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## Just Another Voice in the Crowd? Investigating Digital Voice Formation in the Gig Economy

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Abstract:	<p>Voice is crucial for workers as it enables them to better their organizations and exert some degree of control over managerial decision-making. Yet, as workers increasingly find jobs on digital platforms in the gig economy, traditional channels of voice are being replaced by digital voice channels, such as online communities. To add knowledge on how voice takes form on such channels, we collected conversation data from two online communities, which function as official (Upwork community) and unofficial (Reddit community) digital voice channels for gig workers active on Upwork. Based on a qualitative analysis of both communities, we discovered that when gig workers voice in digital channels, they tend to frame their voice, including signals of status and group membership. This voice framing creates different factions, which then engage in voice modulation, amplifying in-group members and muting outgroup members. Thereby, our study teases out how voice takes form in digital channels and how it differs from voice in traditional organizations. Our study contributes to the growing research at the intersection of voice and digital platforms.</p>

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# Just Another Voice in the Crowd? Investigating Digital Voice Formation in the Gig Economy

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## JUST ANOTHER VOICE IN THE CROWD? INVESTIGATING DIGITAL VOICE FORMATION IN THE GIG ECONOMY

### ABSTRACT

Voice is crucial for workers as it enables them to better their organizations and exert some degree of control over managerial decision-making. Yet, as workers increasingly find jobs on digital platforms in the gig economy, traditional channels of voice are being replaced by digital voice channels, such as online communities. To add knowledge on how voice takes form on such channels, we collected conversation data from two online communities, which function as official (Upwork community) and unofficial (Reddit community) digital voice channels for gig workers active on Upwork. Based on a qualitative analysis of both communities, we discovered that when gig workers voice in digital channels, they tend to frame their voice, including signals of status and group membership. This voice framing creates different factions, which then engage in voice modulation, amplifying in-group members and muting outgroup members. Thereby, our study teases out how voice takes form in digital channels and how it differs from voice in traditional organizations. Our study contributes to the growing research at the intersection of voice and digital platforms.

**Keywords:** Voice, digital platforms, online communities, digital voice channels, gig economy, qualitative methods, digital research methods

### INTRODUCTION

Having a voice is critical for workers to improve their organization, workplace and managerial decision-making (Morrison, 2011). In the words of Wilkinson, Gollan, Kalfa and Xu (2018;711) voice represents a “*fundamental democratic right... to extend a degree of control over managerial decision-making within an organization*”. Consequently, researchers of various traditions have built up a rich literature on how voice takes form in organizations (Morrison, 2011; Wilkinson, Barry & Morrison, 2020). However, an increasing number of workers are finding jobs outside traditional organizations, where classic employment relations are voided, creating doubts to whether workers can influence the organization that they work for (Cameron, 2022; Kalleberg, 2009; Kalleberg & Vallas, 2018; Rahman, 2021). In place of traditional jobs, we have seen the rise of the ‘gig economy’ where workers find jobs through digital labor platforms (Vallas & Schor, 2020). Digital labor platforms, such as ‘Upwork’, ‘Fiverr’ or ‘Freelancer’, act as intermediaries

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3 between workers and clients and enable organizations and individuals to outsource specific tasks,  
4 such as graphic design, programming or data visualization, to an anonymous global workforce.  
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8 Currently, scholars fear that workers on such platforms lack a voice because the platforms  
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10 reject a traditional employment relationship by denying that workers are employed in their  
11 organization (Duggan, Carbery, Sherman & McDonnell, 2020; Meijerink & Keegan, 2019;  
12 Rahman, 2021), and because the platforms replace human managers, who may listen to workers'  
13 voice, with algorithms (Bucher, Schou & Waldkirch, 2021; Rahman, 2021). The lack of a  
14 traditional employment relation means that workers lack a *formal channel* of voice, such as union  
15 representation (McCloskey & McDonnell, 2018), while the replacement of managers with  
16 algorithms, means that workers lack typical *informal channels* of voice, such as informal meetings  
17 with managers (Bashshur & Oc, 2015).  
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29 Given this lack of access to typical channels, scholars have investigated whether gig workers  
30 may have access to other channels, focusing on how they may use online communities to create  
31 spaces for voice (Gray & Suri, 2019; Rosenblat & Stark, 2016; Schou & Bucher, 2022). Thus, a  
32 nascent stream of work has aimed to build up an understanding of how gig workers may use digital  
33 voice channels, that is official and non-official online communities or mobile chats, to voice  
34 concerns to the platforms (Ellmer & Reichel, 2021; Gegenhuber et al., 2021; Karanovic et al.,  
35 2021; Kougiannou & Mendonça, 2021; Martin, Parry & Flowers, 2015; Schou & Bucher, 2022;  
36 Wood, Lehdonvirta & Graham, 2018). This stream has mostly focused on the *outcomes* of voice,  
37 that is whether workers unionize or take collective action based on their communication in digital  
38 channels (Maffie, 2020; Schou & Bucher, 2022; Tassinari & Maccarone, 2020). For example,  
39 Maffie (2020) shows how increased interaction in digital channels, here an online community,  
40 increases worker interest in joining worker associations.  
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However, this leaves our understanding of how gig workers voice, and how they interact with each other when voicing, very limited (Schou & Bucher, 2022; Vallas & Schor, 2020; Wilkinson et al., 2021). Gig workers' voice behavior is likely very different than workers in traditional settings, because gig workers cannot voice directly to managers, because they are a heterogeneous group with large differences in income (Vallas & Schor, 2020), and because digital channels have different properties, possibilities and limitations when compared to traditional channels (Wilkinson et al., 2021). Voice in a digital channel is a collective, interactional phenomenon, because the voice is public and other actors can influence how the voiced idea or complaint is promoted and received (Satterstrom, Kerrisey & DiBenigno, 2021). This stands in contrast to how voice in traditional organizations have been conceptualized, as happening in closed spaces, such as meetings between employees or union representatives and managers (Detert & Burris, 2007). But the theory on collective voice is just being developed, with only a few recent studies providing knowledge here (Bain, Kreps, Meikle & Tenney, 2021; Karunakaran, 2022; Satterstrom et al., 2021). There is much ground to be covered here, especially as scholars argue that behavior changes drastically when situated in digital contexts where actors and their voice are highly visible (Cristea & Leonardi, 2019; Leonardi & Treem, 2020). Simply, gig workers' voice behavior is likely very different from workers in a traditional organization because of their work arrangement and the nature of digital voice channels. We, therefore, seek to investigate *how gig worker voice takes form in digital voice channels*.

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To follow this purpose, we conduct a qualitative study of two online communities: the official community of Upwork and the unofficial Reddit community for gig workers on Upwork, combining quantitative content analysis with a qualitative grounded theory approach (Glaser & Strauss, 1967). These communities provide a fitting context to study voice behavior in different

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3 channels. The official community is organized by Upwork, utilizing moderators, while the  
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5 informal Reddit community is organized in a bottom-up manner by gig workers themselves. In  
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7 order to investigate both communities, we collected discussions (posts & comments) from both  
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9 the official Upwork community (community.upwork.com) as well as from the ‘unofficial’  
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11 community of workers on Reddit (r/upwork). To control for thematic differences, we collected  
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13 discussions surrounding the same *critical event* on both channels: Upwork introduces a design  
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15 change which forces workers to buy ‘connect’ tokens from the platform to be able to send out  
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17 proposals. We engaged in qualitative coding of our sample of a total of 5’045 submissions relying  
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19 on standard methods of analyzing social media data (McKenna, Myers & Newman, 2017;  
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21 Toubiana & Zietsma, 2017; Vaast, Safadi, Lapointe & Negoita, 2017).

