

RESEARCH ARTICLE

Divided we fall: The breakdown of gig worker solidarity in online communities

Peter Kalum Schou¹ | Eliane Bucher²

¹Department of Strategy and Entrepreneurship, BI Norwegian Business School, Oslo, Norway

²Department of Communication and Culture, BI Norwegian Business School, Oslo, Norway

Correspondence

Peter Kalum Schou, Department of Strategy and Entrepreneurship, BI Norwegian Business School, Nydalsveien 37, 0484 Oslo, Norway.

Email: peter.k.schou@bi.no

Abstract

The 'gig economy' presents a contested new work arrangement where freelancers find work on digital platforms. Subsequently, previous research has investigated how gig workers develop solidarity and take collective action against the exploitative practices of the platforms. However, this research is limited by mostly focusing on solidarity in contexts of *local* gig worker communities. We investigate whether freelancers who work on a global platform, Upwork, which hires people for diverse and complex jobs, can build up solidarity in a *global* online community. Applying a mixed-methods research design, we analysed how gig workers responded to a policy change by Upwork that affected their working conditions negatively. In doing so, we outline how solidarity breaks down in an online community of gig workers, due to them realising different interests and identities. We contribute to recent discussions on solidarity in the gig economy, and online communities as tools for organising.

KEYWORDS

collective action, freelancers, gig economy, mixed-methods, online platforms, power, solidarity

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2022 The Authors. *New Technology, Work and Employment* published by Brian Towers (BRITOW) and John Wiley & Sons Ltd.

INTRODUCTION

In recent years, an increasing number of workers worldwide have found jobs outside traditional organisations, instead finding work on digital platforms such as Uber, Deliveroo, Amazon Mechanical Turk and Upwork (Kässi & Lehtonvirta, 2018; Petriglieri et al., 2019; Tassinari & Maccarrone, 2020). Scholars have estimated that around 160 million workers operate in the gig economy, finding work on such platforms (Kässi et al., 2021). The gig economy may offer opportunities to workers, especially to those in low-income countries, who often gain better and more lucrative employment on the platforms than through local employment (Wood et al., 2019a). Yet, most scholars are worried that such platforms may take advantage of workers, as they do not treat them as employees but as replaceable labour (Duggan et al., 2020; Fieseler et al., 2019; Tassinari & Maccarrone, 2020; Veen et al., 2020; Wood et al., 2019b). This fear may be warranted as gig workers have taken highly publicised collective action against the platforms to protest poor working conditions. For example, workers have protested Uber in the United States and Deliveroo in Italy and in the United Kingdom, due to a perceived lack of worker rights and poor pay (Tassinari & Maccarrone, 2020). Consequently, a budding research stream is focused on how gig workers can take collective action against platforms to improve their conditions (Gegenhube et al., 2020; Kalleberg & Vallas, 2018; Tassinari & Maccarrone, 2020; Veen et al., 2020; Wood & Lehtonvirta, 2019). This work points to a key ingredient in workers setting up collective action; solidarity, that is ‘a collective understanding of the situation of different groups of actors and how this can be defended and/or improved by collective action’ (Morgan & Pulignano, 2020, p. 22). Solidarity can thus inspire workers to come together, organise and present as a collective entity fighting to better working conditions and pay (Morgan & Pulignano, 2020; Royle & Rueckert, 2020). Recent research has indicated that gig workers can overcome the atomised work arrangement, and build solidarity with each other, which facilitates collective action (Tassinari & Maccarrone, 2020; Wood et al., 2018). In particular, this research has highlighted the usefulness of online communities in this regard (Maffie, 2020; Wood et al., 2018). Wood et al. (2021, p. 17), for example, suggest that online communities empower workers to voice complaints and build solidarity with each other.

However, the claim that workers can build solidarity and collective action in online communities, as forwarded by recent research (Maffie, 2020; Walker, 2021; Wood et al., 2021), may suffer from a couple of limitations. *First*, this research mostly focuses on how workers *localised* in the same place or in the same organisation build solidarity (e.g., Maffie, 2020; Tassinari & Maccarrone, 2020; Wood, 2015). For example, Tassinari and Maccarrone (2020) focus on how food delivery workers developed solidarity in three respective cities. Yet, gig work is a global phenomenon. *Second*, the research tends to focus on workers operating on platforms with low diversity in skills and tasks, such as Deliveroo (Tassinari & Maccarrone, 2020) and Uber (Maffie, 2020). On these platforms, the task is often physical (delivery or driving), limited to a short period, and clearly defined. In contrast, other platforms, such as Upwork, have a much wider range of workers that solve tasks ranging from voice acting to advanced programming (E. L. Bucher, Schou, et al., 2021). These factors may play an important role in shaping solidarity and collective action. Therefore, Wood and colleagues (2018, 2021) argued that we need a better understanding of how gig workers operating on remote, diverse platforms, such as Upwork, can build solidarity and collective action. Therefore, we ask: ‘Can dispersed and diverse gig workers build solidarity through online communities?’

To answer this question, we relied on a mixed-methods research design to study how workers reacted to a policy change by Upwork where they monetised ‘connects’¹, thereby forcing the freelancers to pay for offering services to clients. We used a linguistic inquiry and word count (LIWC) analysis (Tausczik & Pennebaker, 2010) to detect how the community reacted to a policy change by Upwork. Then, we qualitatively coded comments to understand solidarity among workers in response to the policy change. Doing so, we identified two factors that drove this breakdown of solidarity. First, we found that workers perceived themselves as having opposing interests. Second, we found that they espoused distinct identities, with one group espousing an entrepreneurial identity and another group espousing an employee identity.

Our study thereby contributes to two ongoing debates. Namely: (1) the challenges and opportunities that atomised workers in the gig economy encounter in building solidarity (Beck & Brook, 2020; Tassinari & Maccarrone, 2020) and (2) the role of online communities in replacing traditional forms of organising (Cohen & Richards, 2015; Maffie, 2020; Waldkirch et al., 2021; Wood et al., 2021).

THEORETICAL FRAMEWORK

Solidarity

Solidarity has long been seen as a key concept in understanding social order and conflict in employee relations (Morgan & Pulignano, 2020). The concept refers to when workers share a common understanding of their situation (Morgan & Pulignano, 2020). Solidarity consists of three elements: common identity, common interests and a feeling of shared interdependence (Gumbrell-McCormick & Hyman, 2015). Solidarity is created by a bond of ‘identification and articulation of contingent shared interests’ (Morgan & Pulignano, 2020, p. 25). Naturally, the concept of solidarity is very connected to unions, which have traditionally been the representation of worker solidarity (Beck & Brook, 2020). Unions served as vehicles for collective action and the voices of workers, which allowed them to transform workplaces and exercise their democratic rights over managerial control in organisations (Mowbray et al., 2015; Wilkinson et al., 2018).

While research has found that gig workers may support unions, gig worker unions are at best at an embryonic stage (Wood et al., 2021). Thus, to organise collective action, such as voices directed towards platforms (Walker, 2021), gig workers must self-organise (Maffie, 2020; Tassinari & Maccarrone, 2020). In this respect, research has pointed to the importance of gig workers building solidarity as a form of informal collective identity that can substitute for formal unionisation (Morgan & Pulignano, 2020). Scholars refer to this form of solidarity as ‘workplace collectivism’, which entails workers building up a sense of community with each other (McBride & Lucio, 2011; Stephenson & Stewart, 2001). Obtaining this form of solidarity could then allow gig workers to take steps towards unionisation, thereby formalising their sense of solidarity (Wood et al., 2021).

