of research focusing on digital platforms and platform work. Given the practical difficulties in recruiting workers for research purposes, many researchers often rely directly on platform interfaces to recruit research participants. In this article we have discussed some of the most relevant ethical issues arising when using platform interfaces to recruit research participants, especially when carrying out research into platform working conditions. We recognise that platform interfaces remain a valuable tool for recruiting platform workers for research on the gig economy, yet these interfaces present important ethical concerns in relation to participants' anonymity, informed consent and transparency of research. Using our experience in studying the working conditions in the gig economy, we have critically assessed each of these concerns and how they materialise in different empirical contexts, focusing on both geographically tethered and cloudwork platforms.

Questions remain about the likelihood that platform managers might trace the activities of workers or researchers – as this would require some work on the part of

platforms or other actors. However, surveillance is a real possibility and presents a risk for researchers and participants – particularly those who might be critical of platforms’ organisational practices, working conditions or any other aspect which might negatively impact the researched platform. In that respect, we have highlighted how the ethical boundaries of doing research using platform interfaces are shaped not only by researchers themselves but are co-enacted by the platforms whose interfaces researchers use. Platforms have algorithmic capabilities that are poorly understood. Researchers using platform interfaces should be conscientious about behaving in ways that conform to the platform’s expectations. This will help ensure that no individual worker attracts undue attention from the platform.

In this article we have also presented possible mitigation strategies aimed at minimising these ethical concerns, distinguishing between geographically tethered and cloudwork platforms. On the one hand, we have presented how to use the platform interfaces thoughtfully, for example, by minimising our footprints, operating covertly or disclosing minimal information about the research project. On the other hand, we have discussed alternative recruitment strategies which can make researchers less reliant on platform interfaces, such as utilising offline recruitment strategies or by relying on social media or other online channels to reach out to potential participants. Although none of these mitigation strategies are without their own drawbacks and ethical risks, we hope that the article contributes to a more critical understanding of the ethical risks associated with different recruitment strategies and will help future researchers investigating platforms and working conditions to become more aware of the ethical implications associated with different recruitment strategies, contributing to shedding light on the little considered ethical boundaries of doing research using platforms.

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