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26 Using this method, we draw out a process of how voice is organized in digital voice channels.  
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28 We discover two key voice behaviors occurring in online communities. First, we outline *voice*  
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30 *framing*, a behavior that encompasses how workers signal their group membership, how they frame  
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32 their message and how they direct their voice. We find that this individual-level voice behavior  
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34 not only affects a worker’s voice, but also facilitates faction building within the channel. Second,  
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36 we outline *voice modulation*, which consists of the different factions amplifying and muting each  
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38 other. Building on these findings, we outline a model of how voice is organized through faction-  
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40 building in online communities.  
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45 Our findings provide new insights into how voice forms in digital voice channels. Most  
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47 importantly, we discover that workers not only voice complaints or ideas, but they also *frame* their  
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49 voice, including signals of status and group membership. This framing leads workers to split into  
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51 factions that *modulate* voice, amplifying in-group members and muting out-group members. In  
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53 this regard, our findings extend current debates about collective voice behavior (Bain et al., 2021;  
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3 Satterstrom et al., 2021) and digital voice channels (Ellmer & Reichel, 2021; Gegenhuber et al.,  
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5 2021).  
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## 7 8 **THEORETICAL FRAMEWORK**

### 9 **The organization of voice from traditional organizations to the gig economy**

11 In his classic work, Hirschman (1970: 30) defines voice as “*any attempt at all to change,*  
12 *rather than to escape from, an objectionable state of affairs*”. In this definition, voice is a broad  
13  
14 concept that includes both different stakeholders, ranging from workers to customers, and a wide  
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16 array of ways of voicing, from unionization of workers to customer complaints. Voice is a  
17  
18 particularly vital element for workers as it provides them with a fundamental democratic right to  
19  
20 shape managerial decisions that affect them (Wilkinson et al., 2018: 711). This can be crucial when  
21  
22 workers face damaging work practices, such as work that creates burnout (Holland, Allen &  
23  
24 Cooper, 2013). Yet, voice is also beneficial to organizations. By allowing voice, organizations can  
25  
26 obtain useful input and solutions from lower-level workers and create engagement among workers  
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28 (Detert, Burris, Harrison & Martin, 2013; Morrison, 2011). While scholars interested in workers’  
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30 rights and organizational performance share a common interest in researching how organizations  
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32 can facilitate voice (Wilkinson et al., 2020), there has historically been two perspectives on voice.  
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34 There is an organizational behavior perspective (OB), which focuses on how organizations can  
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36 facilitate voice through management and an organizational culture that promotes voice (Burris et  
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38 al., 2017, Morrison; 2011). In this perspective, voice is a potential source of ideas and knowledge  
39  
40 about the organization that management should seek to promote (Morrison, 2011). Moreover, the  
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42 focus is on the individual employee and what motivates them to voice (Burris, McClean, Detert &  
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44 Quiqley, 2022; Morrison, 2014). The voice channel in focus here is informal meetings between  
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46 managers and employees (e.g. Detert & Burris, 2007). Then there is an industrial relations  
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48 perspective (IR), which focuses on voice as a way for worker to have influence over employment  
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3 relations, e.g., pay and worker rights (Wilkinson et al. 2020). In this perspective, the focus is more  
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5 on how workers organize in unions and voice as a collective endeavor (Wilkinson et al., 2020).  
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7 The voice channel here is thus official interactions between unions and management.  
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10 While this past work has drawn out a rich insights on voice formation and behaviour in  
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12 traditional organizations, many of these insights are not transferable to the gig economy  
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14 (Oyetunde, Prouska & McKearney, 2022; Wilkinson et al., 2021). We point to three reasons for  
15  
16 why existing theories cannot be transferred. *First*, the voice channels used by gig workers are of a  
17  
18 radically different nature than the ones used by workers in traditional organizations. Traditional  
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20 channels for voice formation, such as informal conversations, management meetings, or unions,  
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22 are largely unavailable to gig workers due to the dispersed, globalized and automatized nature of  
23  
24 work (Rahman, 2021; Wood et al., 2018). This situation is further exacerbated for gig workers in  
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26 fully digitalized work environment. While food delivery riders or Uber drivers may meet fellow  
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28 gig workers in physical spaces, such as taxi queues or restaurants (Maffie, 2020; Tassinari &  
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30 Maccarrone, 2020), such opportunity is lacking for workers on digital platforms who only can rely  
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32 on digital voice channels, such as online forums or WhatsApp groups (Bucher et al., 2021;  
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34 Gegenhuber et al., 2021; Gümüşay et al., 2022). Yet, our understanding of how voice forms in  
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36 novel channels, such as Facebook groups remains only tangential (Kougiannou & Mendonça,  
37  
38 2021). This is problematic because digital channels possess different features that separate them  
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40 from traditional, physical channels (Etter & Albu, 2021). For example, many online communities  
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42 have “like/upvote” buttons that boost certain posts. These features can have a significant impact  
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44 on behavior (Majchrzak, Faraj, Kane & Azad, 2013). For example, Etter and Albu (2021) show  
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46 that the like/upvote feature can increase attention to a topic and thus drive interactions around the  
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48 topic in question. Therefore, interactions around voice may be different in digital channels when  
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3 compared to traditional channels because the digital features can augment and distort  
4 conversations (Etter & Albu, 2021).  
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8 *Second*, voice research builds on the assumption of an existing, visible organizational  
9 hierarchy that provides a clear target for voice, such as a supervisor (Detert & Burrell, 2007;  
10 Morrison, 2011). But as gig workers are not employed into an organizational hierarchy, they may  
11 lack a clear target to direct voice to. Indeed, recent empirical research highlights how gig workers  
12 often turn to each other to discuss new ideas and develop solutions (Waldkirch et al., 2021). Yet,  
13 there is limited knowledge on how the lack of a direct target for voice affects gig workers. *Last*,  
14 in past work, voice is often seen as taking place in enclosed, clearly defined spaces, such as weekly  
15 meetings between employees/union reps and their manager. However, in digital voice channels  
16 voicings are public as they are put out in ‘the ether’ of social media. Consequently, voice becomes  
17 a collective endeavor as the voicing is in an open space where everyone can interact with it. Yet,  
18 only recently, research has begun to conceptualize voice as a collective, interactional process that  
19 is occurring in public spheres (Satterstrom et al., 2021). For example, researchers have investigated  
20 how organizational actors may amplify voiced ideas and thus ensure their implementation (Bain  
21 et al., 2021; Satterstrom et al., 2021). However, because this work focuses on traditional  
22 organizations too, it is similar not transferable. For example, voice in a digital channel is seen by  
23 many more people than voice in a small team. Overall, these differences separate remote gig  
24 workers from workers working in traditional organizations. We summarize these differences in  
25 table 1.  
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53 Thus, our understanding of how gig worker voice is taking form in digital crowds is poorly  
54 understood (Karanovic et al., 2021; Kellogg, Valentine & Christin, 2020; Waldkirch et al., 2021),  
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3 leaving gaps in both the IR perspective and the OB perspective. Scholars from the IR perspective  
4 pose that workers, in particular in the gig economy, will have to find new ways to create collective  
5 action (Wilkinson et al., 2021), while scholars in the OB tradition pose that voicing in digital  
6 spaces might unfold in different ways than in traditional spaces (Satterstrom et al., 2021; Turco,  
7 2016). In light of the disruptions to voice behavior noted above, there is a growing body of  
8 research investigating voice in digital spaces.  
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### 10 11 12 **Voice in the gig economy and digital voice channels** 13