However, research has only recently started to investigate how gig workers build up solidarity; that is, how they articulate shared interests and build up a common understanding of their situation (Maffie, 2020; Tassinari & Maccarrone, 2020; Walker, 2021; Wood et al., 2021). This recent research has pointed to the importance of worker online communities as a tool for gig workers to build up solidarity.

Solidarity and collective action through online communities in the gig economy

There is a need for solidarity because gig workers are subjected to ‘algorithmic cruelty’, meaning that platforms use algorithms to determine whether workers are allowed to stay on the platform, and workers have no recourse if they are banned from the platform (E. L. Bucher, Schou, et al., 2021). Furthermore, platforms often do not provide training, leaving workers to fend for themselves in building the necessary skills to navigate the platform, clients and niches of the market (Waldkirch et al., 2021). Finally, workers may have to work antisocial hours and find themselves abused by clients (Wood et al., 2021).

Previous research has found avenues for how gig workers can build solidarity. Tassinari and Maccarrone (2020) pointed to gig workers meeting up in social and virtual spaces, which allow them to overcome the atomised nature of their work arrangement. This finding is backed by budding literature on how online communities (and other social media) can be used by workers to build solidarity and create collective action against employers. This research has shown how workers use online communities to cope with employment-related problems (Cohen & Richards, 2015), show dissent (Thompson et al., 2019) and to construct collective identities to mobilise action (Wood, 2015). While these studies have mostly focused on workers in traditional low-income service jobs, such as employees in supermarkets, recent work has extended this to the gig economy. Maffie (2020) shows that Uber drivers use online communities to organise; similarly, Walker (2021) shows how discussions in online communities help Uber drivers form emergent collective action. Finally, Wood et al. (2018), as well as Waldkirch et al. (2021), highlight how gig workers support each other and share information in online communities.

Despite these advances in knowledge of how gig workers may construct solidarity, and even collective action against platforms (Walker, 2021), there are still some important gaps. First, most of the work covering how gig workers build solidarity and collective action has focused on workers located in the same place. For example, Maffie (2020) provides an example of Uber in a Midwestern town in the United States, and Tassinari and Maccarrone (2020) provide examples of food delivery workers building solidarity in three cities in the United Kingdom and Italy, respectively. The platforms studied, such as Uber and Deliveroo, can be classified as representing the local gig economy because tasks require that the workers are close to the customer, such as ride hailing (Wood et al., 2021). Consequently, workers also tend to be located closely together. Yet, there are also platforms that belong to the remote gig economy where workers do not have to be close to customers because they solve digital tasks such as programming. Remote gig economy platforms include Upwork, Fiverr and Guru. On these platforms, workers are spread around the globe. Yet, scholars have largely neglected the remote gig economy and focused on workers working in the local gig economy (Wood et al. (2021, p. 3). Hence, Wood and colleagues (2019) argue that it is crucial to study how gig workers in the remote gig economy may (or may not) construct solidarity and collective action.

Second, when analysing gig worker solidarity, studies rarely consider that workers differ depending on the platform (E. L. Bucher, Schou, et al., 2021). This is important because, while workers on local gig work platforms carry out the same tasks under the same conditions, for example, delivering food, workers on platforms such as Upwork may carry out very different tasks, have different educational backgrounds, and command different fees. This may hinder workers in building up solidarity. Demirel and colleagues (2020), for example, note how gig workers espouse different forms of capital, which allows actors from the Global North to claim

higher status when compared to actors from the Global South. Third, the knowledge of how gig workers actually engage in online communities is quite limited. Only very recently have studies investigated actual gig worker discussions in these communities (Waldkirch et al., 2021; Walker, 2021). As a result, much of our knowledge about how gig workers use online communities to build solidarity and collective action comes from second-hand data, such as surveys and interviews (Wood et al., 2018, 2021). Perhaps due to this knowledge gap, we see an unresolved debate concerning the usefulness of online communities. Some scholars argue that online communities can facilitate gig worker solidarity, collective action and even a burgeoning move towards unionisation (Maffie, 2020; Walker, 2021; Wood et al., 2021). Yet, other scholars are sceptical about the possibility of online communities acting as an organising tool (Geelan & Hodder, 2017; Gerbaudo, 2017; Massa & O'Mahony, 2021; Saundry et al., 2012). For example, Massa and O'Mahony (2021) show how the lack of direction and coordination causes chaos when members try to organise collective action through online communities, while Geelan and Hodder (2017) note that union initiatives have limited ability to create solidarity through online communities, in particular in cases where they have to do so internationally. Finally, Gerbaudo (2017) notes that there is a clear need for leadership for protest movements in the digital era.

Overall, while there is a nascent literature on the gig economy, including a growing interest and knowledge around how gig workers organise collective action, there are still some important gaps, as mentioned above, which limit our understanding of the ability of, and opportunities for, gig workers to build solidarity and collective action.

We seek to clarify these gaps by focusing on solidarity among gig workers operating on Upwork. Using online community data allows us to take in perspectives from a wider array of workers compared to interviews in local communities (Maffie, 2020; Tassinari & Maccarone, 2020), or surveys targeted at specific areas (Wood et al., 2021).

METHODS

To answer our research question, we employed a mixed-methods approach using quantitative LIWC analysis and in-depth qualitative coding. The reason for this choice was that social media data is often very comprehensive and 'messy', meaning many topics are covered that do not relate to the research question. Using mixed-methods allows researchers to focus on key events and comments that are most likely to inform their research question (c.f. E. Bucher, Fieseler, et al., 2021; E. L. Bucher, Schou, et al., 2021; Waldkirch et al., 2021).

Research context

Digital labour platforms act as intermediaries between workers and clients organising tasks of varying size and nature, from microtasks to transport to larger, creative tasks. Digital platforms, including Upwork, are known for employing algorithms to govern access, visibility and reputation of the workers (E. L. Bucher, Schou, et al., 2021). Upwork is a relevant case for our study because it is one of the largest platforms, the tasks are of larger size, meaning that workers can live off work on the platform and it has a global reach (Waldkirch et al., 2021). Upwork functions by having clients post tasks and a call out for freelancers. The freelancers can then bid on the tasks by sending proposals highlighting their skills. To submit proposals, freelancers need tokens. These tokens are called connects. In the past, connects were free

(a worker received 60 per month) and it only required one connect to send out a proposal. However, in April 2019, Upwork announced that it would change its connects policy. Upwork announced that from then on connects would cost 0.15\$ per unit and proposals for larger tasks would require up to six connects for a worker to send a proposal. Upwork stated on its blog that they expected that ‘fewer proposals will help the best rise to the top. Upwork also stated that they focused on professional freelancers. To ensure this focus, Upwork thus upped the price to be in the game. In the following days after the announcement, *Forbes* reported that: ‘The new system is designed to narrow the field of freelancers going after a job to those who are the best fit’. The news-site *Entrepreneur* reported that Upwork had installed this policy because they believed that the freelancers who could pay the extra fees were inherently higher talent. However, *Entrepreneur* also reported that this might squeeze freelancers who had all their reputation stored on Upwork, and that it might squeeze out new users and those with tight budgets.

Data collection

We collected data from the Reddit online community for freelancers on Upwork, r/upwork, to analyse the response of freelancers to this policy change. We chose this community instead of Upwork’s official community due to Upwork’s policy of policing statements there that are negative towards Upwork. We used a self-developed script within the Python Reddit application programming interface (API) Wrapper (PRAW)—a python package that allows for simple access to Reddit’s API²—to scrape 49,632 comments from October 2018 to October 2019 on r/upwork.

Then we employed our mixed-methods approach, first utilising an LIWC analysis on all the comments to detect how the community overall reacted to the policy changes. The purpose of the LIWC analysis was to gain an overall understanding of how the policy might affect the workers and their communication. As such, the LIWC analysis served as a tool to further sample our data. The LIWC showed exactly when gig workers discussed the policy change and how they reacted. After having employed the LIWC, and identified key moments, we then employed an in-depth qualitative analysis to better understand workers’ efforts to build solidarity and collective action.

Quantitative data analysis

To analyse the data, we first ran the 49,632 comments through LIWC. LIWC is software developed by psychologists to measure the psychological meanings of words (Tausczik & Pennebaker, 2010). LIWC can measure cognitive processes, perceptual processes and emotionality of language, amongst other things. We used it to measure emotionality across five dimensions: positive emotion, negative emotion, anger, sadness and anxiety. These dimensions have been developed in psychological studies and reflect the use of affect words (Tausczik & Pennebaker, 2010). Applying this analysis to the data highlighted two spikes of emotions around April 2019 and July 2019 (see Figure 1). These spikes coincide with the announcement of the new connects policy and the implementation of the policy.

To further link these emotion spikes to the connects policy, we conducted a word count analysis for the term ‘connects’.

This analysis (see Figure 2) revealed that the term ‘connects’ coincided with the emotion spikes. Hence, the LIWC analysis shows that the connects policy was, as we expected, a significant event for the gig workers, spurring strong emotional reactions. Indeed, the LIWC analysis points to workers possibly having a drive towards collective action as they clearly reacted negatively to the policy change. However, the LIWC analysis cannot say much about the solidarity between gig workers with respect to the policy change. To understand the solidarity between gig workers when they face a dramatic change by their platform, we need to analyse the data more in-depth.

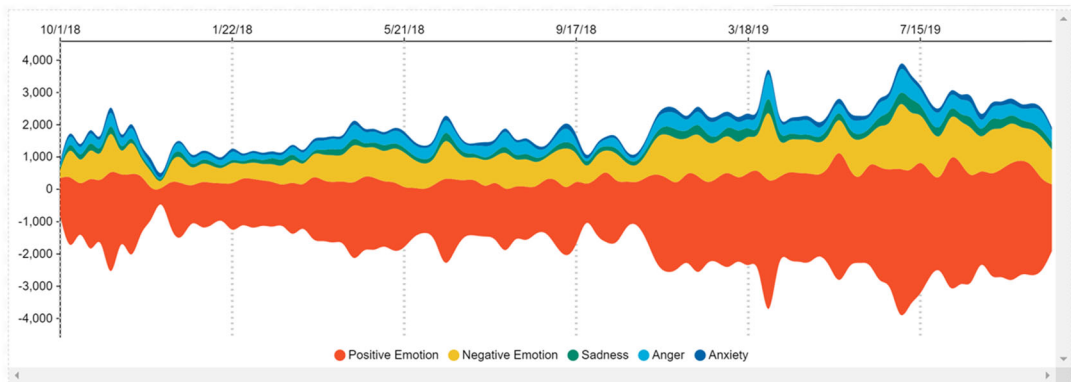


FIGURE 1 Linguistic inquiry and word count analysis [Color figure can be viewed at wileyonlinelibrary.com]

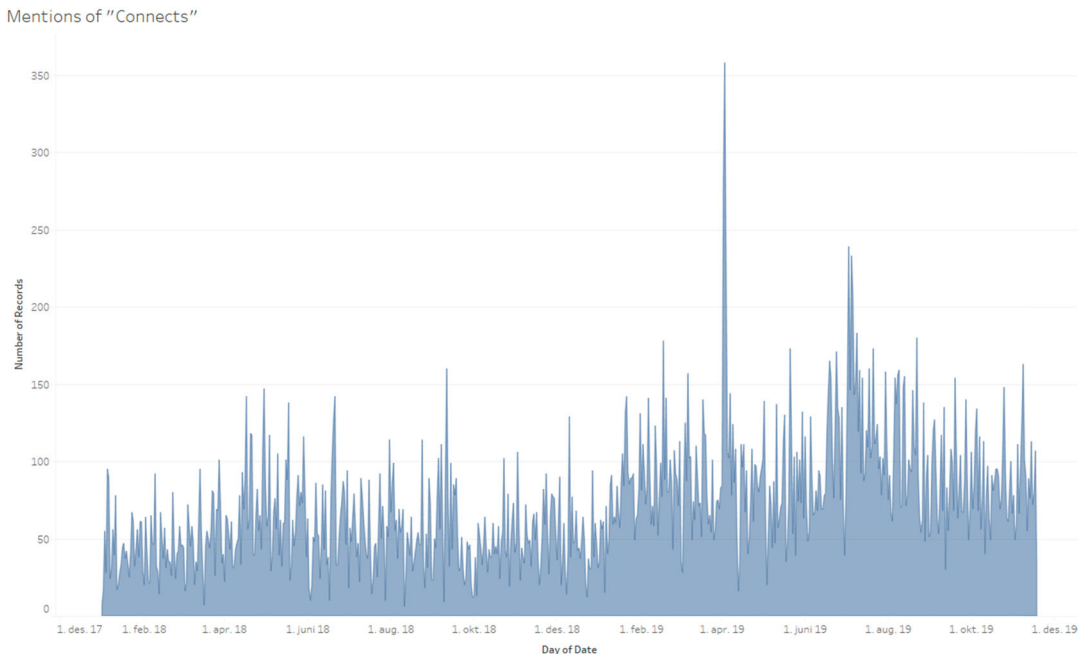


FIGURE 2 Wordcount [Color figure can be viewed at wileyonlinelibrary.com]

To do so, we applied an in-depth qualitative analysis (Levina & Vaast, 2015). Here, we focused only on relevant comments (c.f. Vaast et al., 2017). To determine what comments were relevant, we relied on purposeful sampling (Lincoln & Guba, 1985), meaning that we sampled threads from the 'spike' periods identified by the LIWC analysis. Then we focused on key terms that were most likely to inform our research question (c.f. E. Bucher, Fieseler, et al., 2021; E. L. Bucher, Schou, et al., 2021). We chose 'connects', which helped us focus only on threads concerning the policy change. This resulted in a total of 1124 posts. On top of this, we also sampled for threads dealing explicitly with solidarity, such as when gig workers called for unionisation or collective action. Adding these threads, we ended up at a total of 1301 posts for coding.

Qualitative data analysis

Having identified the announcements and implementation of the connects policy as two critical events, we focused on coding threads on the connects policy around April and July 2019. We applied a Gioia-style coding scheme to ground theory in our data (Gioia et al., 2013). First, we openly coded all comments in our sample, meaning we attached a label such as 'anger towards Upwork', 'positive towards change' and 'solidarity with other workers'. Second, we then axially coded comments from both periods to create larger patterns. As we did so, we noticed overall themes highlighting hindrances to gig workers forming solidarity and using online communities as an organising tool. Third, we then compared our emerging second-order themes with existing work (c.f. Demirel et al., 2020; Tassinari & Macarrone, 2020; Wood et al., 2018). This allowed us to further home in on our themes and present aggregate dimensions that add to existing knowledge of solidarity in the gig economy.

Our data structure with representative quotes is presented in Figure 3 and Table 1.