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15 In the absence of traditional voice channels, gig workers turn to digital voice channels, such  
16 as online communities (Gegenhuber et al., 2021; Maffie, 2020; Tassinari & Maccarone, 2020;  
17 Wood et al., 2018). Online communities are here understood as social media forums where  
18 members gather around a shared interest or activity (Faraj, Von Krogh, Monteiro & Lakhani,  
19 2016). By using online communities, gig workers can organize and oppose platform initiatives  
20 (Karanovic et al., 2021; Maffie, 2020). For example, studies of Uber drivers have shown that they  
21 use online communities to oppose Uber's practices and to build solidarity and collective action  
22 (Karanovic et al., 2021; Maffie, 2020; Rosenblat & Stark, 2016). Kougiannou and Mendonça  
23 (2021) make a similar observation in the case of food couriers. Yet, digital platforms can also use  
24 online communities strategically. For example, platforms may use them to provide controlled  
25 outlets for workers, in which workers can individually voice complaints and issues that disturb  
26 them in their workflow (Gegenhuber et al., 2021). Moreover, platforms may also rely on workers  
27 to supplement initiatives (Karanovic et al., 2021). As such, digital platforms seem to make use of  
28 certain types of gig worker voice. However, they do not want to cede control and still desire to  
29 steer online communities in ways that allow them to control worker voice (Ellmer & Reichel, 2021;  
30 Gegenhuber et al., 2021). In relation to this, recent research on online communities has pointed to  
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3 ways that platforms can strategically govern online communities by constraining conversations,  
4 information, and anonymity (Ellmer & Reichel, 2021).  
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8 While this nascent literature has provided crucial insights into the transformation of worker  
9 voice, there are still important lacunas of knowledge. First, while studies have shown that  
10 platforms utilize digital voice channels, such as online communities, and that they try to control  
11 them (Ellmer & Reichel, 2021; Gegenhuber et al., 2021), we know little about how *attempts of*  
12 *digital platforms to control voice* actually shapes voice behavior of gig workers. Some studies find  
13 evidence of silencing, while others find new modes of voice (Gegenhuber et al., 2021; Kougiannou  
14 & Mendonça. 2021). Second, we know little about the *actual voice behavior of gig workers* in  
15 online communities. Despite online communities allowing researchers to engage with the actual  
16 interactions between workers and platform, recent studies have focused more on which issues  
17 workers voice and why they voice them (Gegenhuber et al., 2021; Karanovic et al., 2021), but not  
18 *how they voice* and *how their voice may be constrained or enabled*. Further insights into actual  
19 voice behavior are vital because voice in online communities is not dyadic but is publicly  
20 broadcast. According to Satterstrom and colleagues (2021), this has significant effects on voice.  
21 For example, they find ideas voiced in front of coworkers can create allyship. Third, studies have  
22 focused on either official communities (e.g. Ellmer & Reichel, 2021; Gegenhuber et al., 2021), or  
23 unofficial communities (e.g. Karanovic et al., 2021; Wood et al., 2018). Both official and unofficial  
24 online communities can serve as digital voice channels, however there may be significant  
25 differences between them as organizations control official communities and present them as quasi-  
26 formal voice channels (Ellmer & Reichel, 2021), while unofficial communities may become  
27 spontaneous, informal meeting spaces where workers may seek to develop voice (Karanovic et al.  
28 2020). Yet, how official and unofficial communities may differ as voice channels is currently  
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3 unknown, which severely limits our understanding of gig worker voice as research have shown  
4 that they use both channels.  
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8 Thus, there is overall a lack of knowledge and theory that explicates and explains how gig  
9 worker voice takes form in digital voice channels. Therefore, we explore how gig worker voice  
10 takes form in official and unofficial communities.  
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## 14 **METHODOLOGY**

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16 In order to gain an understanding of how voice takes form across different channels, we  
17 collected conversation data from two online communities of gig workers from Upwork – one  
18 official (Upwork community) and one unofficial (Reddit community). We chose two different  
19 contexts to add to previous research that has either studied official communities (e.g. Gegenhuber  
20 et al. 2021) or unofficial communities (e.g. Karanovic et al. 2020), but not both simultaneously.  
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22 To detect differences in the two communities, we first conducted a LIWC sentiment analysis  
23 (Linguistic Inquiry and Word Count). This analysis revealed significant differences between the  
24 two communities and motivated us to conduct a deeper investigation. Here, we qualitatively  
25 analyzed the two communities with a focus on voice behaviors, coding and analyzing comments  
26 in line with traditional qualitative research (Gioia, Corley & Hamilton, 2012; Locke, Feldman &  
27 Golden-Biddle, 2020)  
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### 41 **Research context**

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43 Digital labor platforms are intermediaries between job seekers and job providers. These jobs  
44 may vary in size, complexity and whether they can be performed locally or remote (Bucher et al.,  
45 2021; Schou & Bucher, 2022). While sharing some fundamental characteristics with other non-  
46 standard work arrangements, i.e., jobs where people are not permanently employed, such as  
47 matchmakers or temp agencies, digital labor platforms are also unique in key regards (Meijerink  
48 & Keegan, 2019). While employment relations are official in more traditional non-standard work  
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3 arrangements, they are absent on digital labor platforms (Meijerink & Keegan, 2019).  
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5 Accordingly, platforms provide just the bare necessities to workers, such as rudimentary training  
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7 (Cameron, 2022; Meijerink & Keegan, 2019). Therefore, workers are left to shape their workplace  
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9 themselves (Cameron, 2022; Petriglieri, Ashford, Wrzesniewski, 2019). Moreover, while there is  
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11 a human element in the more traditional non-standard work arrangements, as there are too in  
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13 traditional organizations, digital labor platforms usually rely on automated, algorithmic  
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15 management (Rahman, 2021). Studies have shown that platforms' use of algorithmic management  
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17 tends to disempower gig workers and push traditional organizational functions toward workers  
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19 (Bucher et al., 2021; Rahman, 2021; Waldkirch, Bucher, Schou & Grünwald, 2021).  
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24 For our study, we selected the digital work platform 'Upwork' as our context of study.  
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26 Upwork mediates freelance work in 180 countries and generates a total of 1.8 billion USD in  
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28 worker earnings and fees (Pofeldt, 2018; Upwork, 2018). Upwork is a knowledge-based digital  
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30 work platform for highly skilled workers, such as graphic designers, video editors, software  
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32 developers or creative writers (Bucher et al. 2021; Vallas & Schor, 2020). Upwork is at least in  
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34 part 'algorithmically' managed as key outcomes – such as hiring decisions, visibility management  
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36 and reputation building – are based on automatic decision-making (e.g. Bucher et al., 2021). We  
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38 selected Upwork for a couple of reasons: 1) It is a very large platform measured by revenue. The  
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40 number of workers on Upwork is not reported officially, but it is in the millions. 2) Because gigs  
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42 on Upwork pay more and have longer client relationships than micro-work, e.g. Amazon  
43  
44 Mechanical Turk, workers have more "skin in the game", and a greater need to be able to voice.  
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49 Workers on Upwork have two main venues where they come together to share experiences  
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51 and stories, to ask questions and to find support. On the one hand, they visit the official Upwork  
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3 community<sup>1</sup>, which Upwork describes as a forum “*where customers can engage with each other*  
4 *and Upwork representatives*” and “*where members will share input on existing features and*  
5 *suggestions for new features*”. The official community was founded by Upwork in 2015 and  
6  
7 counts over 6’000’000 members today. Contributors are identifiable with their Upwork name  
8 (usually first name and first initial of last name) and often also with their picture and Upwork  
9  
10 profile, which contains their expertise and work/income history. Depending on their activity and  
11  
12 tenure within the community, members receive different status markers, such as ‘community  
13  
14 guru’, ‘ace contributor’, ‘community leader’ or ‘active member’. Upwork employees are present  
15  
16 as ‘moderators’ who actively participate in conversations and strictly enforce the detailed  
17  
18 community guidelines. The guidelines state, for instance, that ‘overly negative’ statements in  
19  
20 general or ‘deliberately disruptive and negative statements about Upwork’ will be deleted or result  
21  
22 in sanctions<sup>2</sup>. The official community can be seen as a formal voice channel, as it is controlled by  
23  
24 Upwork and as they may use it to provide a voice outlet for workers (c.f. Gegenhuber et al., 2021).  
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33 On the other hand, workers may visit an unofficial channel, such as the r/upwork community  
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35 on Reddit<sup>3</sup> [in the following “Reddit community”] that self-describes as the “*unofficial sub for*  
36 *Upwork clients and freelancers*”. This community was founded by workers in 2015 and counts  
37  
38 over 15’000 members. Users post completely anonymously using pseudonyms. There is no official  
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40 presence of Upwork in the community and moderation is limited to infrequent removals of posts  
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42 that violate the very short community guidelines (“*don’t be mean*”). For a comparison of both  
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44 communities, see table 2.  
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54 <sup>1</sup> <https://community.upwork.com/>

55 <sup>2</sup> <https://community.upwork.com/t5/Announcements/Upwork-Community-Guidelines/td-p/3>

56 <sup>3</sup> <https://www.reddit.com/r/Upwork/>

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Insert Table 2 about here  
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## Sampling and Data Collection

In order to study voice formation in digital channels we sought to sample conversation data surrounding one critical event, which was likely to be discussed in both communities (McKenna et al., 2017; Vaast et al., 2017). This process is summarized in figure 1.