FINDINGS

Joint outrage

The change to the connects policy was met with anger from the freelancers. This can be seen in Figure 1, where our LIWC analysis outlines the spike in negative emotion, anger and anxiety. Our qualitative analysis backed the LIWC analysis, and we found the dominant feeling was outrage at the change. Not only did most workers voice anger, they also upvoted critical comments³, thus highlighting them. Even highly ranked freelancers were outraged even though 'Upwork had been good to them' in the past and that the change was not designed to hurt them in particular. The main reason was that the very idea of paying to get a job seemed essentially unfair. One such worker remarked: 'Yep. They've lost me now. I'm done ... I'm not going to pay to bid for a job'. Here, our data pointed to a feeling of being exploited by Upwork. Freelancers would analyse the policy change in the community, and they linked it to Upwork's recent initial public offering (IPO), noting that Upwork did this to boost its revenue and stock market value. As one noted: '... Upwork stands to make almost \$175,000,000 additionally per year from this. But really, truly, they are definitely only doing this for our benefit though. Honestly'.

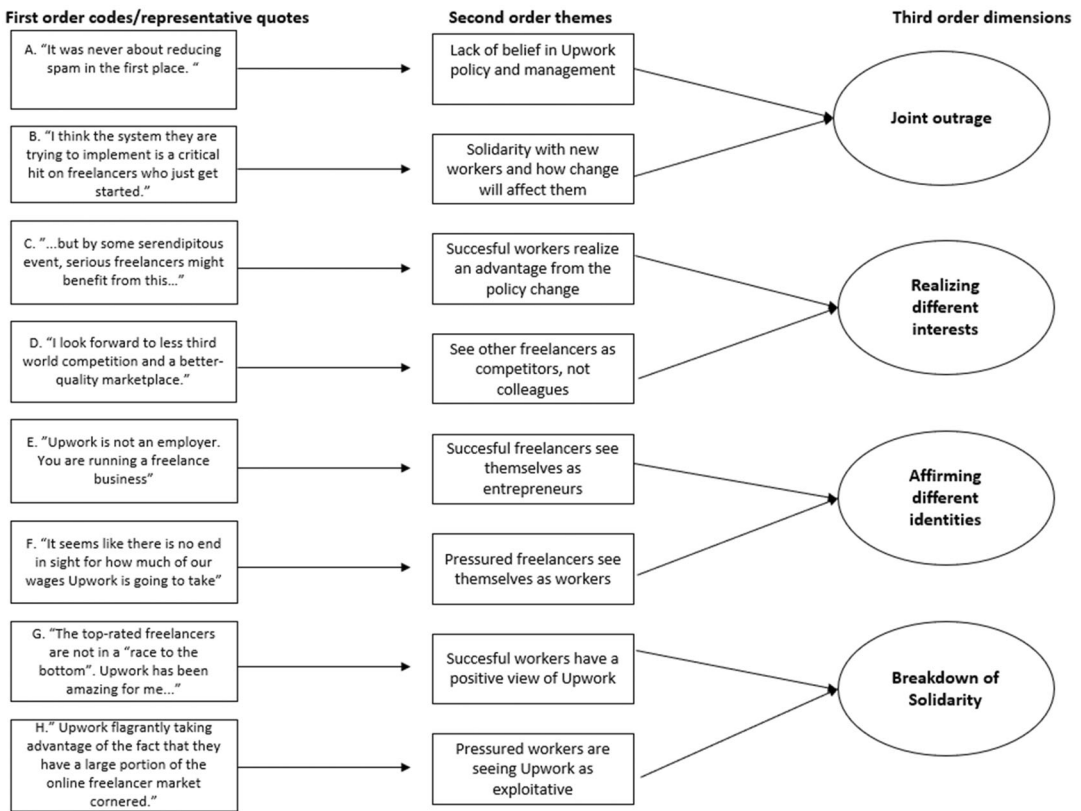


FIGURE 3 Data structure

Second, we found that the freelancers distrusted Upwork's management. Even though Upwork tried to spin the change as positive for 'top workers', many would have none of it, and aimed to make their displeasure with the change quite clear:

'Message for Upwork PR people monitoring this thread'—tell your management that I have never paid a recruiter to put my resume into the market a single time in my entire life, and I don't intend to start now. That's not how this works. **** off. And if one more PR agency for one more company tries to spin me on how upping their fees is 'good for me' I swear I'm going to punch a kitten.'

Third, we noted sentiments of solidarity from 'top-ranked freelancers' and towards new freelancers, who might be hit the hardest by the change. As one freelancer noted:

'I think the system they are trying to implement is a critical hit on freelancers who just get started. Before earning a Top Rated status you have to work for a while to meet all their criteria. Only after that you will be getting invitations to jobs.'

This indicated that there was some sort of solidarity among the freelancers. This indication was further strengthened by behaviour we observed in the community. We noticed some

TABLE 1 Coding scheme

Third-order dimension	First-order codes	Representative quotes
Joint outrage	Feeling exploited by Upwork	'It's utter horseshit and the final nail in a coffin which was already nailed shut, just leaking a bit every once in a while. Like HELL I'm going to pay for the privilege of submitting a job application which may go completely ignored. Never did it before, and absolutely will not do it now'.
	Mistrust and disbelief in Upwork management	'I love how the burden of getting Upwork out of its financial fires always comes down to the freelancer. Oh, we have too many spammy proposals? Nah, don't take charge and clean up the mess, just take additional cuts from everyone else. A problem, arguably, they created by merging NA and global markets together'.
	Solidarity with how the change is going to hurt new workers	'I'm Top Rated in writing and editing. But I won't be doing Upwork forever. When I'm gone, I'm gone. Not coming back. If they make it harder for skilled people to get traction on the site, that's not going to end well for them long term'.
	Solidarity with low-level freelancers	'what I'm afraid this will do in the shallow end of the pool is to make the entry harder and less desirable for individual freelancers—most of whom are trying to earn honest money and at least have the potential to learn and grow on their own'.
Realizing different interests	Seeing other freelancers as competitors, in particular ones from the Global South	'I look forward to less third world competition and a better quality marketplace'.
	Wanting Upwork only to be for top freelancers	'If you can't afford the fees, you don't charge enough'.
	Expressing disgust at freelancers from The Global South	'I don't mind paying \$14.99 a month, I don't mind paying my 5% fees. I enjoy the UpWork experience and will enjoy it more when I'm no longer undercut and lose out simply because I'm in a developed nation'.
	Workers outside United States fearing for their earnings	'People often dismiss this with the excuse of being only 0.15\$ per connect, not only we don't know how many connects will be required, but an outsider of US have to account 20% fee + connect 0.15\$ + paid tax (outside United States), so in reality, there is less money you end up making'.
Affirming distinct identities	Freelancers as entrepreneurs	'Freelancers **aren't** employees. They are business owners. Business owners invest in the resources that help them earn a profit. All.The.Time.
	Failure is individual, not a result of Upwork	'Whether "one" must go through the "ramen level client" or not depends entirely on "one's" standards and ability to market oneself.

TABLE 1 (Continued)

Third-order dimension	First-order codes	Representative quotes
	Freelancers as labour	'Companies as a whole wouldnt exist without workers, yet they're always trying to figure out how to pay us less and less for our labor as well'.
	Failure is due to Upwork's mismanagement and exploitation of workers	'This is race to the bottom. They only want more money, there is no justification for paying for privilege to make more money for Upwork. They already take a whopping 20% fee of contracts under \$500 with one client, which is normal as usually there are one time projects with one client as the do not promote long-term projects... Then they take a fee to send earned money to freelancer's bank account. Still it's not enough, apparently'.
Breakdown of solidarity	Defending Upwork by portraying it as a service	'But why? How is that the best decision for anyone's business, to focus their time and energy trying to change the way one massive service provider that is only one of dozens of options they have for securing clients does business? It's unlikely to succeed, but that's sort of beside the point'.
	Defending Upwork as providing unique opportunities	'I'd be on the street if it wasn't for Upwork'.
	Attacking Upwork for being exploitative	'Their billion dollar company wouldn't exist without freelancers though, we're the foundation it's built on'.
	Internal conflicts over different viewpoints among freelancers	'Work *is* not slavery. YOU choose when you want to work and for whom. If you are applying to gigs that aren't a good fit, that *is* your choice. Regardless of your financial situation, no one is forcing you to apply for gigs on Upwork'.

freelancers were positive towards the change, but they were downvoted and silenced by the community. If a freelancer expressed positivity towards the change, they were quickly met with anger and their post would be downvoted, meaning that it would appear towards the bottom and not the top. For example, one positive freelancer noted that: 'I got down voted in the last thread for daring to think this is an OK idea—but I'll take the risk again ...' This freelancer then again tried to voice his support for the change. Immediately, that freelancer would be met with an ironic response: 'LOL. Maybe you should rethink that one too'. This illustrates that freelancers positive towards the change were silenced in this initial phase.

Overall, our findings showed that the initial reaction from most freelancers was outrage with Upwork and a desire to make their voice heard. This initial outrage could have been the foundation for freelancers to organise as has been seen in other studies (e.g., Tassinari & Maccarrone, 2020).

Realising different interests

As we analysed threads after the initial first reactions, we noted that more workers would voice their positive appraisal of the change. Moreover, we noted that these comments were not as likely to be downvoted. Our findings show that this was due to more experienced and highly ranked freelancers, who wanted to get rid of competition: ‘This is awesome. It will reduce spammy freelancers with 0 skill and with that improve the hiring rates.... I will continue to pay for premium profile, even though it’s 50% increased in price’.

The highly ranked freelancers were tired of what they termed ‘lowballers’, freelancers who were not as highly ranked and who tried to get by with as low a rate as possible. To get rid of them, highly ranked freelancers were willing to pay a higher fee themselves, as exemplified by the quote. Furthermore, freelancers who could command higher fees expressed disdain towards freelancers from poorer countries, who did not command the same fees. These lower-tier freelancers were, by some, referred to as ‘Indian princes’:

‘...People from developing countries that swarm job boards with fake profiles and credentials. They’re all scam artists. I named them after the Nigerian princes that write those weird email scams... They make up the majority of the bids on the site. These changes will get rid of them. They’ll never pay.’

Vice versa, freelancers outside the United States would sometimes retort derisively due to the perception that the US freelancers looked down on them:

‘Then again, there are excellent freelancers from all over the world, even from 3rd world [expletive] as some of the more vocal US freelancers like to call them, that do excellent work and don’t need to be paid big bucks to be content and run a lucrative business.’

Hence, one driver of different interests was that the workers were quick to attack each other based on where they perceived each other to be located. We found several instances of gig workers having heated discussions, such as one freelancer, who was presumably from a developed country, calling freelancers from developing countries ‘Indian princes’. This caused an angry reaction and debate, as evidenced by the freelancer’s angry retort to US freelancers. While we cannot locate the workers in question, we note that they attack each other based on *perceptions* on where each other are from, for example, workers from developed countries are likely to attack workers who they *think* are from developing countries. According to Wood et al. (2019b) this exemplifies a feeling of disembeddedness, where workers do not feel that they share the same fate. We can further see this disembeddedness as the gig workers debate whether Upwork should be for freelancers in developing countries at all. Some of the gig workers espouse the idea that Upwork should cater to gig workers working in the United States. Yet others disagree with this idea: ...being in a developed or not country should not account for anything in online platforms, talented people come from many locations not just the ones called “developed countries”.

A further driver of why the gig workers started realising different interests may be that Upwork attracts workers who have different skillsets and different levels of skill. We noted that gig workers who perceived themselves as being ‘top level’, would to a greater degree applaud the change: ‘Actually I’m doing better than ever. I think the freelancers who don’t charge top

dollar/provide the highest quality service to their clients are the ones being squeezed by these new changes'. In contrast, workers who may work in other fields reported being hurt by the change because they were not 'top rated workers: "Upwork is really putting the squeeze on non-Top Rated freelancers"'.

Overall, we point to two drivers of why gig workers start realising different interests. First, there is the fact that Upwork attracts gig workers with different skillsets and skill levels, meaning that the change to connects hit workers disproportionately. Second, we find that workers perceive themselves as being disembedded and disconnected from each other (c.f. Wood et al., 2019b). We find that the gig workers do not find common ground despite the platform launching a policy that takes more of their pay, and even though they can communicate with each other in the community. Instead, we see that the workers argue about who the platform should be for, with some gig workers arguing that platforms should only be for the 'top workers', meaning successful workers in developed countries, and then other gig workers attacking this notion. In short, we find that gig workers do not feel that they 'share the same fate' and that this feeling does not dissipate even when they can communicate with others in the forum. This is surprising, as prior work has argued that online communities allow workers to find common ground (Walker, 2021; Wood et al., 2021).

Affirming distinct identities

As we started to code threads around the implementation of the policy in July 2019, these interests became even more apparent. Now we saw that the freelancers espoused very clear identities that guided their reactions to the connects policy. The top-ranked freelancers saw themselves as entrepreneurs: 'Freelancers ****aren't**** employees. They are business owners'. Moreover, they saw Upwork as a service, a fellow business, that also had to make money. They did not see themselves as squeezed or exploited, as one mentioned: 'I can't really respond to that because I've never experienced being mistreated. It may just come down to the fact that not every business is for every customer'. To explain failure, these gig workers then argued that it was more the worker's own fault due to their lack of ability to use Upwork:

If you aren't landing a job within 10 proposals, there may be something fundamentally wrong with your approach. The entire purpose of this change is to encourage quality proposals, which usually require only applying to jobs you can really knock out of the park, not just random \$50–100 dollar jobs.

In contrast, other freelancers saw themselves more as 'workers' in a traditional sense and saw organising as the clearest way forward: 'If all the people who used Upwork coordinated their efforts, we would be able to strongarm it into changing its policies'. The freelancers who saw themselves as workers also saw failure in their work as a result of Upwork's policies and mismanagement. As one noted: 'Stephane [Upwork CEO] is trying to squeeze out all the money he can from freelancers'. These freelancers, often identifying themselves as coming from poorer countries, did feel exploited by Upwork 'taking their wages', as one put it. Whereas the first group of freelancers saw themselves as empowered entrepreneurs who could choose their own destiny and where failure was merely due to poor business strategy, the second group of freelancers saw themselves as labour that was sold by Upwork: 'It is in the best interests of Upwork to cater to the hiring parties. They sell our work to them. We're the product...'

Altogether, we noted that the Upwork gig workers did not share a collective identity. Instead, there were two dominant identities: an entrepreneurial one and an employee identity. These identities then related to how the gig workers perceived their relation to Upwork, with the ones with the entrepreneurship identity seeing Upwork as a service and a business that they can use or not. To them, failure was not due to Upwork because, in their eyes, Upwork did not have power over them. In contrast, the other group saw themselves as employed by Upwork and that Upwork is causing them to fail due to their mismanagement; for example, not controlling for bad clients, and because of their extractive policies.