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Insert Figure 1 about here  
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We started our data collection with the Reddit community. Using a self-developed python script, we accessed the Reddit API, collecting all posts on r/upwork during 2019, which resulted in 35'059 posts. Using Tableau to visualize this data on a time axis, we found two significant spikes in comment volume in April, June and November, indicating the potential occurrence of critical events (see figure 2). Upon further investigation, we identified a substantial design change to the Upwork platform that was announced and rolled out between April and June: Workers will now have to pay 'connect' tokens to be able to send out proposals to clients. These tokens need to be purchased from the platform and thus amount to a monetization of a key element of platform work<sup>4</sup>. A cursory reading of the comments during these spikes confirmed the correlation between the design change and the surge in comments in April and June. A third spike in November turned out not to be related to the policy change. We then proceeded to code all submissions between April and June, identifying a total of 42 submissions (with a total of 1083 comments) that were explicitly and solely about the design change. The relevant threads included descriptive titles like

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<sup>4</sup> Upwork announced the change on the official community with the following statement; "When the change takes effect, Connects will cost \$0.15 each and we will no longer be providing users with 60 free Connects (or 80 free for agencies) each month. Submitting a proposal will no longer cost 0-2 Connects and will range from 1-6 Connects, depending on the job post."



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3 “Changes to Connects”, “About the new connects pricing” or more emotional titles such as “Are  
4 you kidding me?”.

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9 Insert Figure 2 about here  
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11 Subsequently, we turned to the official Upwork forum to identify conversations about the  
12 same critical event (design change that monetizes connects). Here, we used Selenium to scrape all  
13 comments to the official announcement of the design change on April 2<sup>nd</sup>, titled “*Upcoming*  
14 *changes to connects*”<sup>5</sup>, which resulted in 1,321 comments, as well as all comments to an  
15 announcement on May 13<sup>th</sup> marking the starting roll-out phase of the design change, titled  
16 “*Connects Change Rollout Update and Frequently Asked Questions*”<sup>6</sup>, which resulted in 2,641  
17 comments. Overall, we base our analysis on 3,962 comments in the official Upwork community  
18 and 1,083 comments in the unofficial Reddit community which amounts to a total corpus of **5,045**  
19 comments.  
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### 31 **Data Analysis**

32 Based on our collection of comments from both voice channels, we first performed a  
33 quantitative sentiment analysis based on LIWC (linguistic inquiry and word count) (Pennebaker,  
34 Ryan, Boyd and Blackburn, 2015; Pennebaker, Francis & Booth, 2001) to investigate linguistic  
35 differences between the two online communities. We were especially interested in the dimensions  
36 of affective processes (positive emotion, negative emotion, anger, sadness, anxiety), social  
37 processes (words indicating social interaction and closeness) as well as informal language markers  
38 (swearing, netspeak). We were interested in these dimensions because they may inform us about  
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53 <sup>5</sup> <https://community.upwork.com/t5/Announcements/Upcoming-Changes-to-Connects/m-p/580451>

54 <sup>6</sup> <https://community.upwork.com/t5/Announcements/Connects-Change-Rollout-Update-and-Frequently-Asked-Questions/m-p/595772/highlight/true#M29944>

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3 voice and voice behavior, e.g. negative emotion and anger may reflect grievances, while social  
4 processes could inform us about voice as a collective interactional phenomenon. The dimension  
5 of word count (length of each comment string) was used as a covariate control variable and did  
6 not reveal any significant differences. A t-test revealed significant differences between the two  
7 groups. Workers on the Reddit community displayed more affect, more positive emotion, more  
8 negative emotion, more anxiety and more anger in their speech. Furthermore, they were also more  
9 likely to use informal language, swear words and slang. Workers on the official forum tended to  
10 leave longer comments. All mean differences between the two communities were significant apart  
11 from sadness and social (see Table 3). In the appendix, we describe the differences in more detail.  
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25 Insert Table 3 about here  
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27 Having identified significant linguistic differences between online communities, we  
28 conducted a grounded, qualitative analysis to investigate the differences in conversation data in  
29 more depth (McKenna et al., 2017). In doing so, we sought to uncover not just how workers  
30 perceive the design change, but also how their voice behavior differs across the online  
31 communities.  
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39 We followed an inductive qualitative coding approach (Gioia, Corley & Hamilton, 2013).  
40 First, we openly coded all the comments in our sample, providing them with descriptive labels and  
41 scoring them with respect to their attitude towards the change, i.e. positive, neutral and negative  
42 (see appendix for more detail). For example, an open code could be “worker calling Upwork a  
43 Ponzi Scheme” or “Community Guru defending the change”. During this open coding, we relied  
44 on Hirschmann’s (1970) broad definition of voice. As such, we refrain from entering the debate  
45 between IR scholars and OB scholars on what constitutes voice (see Barry & Wilkinson, 2016;  
46 Wilkinson et al., 2020). We, instead, follow Barry and Wilkinson’s (2016) and Morrison’s (2023)  
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3 suggestion to work with a broad conception of voice, where it can be both grievances, which are  
4 usually negatively laden, and suggestions, which are usually more positive. The result of the  
5 opening coding was that we ended up with a large number of open codes (Gioia et al., 2013). The  
6 first order coding thus does not provide meaning, but an overview of what is happening in our  
7 sample, such as the reaction to the change and how workers interact with each other, e.g., their  
8 level of agreement or disagreement.  
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17 Second, we then start to code across our first order codes. Doing so, we looked for recurring  
18 patterns that helped us understand voice behavior. For example, we noted that workers in unofficial  
19 Reddit community tended to signal their status often. We also noted that Community Gurus in the  
20 official community tended to attack workers with low status markers. These codes were the result  
21 of axial coding (Gioia et al., 2013), where the two first authors noted recurring first order codes  
22 across the communities and then aggregated them into larger second order codes. The third author  
23 then critically challenged codes and themes to further challenge our emerging interpretation of the  
24 data.  
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36 Third, we then started theorizing by using recent developments in the voice and gig work  
37 literature to make sense of our emergent patterns (Locke, Feldman & Golden-Biddle, 2022, p.  
38 269). In particular, we engaged with the literature on voice as a collective phenomenon  
39 (Satterstrom et al., 2021), and we started to separate voice into individual and group level. The  
40 individual level, what we term voice framing, refers to how actors not only voice ideas or  
41 complaints, but send signals about who they are, where they belong in the status hierarchy and  
42 who they want to ally with. As actors send these signals, they create what we call voice factions  
43 where they separate into high and low status groups. These factions then engage in group level  
44 voice behavior, what we term voice modulation, where they amplify members of their group and  
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3 mute actors from the other group (Bain et al., 2021; Satterstrom et al., 2021). Finally, we coded  
4 for the technical features of each community affected these voice behaviors (Gegenhuber et al.,  
5 2021). These technological features include liking/upvoting of posts by others, presence of  
6 moderators, status markers and whether workers used monikers that made them anonymous or  
7 their real name. We present our data structure and supporting evidence in table 4 below.  
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## 18 **FINDINGS**

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20 Our analysis of conversation data surrounding a critical event – a design change on a digital  
21 work platform – suggests that worker voice unfolds through both individual and group level  
22 mechanisms. On an individual level, workers engage in voice framing behavior; they signal status,  
23 look for alliances and distance themselves from outgroups. This individual behavior serves to  
24 create factions, i.e. workers perceiving themselves to be in high or low status groups. These  
25 factions then engage in group level voice behavior, what we term voice modulation, which we  
26 conceptualize as when workers modulate voice by either amplifying or muting contributions or  
27 contributors. Finally, we discuss the ‘outcomes’ of this behavior by outlining how the communities  
28 differ in how they direct their voice and whether they voice complaints or ideas.  
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### 40 **Individual-level Voice Behaviors: Framing Voice**

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42 Our findings draw out how gig workers, on an individual level, frame their comments and  
43 voice through three behaviors: *signaling status*, *building alliances* and *distancing from outgroups*.  
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#### 47 **Signaling Status**