Breakdown of solidarity

Our final set of findings highlights how these identities are related to perceptions of Upwork, and how this led to a breakdown in solidarity. We noticed that freelancers were divided into two groups. One group, the ‘entrepreneurs’ saw Upwork as providing opportunities as a service or a tool that they chose to use, and not an employer that they had to work for:

‘Unions are for employees. As a freelancer, you are the business owner, not an employee. In other words, you’re not “labor”— you’re owner and manager of your business. Upwork is one tool you can choose to use or not to further your freelancer business...’.

The second group of freelancers, who saw themselves as employees, were incensed by this notion, feeling that the first group simply did not understand the plight of being a gig worker:

The thing about those [expletive] is that they have convinced themselves that they are freelancers, not employees, etc. They’re so ignorant and obnoxious. They are working for “the man” just like everyone else. They’re just too delusional to see that they are just a money-making machine for Upwork.’

Whereas there had been some initial calls for solidarity when the policy was first announced, workers now fought among each other, and the two groups denigrated each other, with the first group who identified as entrepreneurs often attacking members of the other group:

‘I don’t know if this is just a joke, but seems so many people think this is a money grab for Upwork, and I think they are missing the point. I doubt this money will make much of a dent on revenue...This is to drive off the shit tier people. If \$12 for 80 connects is the end of the world for you, you are the person they want to get rid of, sweetie’.

This excerpt was taken from a thread on whether it was time to start an Upwork union. It illustrates how top-ranked freelancers would now gloat over freelancers that were hit by the change. The language also clearly illustrates a disdain for a certain group of freelancers, who were ‘shit tier people’ and who Upwork should get rid of. Indeed, while some freelancers tried to organise collective action and wanted the top-ranked freelancers to join them, as one

freelancer noted: business owners can also organise, but this was not met with any interest. It was met with the following sentiment:

Upwork is not your employer. It is a service, and you choose how to utilize it to your advantage. Sitting around and complaining won't solve any business problems.

In sum, we first saw examples of solidarity when the policy change was announced with most workers noting their anger, downvoting positive sentiments and some showing solidarity to lower-status workers and new workers. However, this solidarity was frail. After this initial reaction, it became clear that there were two major hindrances to workers building a solid form of solidarity and perhaps trying to form collective action. Namely, workers separated along lines of different interests, so that instead of finding a collective understanding, more saw each other as competitors. This is an important finding because Upwork specifically tried to cater to certain groups of workers. Gig workers who saw themselves in the category of being supported by Upwork, praised the change and attacked their fellow gig workers. The breakdown of solidarity was further driven by gig workers not sharing a collective identity, which is crucial for starting collective action (Royle & Rueckert, 2020); instead they had distinct identities. These identities affected where workers saw their interests and allies, with one group seeing themselves as entrepreneurs allied with Upwork because Upwork provides a useful service. As a consequence, they turned against other workers, who they saw as unworthy competitors that threatened their business.

DISCUSSION

Our findings show that, while gig workers may share an initial outrage over platform policies, in this case, Upwork's change to connects, their ability to construct collective action is limited by the breakdown of solidarity. Instead of identifying and articulating shared interests, the freelancers instead divided into groups based on their own personal interests and identities as either entrepreneurs or employees of the platform. The main point of our findings is the division of freelancers due to them perceiving themselves as belonging to different 'classes'. One group saw themselves as 'top level' freelancers who were running their own business and using Upwork as a service. To them, gig workers coming from low-income countries or who otherwise could not command high fees were unwanted competition who clogged up the platform, making it harder to run a business. On the other hand, there were workers who saw themselves as 'employees' of Upwork, mostly because they had a higher dependence on Upwork, and because they had few alternative employment options. Our findings, therefore, echo previous research that has noted that gig workers tend to fight among themselves to claim status, which can only be achieved when one group disparages another group (Demirel et al., 2020).

Furthermore, our findings go against previous work that has found that online communities can serve as spaces where workers can build up solidarity and create collective action (Tassinari & Maccarrone, 2020; Wood et al., 2018). Yet, it corresponds with the research that has pointed out that online communities only provide weak ties, which may not be strong enough to overcome the fact that workers are dispersed around the globe and lack a clear community (Heckscher & McCarthy, 2014). Our findings highlight issues regarding workers taking collective action towards platforms. Thereby, we contribute to two ongoing discussions: one concerning solidarity in the gig economy, and one concerning online communities as a tool for workers organising.

Solidarity and collective actions in the gig economy

Recent work has pointed out that gig workers can build solidarity and collective action (Maffie, 2020; Tassinari & Maccarrone, 2020; Wood et al., 2018). Our findings differ from the findings in these studies and may, therefore, extend and nuance the understanding of solidarity in the gig economy.

Instead of collective identities and action, we find division in both identities and proposed action, with some workers even supporting the platform. A reason for this disagreement may be that previous research has focused on workers who work under the same conditions and in the same location, for example, Uber drivers (Maffie, 2020). These types of gig workers stand out by working on platforms that offer local, physical and clearly defined jobs, such as ride hailing (Wood et al., 2021). In contrast, workers on Upwork work in different locations and may differ greatly in skills, job niche and the fees they can command (E. L. Bucher, Schou, et al., 2021; Wood et al., 2021).

Our findings point to workers having different interests and distinct identities. That different interests affect collective action echoes classic theories on collective action that argue that workers pursue their own self-interest (Olson, 1965). More modern research has emphasised that networks, including networks from online communities, can serve to overcome such self-interest (Hedström, 1994; Maffie, 2020). When workers are embedded into dense networks, then collective identities and solidarity may arise, and organisations follow (Hedström, 1994). This embeddedness is lacking in the global gig economy and it makes it difficult for workers to overcome narrow self-interest. This finding differs from Wood et al.'s (2018) notion that gig workers share a collective identity bound in autonomy and entrepreneurial values. Instead, our study illustrates that workers are split up into two identities. Our findings echo and extend studies that show that gig workers split up in different identities and in relation to the platform (E. Bucher, Fieseler, et al., 2021; Demirel et al., 2020). For example, Demirel and colleagues (2020) showed that gig workers separate along 'class lines' based on their location in the Global North or South. Our findings extend this by illustrating that workers also separate along distinct identities as either entrepreneurs or employees. While we cannot link posts to location, we do see evidence that these two identities might be linked to location. Freelancers who saw themselves as 'employees' often stated that they were not in the United States, while gig workers espousing an entrepreneurial identity were more likely to show that they were in the United States. Hence, it might be crucial to further explore how collective gig worker identities are influenced by place.

Overall, whereas previous research has been more positive towards the possibility of workers building solidarity and conducting collective action (e.g., Maffie, 2020; Tassinari & Maccarrone, 2020), our findings point to the solidarity that workers initially showed as being largely symbolic. Workers may express initial joint outrage and collective sympathy, but then narrow self-interest emerges and the impetus to collective action collapses.

Online communities as a tool for organising workers

Our findings problematise the notion that online communities can work as spaces where solidarity between workers arises (Maffie, 2020; Tassinari & Maccarrone, 2020; Wood et al., 2018). Recent research has been optimistic in regard to the potential of online communities in organising workers. The notion is that online communities can replace physical social networks (Wood, 2015) and that workers can build up bonds by using these communities (Cohen & Richards, 2015).

Thereby, they serve as spaces for workers to organise. Again, our findings differ from these notions, which provide us with the opportunity to nuance and extend prior work.