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49 Workers in both channels employ signals to contextualize their own positions, thereby  
50 effectively defining and defending their own standing within the community. *Signaling status* is  
51 the act of self-identifying and self-describing as a member of a specific sub-group of workers. This  
52 signaling often depends on a worker’s tenure on the platform, job success, expertise, or socio-  
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3 economic background. This signaling implicitly uncovers hierarchical patterns within both voice  
4 channels spanning groups of higher-status workers (experienced, successful, skilled, high-wage  
5 economy background) as well as lower-status workers (less experienced, less successful, less  
6 skilled, lower-wage economy background), each with their own perspectives and grievances. For  
7  
8 example, on the unofficial Reddit forum, workers would preambule their comments with a short  
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10 marker of their status, as evidenced by this example of worker reacting negatively to the  
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12 announcement of the policy:  
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19 “I'm Top Rated in writing and editing. But I won't be doing Upwork forever. When I'm gone, I'm  
20 gone. Not coming back. If they make it harder for skilled people to get traction on the site, that's  
21 not going to end well for them long term.”  
22

23 We found instances of this behavior in both forums, where workers sought to lend more  
24 weight to their own voice and perspective on the change by employing status signals: “*I'm an*  
25 *established person and I'm saying [the change] is a big deal*”. In particular, workers often signal  
26 their job success in an attempt to bargain with the platform: “*I'm a top rated freelancer at upwork.*  
27 *[...] I'm expecting answers from the support persons here. Please!*” Similarly, some workers use  
28 their tenure on the platform to emphasize the extent of their unhappiness. One worker on the  
29 Upwork community self-describes as “*a loyal Upwork user for years now*”, stating that they find  
30 the design change “*very frustrating*”. Yet, as the official forum had built in status markers, the  
31 behavior of signaling status was more prominent on the unofficial Reddit forum, where workers  
32 were only known by a tag. Interestingly, we also observed that low-status workers, such as workers  
33 with little experience and history with Upwork, would also signal this status at times:  
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48 “I'm undecided on this. As a new freelancer on Upwork, it's damn near impossible to get a job  
49 that's not for some low-balling chump who thinks they can screw you just so you can get a rating.  
50 Will this make it easier to land jobs? I have no idea. I see a lot of established people saying it's no  
51 big deal. On the other hand, I can see it getting rid of scammers/spammers on there so that would  
52 be nice. I guess we'll have to wait and see what happens.”  
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### **Building Alliances**

Furthermore, workers also convey more specific group memberships in order to *build alliances* and rally others around common interests or causes. Here, it is often workers with less experience and less economic success on the platform who make the case for their specific perspective. For instance, a worker hurt by the change would call on the other workers in the same situation to come together: *“I have been thinking and for those of us who don’t like this decision, let’s take it on social media. I don’t know if the petition would make much difference but voicing it on social media would definitely have an impact.”* Moreover, many new and inexperienced workers describe the specific challenges they face, acknowledging that more tenured workers may not face the same struggles and thus may not find the design change problematic. While most rallying and alliance-building takes place between workers of equal status, there is some cross-group alliance building, for instance as tenured workers speak up on behalf of less experienced and less powerful individuals. For example, one member on the unofficial forum noted how the change would hurt skilled workers who were just coming to the platform: *“You’ll also weed out anyone new enough not to have JSS, which seems a pretty harsh result for those who are skilled and making specific bids when they aren’t part of the problem.”*

### **Distancing from outgroups**

In some instances, instead of reaching out and building alliances, higher-status workers (such as community gurus on the Upwork community or members who self-describe as *‘highly experienced’* on Reddit) engage in *distancing* behavior. When doing so, the higher-status workers not only highlight their own status and competency but dismiss perceived lower status workers (such as *‘active members’* on the Upwork community or self-described *‘newbies’* on Reddit). For instance, high status workers would remark that Upwork did not need lower status workers and that the platform should charge \$ 15 and not \$ 0.15 to support the *‘professional freelancers’*, which

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2  
3 was a preferred term especially among community gurus: *“there is no need for 'newbies' for*  
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5 *Upwork in general: ideal future for it is to become a platform where seasoned professionals*  
6  
7 *engage with serious clients”*. We particularly noted this behavior on the official forum where the  
8  
9 status marker and worker profile allowed workers to check each other’s’ earning history and  
10  
11 history on the forum. For example, one community guru would praise the change and how it sent  
12  
13 a signal to lower status workers to leave:  
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16  
17 “Upwork wants to say [to] us: “those of you for who \$0.15-\$0.9 is more valuable than half an hour  
18 of your time you'd spend writing that proposal, are no longer welcome here”, which is hardly a bad  
19 message. After all, the minimum hourly rate here is \$3. There are other services for people of that  
20 category...”  
21

22 In general, lower-status workers were referred to as *“least valuable asset class”*,  
23  
24 *“unproductive”* or making *“poor life choices”* on both forums. This led one worker on Reddit to  
25  
26 call out some community members for their *“derogatory and derisive tone”* – especially towards  
27  
28 workers who were critical of the design change.  
29  
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31 While we found similarities in individual voice behavior across the two forums, we also  
32  
33 found differences caused by the variation in technological features. This affected how workers  
34  
35 build up factions. On the official Upwork community, different worker groups were more easily  
36  
37 discernable as members receive an official status label identifying them as ‘community guru’,  
38  
39 ‘community leader’, ‘community manager’, ‘ace contributor’ or ‘active member’ depending on  
40  
41 their tenure and activity on the forum. Furthermore, members on the official community were  
42  
43 identifiable with their Upwork profile, which displayed work history and job success. This  
44  
45 generally led to slightly more pronounced alliance building and distancing behaviors in the official  
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47 community. For instance, community gurus often built alliances, treating each other as equals or  
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3 friends: “[Andrea<sup>7</sup>]...indeed you are definitely a professional and a valuable member of this  
4 marketplace.” On the unofficial Reddit forum, there were no explicit status markers, which  
5  
6 induced workers to signal their status more clearly. Despite this, we found that anonymity did  
7  
8 promote a modicum of equality between workers compared to the official forum with its status  
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10 markers.  
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14 Overall, we find that in contrast to voicing in traditional organizations and channels, where  
15  
16 voice is used to promote ideas or highlight complains, voice in digital voice channels have an  
17  
18 additional purpose: it serves to highlight who you are, why people should listen to you (“I am top  
19  
20 rated”) and to which group you belong.  
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### 23 24 **Group-level Voice Behaviors: Voice Modulation**

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26 Having framed their voice on an individual level – through signaling status, building  
27  
28 alliances and distancing from outgroups– workers also employ group-level voice behaviors. They  
29  
30 engage in voice modulation by (1) amplifying voices and speakers that they deem valuable and by  
31  
32 (2) muting voices and speakers that they deem less valuable or offending. In the following we will  
33  
34 present and illustrate each of these modulating voice behaviors with exemplary quotes.  
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36

### 37 38 **Amplifying Voice**

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40 We find that workers can amplify other voices or community members through agreement  
41  
42 (highlighting the benefits of a suggestion), vouching (using one’s role and status to express  
43  
44 support), expanding (adding more evidence or arguments for a point) and justifying (bolstering an  
45  
46 argument by outlining the poster’s intent). There are several ways for workers to voice their  
47  
48 *agreement* with another statement or community member. On the one hand, workers may offer a  
49  
50 short sentiment of gratitude or praise. This includes workers praising other contributions as a  
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56 <sup>7</sup> Names are changed to anonymize the data as much as possible.  
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3 “great suggestion”, a “very good comment” or as the “best response I’ve read on here so far”.  
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5 Some agreements are voiced emphatically and emotionally: “Preach it, sister! You have  
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7 *absolutely, positively, hands-down, flat-out nailed it!*” Agreement is often expressed in a  
8  
9 personalized manner and workers sometimes even refer to another contributor by name to  
10  
11 emphasize their agreement: “I’m with you [Julie]. [...] I hope Upwork will reconsider these  
12  
13 *things.*” Frequent and emphatic agreement within the community boosts the perceived quality and  
14  
15 relevance of a specific contribution and thus effectively amplifies the original comment or  
16  
17 position. While amplification through agreement is a very prominent part of conversations among  
18  
19 all workers, it is particularly often lower-status workers who “band together” and amplify each  
20  
21 other’s voices, thus effectively increasing the weight of their voice within the community. Such  
22  
23 continuous in-group agreement sometimes creates chains where one particular grievance or  
24  
25 suggestion is amplified several times.  
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31 On Reddit, the number of upvotes a comment receives determines their position in the thread.  
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33 The most ‘agreed with’ comment will rise to the top and will be displayed first. The least ‘agreed  
34  
35 with’ comments will sink to the bottom of the thread. This effectively renders agreement as a form  
36  
37 of amplification more effective on Reddit as posts which are rewarded by the community become  
38  
39 more visible, garner more community engagement and are therefore also more influential in  
40  
41 shaping community voices. As a general tendency, we noted that comments which were critical  
42  
43 towards the design change received more kudos (Upwork) and upvotes (Reddit), than positive,  
44  
45 mixed or neutral posts. One of the top-rated comments on Reddit reads: “*Yep. They’ve lost me  
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47 now. I’m done. [...] I’m not shelling out cash to find work when they’re already taking such a huge  
48  
49 chunk.*” On the Upwork forum, one of the top comments displays a similar level of outrage at the  
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51 change: “*Am I misunderstanding this? We now have to pay to apply for jobs if we haven’t  
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3 *specifically been invited to it? [...] Never thought I'd see what is, essentially, gambling on a*  
4 *freelance website."*  
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8 Workers also amplify others by *vouching* for their statement – here, they often include a  
9  
10 signal of their group membership as well: “This is a fantastic idea, I think it makes a lot of sense.  
11 I'm a frequent freelancer, and occasional client, and this ticks the boxes on both sides of the  
12 equation.” or “Think about it. What [Carla] is saying is, in so many words, EXACTLY what  
13 seasoned FLers [Freelancers] have been posting for years.” When workers vouch for a specific  
14 statement, they play into the alliance building outlined in the previous section. Top-ranked workers  
15 or ‘Community Gurus’ would often vouch for each other. Vouching takes place on both voice  
16 channels but is particularly pronounced on the official forum where members particularly often  
17 share concrete suggestions or ideas for improvement, which are then picked up and vouched for  
18 by other members.  
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31 Another way of amplifying is going beyond agreement and vouching to *expand* a point with  
32 further arguments, examples, or anecdotes. Expanding is a way for workers to bolster a voiced  
33 notion and to provide a more nuanced perspective, thus adding to a more expansive collective  
34 voice corpus on a specific subject. For instance, one worker remarks that “*The change affects*  
35 *mostly 3rd world countries from Asia.*” Other workers chime in to expand this point with specific  
36 examples: “[In my country], *60 connects basically cost more than wire-line internet.*” Another  
37 worker expands on this even more, adding more nuance and data points to the discussion: “*In my*  
38 *country (also 3rd world), 60 connects equal 1/2 of the price of the same kind of package.*”  
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49 Expanding behaviors also serve to develop suggestions in an ad-hoc manner, where one person  
50 starts with a proposition and others expand on it to the point where it becomes a more mature and  
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3 fleshed out suggestion directed at Upwork. This form of amplification is particularly evident on  
4  
5 the official community where workers often develop and share suggestions.  
6

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8 Finally, workers can amplify another – often controversial – statement or contributor by  
9  
10 *justifying* its rationale or intention. Justification is a way to either pre-emptively or retroactively  
11  
12 bolster an argument against counterpoints. Workers employ justification behaviors particularly as  
13  
14 a countermeasure towards muting attempts (attacking, delegitimizing). Often, justification plays a  
15  
16 key role in conversations between different alliances where one group starkly disagrees with the  
17  
18 other. For instance, while a majority of workers speaks out against the design change, some  
19  
20 workers are for it. “*What the platform wants is professionals who [...] are willing to pay someone*  
21  
22 *to manage the lead generation.*” When statements like this are attacked by workers who find the  
23  
24 change exploitative and unfair, other workers usually justify this argument by pointing out that  
25  
26 Upwork is “*a business*” and “*not a charity*”. Similarly, workers justify this position by drawing  
27  
28 individual-level analogies: “*Do you have the same perspective for your own business? Do you, for*  
29  
30 *instance, work at a loss for clients in depressed economic areas, because they have less money?*”  
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35  
36 Taken together, our findings highlight a multifaceted amplifying voice behavior, where  
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38 workers use the affordances of online communities to agree with, vouch for, expand on and justify  
39  
40 statements that they find to be valuable and that they want to position more centrally within the  
41  
42 community discussion. We find that due to the upvote feature on Reddit, which highlights most  
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44 popular posts by putting them at the top of the thread, amplifying is more dominant and effective.  
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46 This made negative posts, often ones posted by low-status freelancers, more salient than positive  
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48 posts. While negative posts also got more ‘kudos’ on the official forum, it does not have the same  
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50 effect as these posts are not highlighted, i.e. they do not move to the top of thread like in unofficial  
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52 forum. Thus, we see that technological features of online communities help shape voice behavior.  
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3 More precisely, upvoting may democratize voicing as it is not necessarily authority or even tenure  
4 that determines how a voice is received (see for example Satterstrom et al., 2021), but rather  
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6 number of “votes.”  
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### 9 10 **Muting Voice**

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12 Workers and moderators on both channels mute other voices in three difference ways. They  
13  
14 may attack speakers in an attempt to delegitimize them. Then moderators might seek to control  
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16 dissent through the deletion or editing of comments, as well as by selectively engaging with  
17  
18 grievances and suggestions.  
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21 One frequently employed strategy to mute other voices is to attack the speaker – often on a  
22  
23 personal level. Such attacks serve to question a worker’s standing or credibility within the  
24  
25 community. For instance, on Reddit workers who speak out in favor of the design change are  
26  
27 sometimes accused of being moles for Upwork and therefore not actually speaking from the  
28  
29 perspective of a ‘real’ worker: *“Seriously, we get that you work for Upwork and are trying to do*  
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31 *PR damage control.”* Furthermore, community members sometimes also mute each other by  
32  
33 attacking their competence or skill. This is especially pronounced on the official community where  
34  
35 workers have insight into each other’s profiles: *“[Ivan], instead of all the negative posting you are*  
36  
37 *doing on the community site, maybe you should try to figure out why you have only had four jobs*  
38  
39 *in over a year. Is it because no one wants to buy what you are offering?”* Similarly, another worker  
40  
41 points out that if a worker doesn’t receive a reply from a client, *“that doesn't mean it is spam - it*  
42  
43 *just means they don't want you.”* Portraying other workers as incompetent undermines their  
44  
45 legitimacy and implies that their concerns should not be taken as seriously as those of ‘successful’  
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47 or ‘professional’ workers.  
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54 Attacks are very common on both channels and they often unfold in a cross-group dynamic  
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56 where either a higher-status group attacks a lower status group for being irrational or not competent  
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3 or vice versa with a lower-status group attacking a higher-status group for arguing in bad faith, for  
4 being heartless or for being a mouthpiece for another party of interest. A particularly interesting  
5 group in this regard are the moderators – especially on the official forum, as they are often the  
6 target of attacks as workers direct much of their frustration and anger towards moderators as the  
7 only tangible representatives of the Upwork platform. Here, moderators seem to take on the  
8 function of a ‘lightning rod’, attracting much of the immediate and unfiltered reactions. Users  
9 describe moderators as “*programmed robots*” which are “*paid to regurgitate the company line*  
10 [...] *and to pacify [workers] with innocuous, prescribed, corporate-line responses*”. Another  
11 worker states that the “*moderators’ scripted replies [...] are just making most of us more furious*”.  
12 While attacks are considered a normal part of the conversation, it is often problematic or overly  
13 aggressive tonality and overly personal attacks which are called out by the community. One user  
14 chides others for “*coming off like mean children and not working professionals.*” Another suggests  
15 that one shouldn’t ‘*denigrate*’ somebody before learning more about where they come from.  
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33 Another way to mute voices in both channels is through *top-down moderation* which  
34 encompasses deletion, editing and verbal sanctioning of posts which are either deemed problematic  
35 by moderators or which are reported by the community. Occasionally, a moderator would remind  
36 the community of the guidelines: “*A few posts have been edited or removed from this thread.*  
37 *Please, be mindful of the Community Guidelines.*” Furthermore, top-down moderation also  
38 includes instances where moderators address a particular issue with a worker ‘off platform’. Here,  
39 moderators often ask workers to “*send [them] a private message*” or they inform them that “*one*  
40 *of our team members will reach out to you directly via a support ticket to assist you further.*”  
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51 Both voice channels are moderated, however, moderation is much stricter and more visible  
52 on the official community. Here, moderators routinely delete or edit problematic terms or passages.  
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3 These edits were often opaque to workers because it was unclear what was edited and why.  
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5 Workers complained over this, arguing that the moderators “*edited one of my posts and it wasn't*  
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7  
8 *even close to profane*”.