Instead of acting as a space where workers build up solidarity and organise, the online community in our study became a space for conflict. There may be a number of reasons as to why our findings differ from previous research. First, in previous research, workers had the ability to meet up physically (c.f. Maffie, 2020; Wood, 2015). This was not the case in our study. In contrast, our findings indicate that the virtual social ties that online communities provide are not strong enough to overcome narrow self-interest and create worker collectives. They may serve as spaces for symbolic solidarity but not for actual solidarity that includes letting go of self-interest. Moreover, online communities may serve as a complement to physical meetups but not as a substitute.

A major limitation in understanding how (or whether) online communities can function as drivers for solidarity (or not), is a lack of understanding of the affordances of online communities in this regard (Geelan, 2021; Hennebert et al., 2021). According to information systems theory, digital technologies, such as online communities, possess certain affordances, that is, action possibilities that actors *may* use to reach a certain goal (Faraj & Azad, 2012; Faraj et al., 2016). Actors may build up support and come together through participating in online communities *if* they use the communities in a particular way (Meurer et al., 2022). However, currently, we do not know how gig workers may actualise the affordances of online communities to build up solidarity.

Second, another issue could be the lack of orchestration in the online community we study. Previous research has pointed out that unions need to act as orchestrators in online communities to secure strategic oversight and coordination (Wood, 2015). Our findings point to how, when lacking these elements, online communities may turn into conflict zones that breakdown solidarity among workers. In this regard, our findings echo and add to work that has been more sceptical of the idea that online communities can organise workers by themselves (Massa & O'Mahony, 2021; Saundry et al., 2012).

Instead, this work tends to argue that there is a need for unions to take active leadership in online communities to ensure that solidarity and not conflict emerge from the communities (Heckscher & McCarthy, 2014, pp. 643–644; Pasquier & Wood, 2018). However, while there is a growing literature on how unions utilize new forms of social media and online communities (Geelan & Hodder, 2017; Geelan, 2021; Hennebert et al., 2021; Hodder & Houghton, 2015), there are still open questions as to whether unions can organise workers who mainly interact through online communities. Wood and colleagues (2021, p. 16) note that support for unions may be limited in such cases. Here, our study shows a similar paradox: while the workers may need orchestration, they may not support union orchestration efforts because a large group of them perceive themselves to be 'entrepreneurs'.

Overall, our study points to how online communities, as currently used by workers, are not conducive to building solidarity and, possibly, consequent collective action. Furthermore, our findings support the notion that many gig workers, who see themselves as entrepreneurs, are unlikely to support unions (c.f. Wood et al., 2021). Hence, union orchestration may not be forthcoming. Instead, we suggest that it is important to consider that online communities are fluid tools and that workers may find ways to use online community affordances to build solidarity. In their study, Massa and O'Mahony (2021) found that activists set up an architecture that allowed for collaboration and reduced conflict, thus allowing 'order to emerge from chaos'. This indicates that self-organisation among workers may arise over time, and that solidarity and collective action may be obtained as workers improve the way they engage with other in online communities. We encourage future research to investigate this.

LIMITATIONS

Our study is not without limitations. In particular, we note three limitations. First, our study only considered one platform (Upwork) and one policy change. As previous research has noted, there might be differences across platforms (Wood et al., 2018), and so it is important that future research delves into possible variations across platforms. Second, workers that post on Reddit might represent a biased sample, for example, it may be particularly disaffected workers. Third, while relying on online community data allowed us to study how workers actually use these communities, it also limited us to some degree in how we could analyse solidarity. We could not directly measure the amount of solidarity that workers felt, but only infer it from their conversations with each other. Thus, while our methods had the strength of allowing us to engage with work arguing that workers build solidarity in online communities (Maffie, 2020; Tassinari & Maccarrone, 2020; Walker, 2021), it was not without weaknesses. We, therefore, suggest that future research complement our findings by investigating solidarity in the gig economy through other means, such as surveys or qualitative interviews.

CONCLUSION

Gig workers have protested digital labour platforms in the past, aiming to secure better rights and pay (Tassinari & Maccarrone, 2020; Wood & Lehdonvirta, 2019). Moreover, legislators, most prominently in California, have taken action against exploitative platform practices. However, these organised actions against digital platforms mostly take place at local or regional levels. Our paper indicates that workers organising on a global scale to improve their working arrangement faces great obstacles. Indeed, workers may more organise against each other than against the platform because they are guided by narrow self-interest and because workers do not realise an identity as employees.

Our paper shows that workers seek to benefit themselves, or their own ‘business’ as some described it, rather than collectively organising. The implications of this may be that rather than gaining rights and better working conditions, workers in the global gig economy may find themselves in a race to the bottom as platforms are able to take a greater cut, enabled by gig workers who would rather be rid of ‘competition’ than collectively organising.

ENDNOTE

¹ ‘Connects are used to submit proposals for jobs. Submitting a proposal to a job requires up to 6 Connects, depending on factors such as the size and type of project’ (Upwork, 2020). In other words, connects are the fee that workers pay to bid for jobs.

² PRAW documentation: <https://praw.readthedocs.io/en/latest/>

³ Upvoting on Reddit is similar to liking on Facebook. Typically, Reddit displays the most upvoted comments at the top. Hence, upvoting a post highlights it in a thread, and upvoting a thread highlights it in the community.

REFERENCES

- Beck, V. & Brook, P. (2020) Solidarities in and through work in an age of extremes. *Work, Employment and Society*, 34(1), 3–17.
- Bucher, E., Fieseler, C., Lutz, C. & Buhmann, A. (2021) Professionals, purpose-seekers, and passers-through: how microworkers reconcile alienation and platform commitment through identity work. *New Media & Society*, Forthcoming.