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10 A final muting behavior is *selective engagement* with only specific contributors and  
11  
12 comments, while other contributors and grievances are ignored. Here, we notice a tendency for  
13  
14 higher-ranking workers and moderators to engage selectively with technical questions about the  
15  
16 change (e.g. will our connects roll over?) or processual questions (e.g. when will the change be  
17  
18 rolled out?) but ignore more critical and more fundamental statements. This ‘non-engagement’ of  
19  
20 moderators with critical voices is sometimes lamented by workers: “*Again - why do you only*  
21  
22 *respond to posts in order to confirm charges and are still unable to address negative points or*  
23  
24 *concerns? How can you be so overtly ignorant?*” Similarly, another worker finds that their critical  
25  
26 question has been purposely ignored: “*Thank you [Moderator] for repeating exactly the changes*  
27  
28 *being put in place and completely ignoring my question.*”

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33 There is a larger conversation present on either forum with respect to whose voices are being  
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35 heard and taken seriously on the platform. There is an implicit understanding that lower-status  
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37 workers have a harder time being heard. One worker picks up on this and states their belief that  
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39 the community shouldn’t “*rule peoples opinion out just because they joined a few months ago [...]*  
40  
41 *a successful business will grow bigger when everyone's voice counts.*”

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44 Our findings show that the technological features of the community matter for muting too.  
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46 In particular, we find that - surprisingly – having active moderators representing the organization  
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48 may spur on aggressive forms of voice behavior, where individuals attack the moderators and use  
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50 them as targets for their anger.  
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3 Overall, our analysis of group level voice behavior highlights how voice in digital channels  
4 differs from voice in traditional organizations. In digital channels, voice is not dyadic but  
5 collective. Moreover, voice is modulated by amplification and muting behavior, which is driven  
6 by voice factions. In particular, we find faction building and perceived status to be highly relevant  
7 due to the public nature of voicing.  
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### 14 **Form of voice: How voice behavior and differences in online community design affects** 15 **voicing**

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17 Finally, we discuss how this behavior taken together with online community design features,  
18 e.g. whether workers are anonymous and how the community is moderated, affect how workers  
19 voice ideas and complaints. Here, we coded for the *message content*, i.e. whether workers would  
20 voice constructive suggestions or vent, and *voice direction*, i.e. who the workers intended their  
21 voice for. With respect to *message content*, that is whether workers voiced a complaint without a  
22 constructive solution (e.g., “...Upwork becomes more and more greedy, offering nothing in  
23 exchange.”) or whether they provided suggestions (e.g. “I think then also Upwork should stop  
24 charging hourly cutoffs from freelancers, if you want to earn revenue by this connects”). We do  
25 not find large differences across community with regards to message content. However, when we  
26 look at who voices suggestions for improving the work experience on Upwork on the official  
27 forum, it is mostly workers who have a lower status marker, i.e., “active member”. In contrast, the  
28 experienced Community Gurus would sometimes even try to kill off ideas (i.e., mute) by these  
29 lower status members:  
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48 “For the umpteenth time, this has been tried before on Elance [Upwork’s former company name],  
49 but never worked. Only resulted in so much spam. In fact, the very idea is a scheme to circumvent  
50 the principle on which the Connects system is based. Sorry, Upwork will NOT consider your  
51 suggestion.”  
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53 We find that the voice behavior and online community design affects the *voice direction*.  
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55 We find that upwards voice is especially pronounced on the official channel as workers voice  
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3 directly aimed at Upwork. For instance, one worker addresses Upwork directly and in a personal  
4 manner: “*I hope you realize you've made things much more difficult for new freelancers.*” Another  
5  
6 worker ends on a personal plea towards Upwork: “*I hope you reconsider*”. Finally, some workers  
7  
8 title their posts with “*dear Upwork, [...]*” or “*dear team of Upwork*”. In contrast, in the Reddit  
9  
10 community, workers have no direct target to voice to as Upwork is not present. As a result, upwards  
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12 voice is rarer in this community than in the official one.  
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17 Conversely, we find that workers are much more likely to be voicing horizontally towards  
18  
19 each other on Reddit. Such horizontal conversations are often geared towards making sense of  
20  
21 ongoing or ambiguous issues and thus help workers collectively frame and find their voice. For  
22  
23 example, on the same day the design change was announced, a worker opened a first discussion  
24  
25 thread on Reddit: “*Surprised not to have seen any discussion here or on the Upwork forum about*  
26  
27 *this pretty significant change announced this morning.*” Workers also direct voice horizontally to  
28  
29 rally support and coordinate specific actions. In light of the change, one worker on the official  
30  
31 forum is asking the community whether they know “*another site like Upwork but better that we*  
32  
33 *can move to?*” But there are also more elaborate collective actions which are deliberated in a  
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35 horizontal manner among workers, including the idea that “*if everybody agrees to do not pay*  
36  
37 *[Upwork] will be forced to come back to 'free memberships'*”. Similarly, workers suggest that the  
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39 platform should be “*boycotted for a couple of weeks*” (there is even a hashtag #BoycottUpwork  
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41 suggested) or that workers should “*create a word of mouth campaign that slows down people*  
42  
43 *signing up*”.  
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49 Overall, we find that online community design likely affects how workers voice. On the  
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51 official forum the presence of representatives of Upwork, the moderators, provide workers with a  
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53 target to direct their voice to. On the other hand, the clearer status markers means that workers  
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3 tend to engage more in muting of each other. Moreover, we find differences in content here, with  
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5 lower status workers being more likely to voice suggestions, while high status workers more tend  
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7 to defend the status quo and mute suggestions. This “stopping” progress can also count as voice,  
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9 if the person believes that a suggested change would be harmful to the organization (Morrison,  
10  
11 2011). On the unofficial Reddit forum, we find that the low entry barrier and comparative  
12  
13 anonymous status supports horizontal voice behavior. As such, the unofficial community may  
14  
15 resemble a relational space, where workers can interact and possibly initiate collective action  
16  
17 (Kellogg, 2009). Thus, because of the design features of each community, they may come to serve  
18  
19 different purposes for the workers. The official community may become the place where workers  
20  
21 seek to perform upward voice, and change their circumstances, albeit they may be hindered here  
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23 by other workers. The unofficial community in turn may serve to be the place where workers may  
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25 organize their voice.  
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### 30 31 **Community voice as a process of faction-building**