- Bucher, E.L., Schou, P.K. & Waldkirch, M. (2021) Pacifying the algorithm–anticipatory compliance in the face of algorithmic management in the gig economy. *Organization*, 28(1), 44–67.
- Cohen, N. & Richards, J. (2015) I didn't feel like I was alone anymore': evaluating self-organised employee coping practices conducted via Facebook: coping practices through Facebook. *New Technology, Work and Employment*, 30(3), 222–236.
- Demirel, P., Nemkova, E. & Taylor, R. (2020) Reproducing global inequalities in the online labour market: valuing capital in the design field. *Work, Employment and Society*, 35(35), 914–930.
- Duggan, J., Sherman, U., Carbery, R. & McDonnell, A. (2020) Algorithmic management and app-work in the gig economy: a research agenda for employment relations and HRM. *Human Resource Management Journal*, 30(1), 114–132.
- Faraj, S. & Azad, B. (2012) The materiality of technology: an affordance perspective, *Materiality and organizing: social interaction in a technological world*, 237. Oxford: Oxford University Press, p. 258.
- Faraj, S., von Krogh, G., Monteiro, E. & Lakhani, K.R. (2016) Special section introduction—online community as space for knowledge flows. *Information systems Research*, 27(4), 668–684.
- Fieseler, C., Bucher, E. & Hoffmann, C.P. (2019) Unfairness by design? The perceived fairness of digital labor on crowdworking platforms. *Journal of Business Ethics*, 156(4), 987–1005.
- Geelan, T. (2021) Introduction to the special issue—the Internet, social media and trade union revitalization: still behind the digital curve or catching up? *New Technology, Work and Employment*, 36(2), 123–139.
- Geelan, T. & Hodder, A. (2017) Enhancing transnational labour solidarity: the unfulfilled promise of the Internet and social media. *Industrial Relations Journal*, 48(4), 345–364.
- Gegenhuber, T., Ellmer, M. & Schüßler, E. (2021) Microphones, not megaphones: functional crowdworker voice regimes on digital work platforms. *Human Relations*, 74(9), 1473–1503.
- Gerbaudo, P. (2017) Social media teams as digital vanguards: the question of leadership in the management of key Facebook and Twitter accounts of occupy wall street, indignados and UK uncut. *Information, Communication & Society*, 20(2), 185–202.
- Gioia, D.A., Corley, K.G. & Hamilton, A.L. (2013) Seeking qualitative rigor in inductive research: notes on the gioia methodology. *Organizational Research Methods*, 16(1), 15–31.
- Gumbrell-McCormick, R. & Hyman, R. (2015) International trade union solidarity and the impact of the crisis. *European Policy Analysis*, 2015(1), 1–16.
- Heckscher, C. & McCarthy, J. (2014) Transient solidarities: commitment and collective action in post-industrial societies. *British Journal of Industrial Relations*, 52(4), 627–657.
- Hedström, P. (1994) Contagious collectivities: on the spatial diffusion of Swedish trade unions, 1890–1940. *American Journal of Sociology*, 99(5), 1157–1179.
- Hennebert, M.A., Pasquier, V. & Lévesque, C. (2021) What do unions do with digital technologies? An affordance approach. *New Technology, Work and Employment*, 36(2), 177–200.
- Hodder, A. & Houghton, D. (2015) Union use of social media: a study of the university and college union on Twitter. *New Technology, Work and Employment*, 30(3), 173–189.
- Kalleberg, A.L. & Vallas, S.P. (2018) Probing precarious work: theory, research, and politics. *Research in the Sociology of Work*, 31, 1–30.
- Kässi, O. & Lehdonvirta, V. (2018) Online labour index: measuring the online gig economy for policy and research. *Technological Forecasting and Social Change*, 137, 241–248.
- Kässi, O., Lehdonvirta, V. & Stephany, F. (2021). *How many online workers are there in the world? A data-driven assessment. A Data-Driven Assessment (March 23, 2021)*. ArXiv preprint: 2103.12648.
- Levina, N. & Vaast, E. (2015) *Leveraging archival data from online communities for grounded process theorizing*. London: Routledge, p. 520.
- Lincoln, Y. & Guba, E. (1985) *Naturalistic inquiry*. London: Sage.
- Maffie, M.D. (2020) The role of digital communities in organizing gig workers. *Industrial Relations: A Journal of Economy and Society*, 59, 123–149.
- Massa, F.G. & O'Mahony, S. (2021) Order from chaos: how networked activists self-organize by creating a participation architecture. *Administrative Science Quarterly*, 66(4), 1037–1083.

- McBride, J. & Lucio, M.M. (2011) Dimensions of collectivism: occupation, community and the increasing role of memory and personal dynamics in the debate. *Work, Employment and Society*, 25(4), 794–805.
- Meurer, M.M., Waldkirch, M., Schou, P.K., Bucher, E.L. & Burmeister-Lamp, K. (2022) Digital affordances: how entrepreneurs access support in online communities during the COVID-19 pandemic. *Small Business Economics*, 58(2), 637–663.
- Morgan, G. & Pulignano, V. (2020) Solidarity at work: concepts, levels and challenges. *Work, Employment and Society*, 34(1), 18–34.
- Mowbray, P.K., Wilkinson, A. & Tse, H.H.M. (2015) An integrative review of employee voice: identifying a common conceptualization and research agenda. *International Journal of Management Reviews*, 17(3), 382–400.
- Olson, M. (1965) *The logic of collective action: public goods and the theory of groups, second printing with a new preface and appendix*, 124. Boston: Harvard University Press 2009.
- Pasquier, V. & Wood, A.J. (2018) The power of social media as a labour campaigning tool: lessons from OUR walmart and the fight for 15. *ETUI Policy Brief*, 1–6.
- Petriglieri, G., Ashford, S.J. & Wrzesniewski, A. (2019) Agony and ecstasy in the gig economy: cultivating holding environments for precarious and personalized work identities. *Administrative Science Quarterly*, 64(1), 124–170.
- Royle, T. & Rueckert, Y. (2022) McStrike! Framing, (political) opportunity and the development of a collective identity: McDonald's and the UK fast-food rights campaign. *Work, Employment and Society*, 36(3), 407–426.
- Saundry, R., Stuart, M. & Antcliff, V. (2012) Social capital and union revitalization: a study of worker networks in the UK audio-visual industries. *British Journal of Industrial Relations*, 50(2), 263–286.
- Stephenson, C. & Stewart, P. (2001) The whispering shadow: collectivism and individualism at Ikeda-Hoover and Nissan UK. *Sociological Research Online*, 6(3), 72–82.
- Tassinari, A. & Maccarrone, V. (2020) Riders on the storm: workplace solidarity among gig economy couriers in Italy and the UK. *Work, Employment and Society*, 34(1), 35–54.
- Tausczik, Y.R. & Pennebaker, J.W. (2010) The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology*, 29(1), 24–54.
- Thompson, P., McDonald, P. & O'Connor, P. (2020) Employee dissent on social media and organizational discipline. *Human Relations*, 73(5), 631–652.
- Vaast, E., Safadi, H., Lapointe, L. & Negoita, B. (2017) Social media affordances for connective action: an examination of microblogging use during the Gulf of Mexico oil spill. *MIS Quarterly*, 41, 1179–1205.
- Veen, A., Barratt, T. & Goods, C. (2020) Platform-capital's 'app-etite' for control: a labour process analysis of food-delivery work in Australia. *Work, Employment and Society*, 34(3), 388–406.
- Waldkirch, M., Bucher, E., Schou, P.K. & Grünwald, E. (2021) Controlled by the algorithm, coached by the crowd—how HRM activities take shape on digital work platforms in the gig economy. *The International Journal of Human Resource Management*, 32, 2643–2682.
- Walker, M. (2021) Peer-to-peer online voice as emergent collective action. *Journal of Industrial Relations*, 63(5), 777–797.
- Wilkinson, A., Gollan, P.J., Kalfa, S. & Xu, Y. (2018) Voices unheard: employee voice in the new century. *The International Journal of Human Resource Management*, 29(5), 711–724.
- Wood, A.J. (2015) Networks of injustice and worker mobilisation at Walmart. *Industrial Relations Journal*, 46(4), 259–274.
- Wood, A.J., Graham, M., Lehdonvirta, V. & Hjorth, I. (2019a) Good gig, bad gig: autonomy and algorithmic control in the global gig economy. *Work, Employment and Society*, 33(1), 56–75.
- Wood, A.J., Graham, M., Lehdonvirta, V. & Hjorth, I. (2019b) Networked but commodified: the (dis) embeddedness of digital labour in the gig economy. *Sociology*, 53(5), 931–950.
- Wood, A.J. & Lehdonvirta, V. (2019). *Platform labour and structured antagonism: understanding the origins of protest in the gig economy*. Oxford: Working Paper presented at the Oxford Internet Institute Platform Economy Seminar Series 5 March 2019.

- Wood, A.J., Lehdonvirta, V. & Graham, M. (2018) Workers of the Internet unite? Online freelancer organisation among remote gig economy workers in six Asian and African countries. *New Technology, Work and Employment*, 33(2), 95–112.
- Wood, A.J., Martindale, N. & Lehdonvirta, V. (2021) Dynamics of contention in the gig economy: rage against the platform, customer or state? *New Technology, Work and Employment*, 1–21.

How to cite this article: Schou, P.K. & Bucher, E. (2022) Divided we fall: the breakdown of gig worker solidarity in online communities. *New Technology, Work and Employment*, 1–21. <https://doi.org/10.1111/ntwe.12260>