32 Taken together, our findings reveal a process of how voice takes form in digital voice  
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34 channels. We show that voice in online communities unfolds through two key voice activities,  
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36 *voice framing* (which enables faction building) and *voice modulation* (which enables factions to  
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38 mute and amplify each other). This voice process is enabled and shaped by community-specific  
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40 *design features*, such as built-in status markers, anonymity of members or community governance,  
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42 which collectively explain voice differences across channels. We outline this voice process in  
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44 figure 3.  
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50 Insert Figure 3 about here  
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52 Based on our findings, we conceptualize that voicing in digital channels serves a dual  
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54 purpose and function in an individual and collective manner. *First*, we find that members engage  
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3 in *voice framing*, an individual level voice behavior. Here, they contextualize their own voice by  
4 signaling status, building alliances and distancing themselves from outgroups. This inadvertently  
5 leads to *faction building* as workers are now able to gauge their own position vis à vis positions of  
6 other workers in the community. Within voice factions, workers often share similar status markers,  
7 interests and attitudes towards other factions, which become visible through voice-framing.  
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14 *Second*, workers of specific factions engage in *voice modulation*. Here, workers amplify  
15 voices of similar factions by agreeing with them, vouching for them, expanding on them or  
16 justifying them. At the same time, workers of specific factions also mute voices or rival factions,  
17 by either attacking them, by moderating or editing them or by purposely ignoring them. Voice  
18 modulation frequently – but not always – unfolds between factions of different status: Factions of  
19 more experienced, tenured and economically successful workers tend to amplify each other while  
20 muting rivaling factions of less experienced, newer and less economically successful workers. As  
21 the conversation within the voice channel unfolds, modulating behaviors seem to solidify the  
22 provisional voice factions as positions become “locked in” through increasingly vocal efforts of  
23 amplification or muting.  
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38 A key determinant of how voice behaviors and faction building unfold in online spaces are  
39 the specific *design features* of each voice channel. In particular, our findings highlight how status  
40 markers and anonymity, as well as online community governance (moderation) affects voice  
41 behavior. We find that status markers and anonymity in particular affects voice framing. Explicit  
42 status markers and identifiable workers render the official community much more hierarchical with  
43 status differences becoming hyper-visible from the start. This manifests in high degrees of  
44 emotional tension between factions. Absent status markers and with workers being anonymous,  
45 the unofficial forum is much less hierarchical than the official community. Status differences and  
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3 rivaling voice factions are present but emerge in an organic manner as community members  
4 convey group membership and status themselves over time. Emotional tensions between factions  
5 are present but not as ferocious as on the official community. Moreover, we find that the upvoting  
6 feature affects the visibility of voice. In the Reddit community, upvoting a comment brings it to  
7 the top, thus providing the ‘silent majority’ with a way to influence the conversation. In the official  
8 forum, upvoting does not work in this way, and hence upvoting/liking a comment does not serve  
9 to amplify a comment in the same way. Finally, we find that online community governance affects  
10 voice behavior. In the official forum, the presence of moderators presents a target that allows  
11 workers to engage in upwards voice. However, this presence also attracts complaints and anger.  
12 In other words, moderators become ‘lighting rods’ for workers.  
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26 *Overall*, our findings tease out how voice takes form in digital voice channels. Our core  
27 findings are that voicing in digital channels serves a dual purpose of both presenting an idea or  
28 complaint, similar to voice in traditional organizations, *and* highlighting the status and group  
29 membership of the voicer. This behavior where individuals put a frame around their voice,  
30 signaling who they are, initiates faction building and voice as a collective phenomenon where  
31 individuals amplify members of their group and seek to mute individuals of the outgroup. Finally,  
32 we find that digital voice channel design, i.e. the online community features, affect these behaviors.  
33 Clearer status markers ‘supercharge’ in and outgroup voice behavior, creating stronger factions,  
34 which reduces horizontal voice. Upvoting on the unofficial forum allows lower status workers to  
35 amplify critical comments. Online community governance then boosts upward voice, voice  
36 modulation and thus further divides the channel into a hierarchy of different groups. Thus, while  
37 the voice formation process is similar to a large degree in both communities, the form of voice  
38 differs to a certain degree due to the technological features. Most importantly, we find that the  
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3 unofficial community more functions as a relational space, where workers can make sense of the  
4 change (Kellogg, 2009), while the official community is more used to voice complaints and ideas,  
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6 but it is also more hierarchical with workers muting complaints and ideas from workers they  
7  
8 perceive to be outgroup.  
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## 11 **DISCUSSION**

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14 Our findings outline how voice takes form in open, digital channels. These findings enrich  
15  
16 two nascent debates in the intersection of voice and digital platforms, namely we enrich work on  
17  
18 voice as a collective phenomenon (Satterstrom et al., 2021), and how voice taking form in digital  
19  
20 channels (Gegenhuber et al., 2021; Wilkinson et al., 2021).  
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### 23 **Contributions to understanding voice as a collective interactional phenomenon**

24  
25 Recently, scholars have argued for conceptualizing voice as a collective, interactional  
26  
27 phenomenon where the voice of individuals is amplified, cultivated or muted as other  
28  
29 organizational members engage with the voiced idea or complaint (Bain et al., 2021; Satterstrom  
30  
31 et al., 2021). This work has found that workers may amplify and mute each other (Bain et al., 2021;  
32  
33 Satterstrom et al., 2021), and that class and status in organizations matter for how voice is received  
34  
35 (Karunakaran, 2022; Martin & Harrison, 2022). However, as this is this a very nascent literature  
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37 there are some important gaps, which our study serves to fill.  
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41 *First*, research on collective voice has mostly focused on the outcomes of this type of voice  
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43 behavior, such as whether the idea is implemented (Satterstrom et al., 2021), or how the voicer is  
44  
45 affected (Bain et al., 2021; Behfar, Cronin & McCarthy, 2020). It has not conceptualized how  
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47 voice behavior might be affected by being public rather than happening in a closed space. We find  
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49 that when workers voice in a public digital channel, such as an online community, they not only  
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51 voice an idea or complaint. They *frame* their voice too, signaling status, group membership and  
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53 including call for likeminded supporters. In other words, a *key discovery* of our findings is that the  
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3 voice content of voice in public spaces is not just the idea or complaint, it is also this frame around  
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5 it. This is a key difference from voice in a closed space, e.g. a meeting room, in a traditional  
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7 company. In this traditional setting, there would be no need to frame the voice in this way.  
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10 Moreover, we pose that voice framing, an individual behavior, shapes group level behavior, the  
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12 voice modulation. Thereby, whereas the recent work in question has tended to treat status as given,  
13  
14 stable characteristic, like a doctor being higher status than a nurse (Satterstrom et al., 2021), we  
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16 highlight that status is something that individuals seek to claim when they voice, e.g. by  
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18 highlighting their experience, knowhow and success.  
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22 *Second*, while the prior research mentioned has focused on status (e.g. Karunakaran, 2022),  
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24 it has not explained how it drives voice behavior. In our findings, the workers status and social  
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26 identity, how they categorize themselves into groups of certain status (Hogg & Terry, 2000; Tajfel  
27  
28 & Turner, 1979), plays a significant role in how they modulate each other's voice. We find that  
29  
30 high-status workers refer themselves as belonging to a group of 'professional freelancers'. This  
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32 group claims higher status and seeks to protect this by muting ideas that they find threatening, e.g.,  
33  
34 a suggestion to allow new workers to bid more freely for jobs. Vice versa, lower status workers  
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36 often engage in amplifying such ideas, trying to support each other. In other words, a worker's  
37  
38 social identity influences how they engage with other workers' voice. Workers of different social  
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40 identity groups mute each other, and workers of the same group amplify each other. In sum, while  
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42 other studies such as Bain et al., (2021), Karunakaran (2022); Martin and Harrison (2022), and  
43  
44 Satterstrom et al., (2021) also discuss status as an element in collective voice behavior, they do not  
45  
46 detail how status and social identity drives voice behavior, such as amplifying or muting others.  
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48 Considering this allows researchers to better understand why individuals would amplify, or mute,  
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50 each other as seen in the other studies.  
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3         *Third*, our findings that workers mute each other also contrasts with the focus on prosocial  
4 motive to voice found in both IR and OB (Mowbray, Wilkinson & Tse, 2015). For IR scholars,  
5 the prosocial part is that workers come together to voice their interests as a collective, while for  
6 OB scholars the prosocial element is that workers seek to improve their organization. Yet, we find  
7 the almost entire opposite. Instead of leading collective action or seeking to improve their  
8 organization, higher status workers tend to defend Upwork and attack lower status workers when  
9 these call for change. Some of this muting could be counted as voice, i.e. when a high status worker  
10 objects to a suggested change with the argument that it would hurt the company, then it would  
11 normally count as voice for OB scholars (Morrison, 2011). Consequently, a possible conclusion  
12 from our findings is that when voice is occurring in a public space, then overall prosocial behavior  
13 declines, and in particular high-status actors tend to want to stop changes that could disrupt their  
14 work and status. We note that Satterstrom et al., (2021) point to similar dynamics.  
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31         *Overall*, our study extends the nascent stream on voice as a collective, interactional  
32 phenomenon occurring in public spaces in the following ways; 1) we show that voicing in public  
33 spaces not only include an idea or complaint, but also a frame around it, e.g. a signal or call for an  
34 alliance; 2) As workers signal who they are where they belong, factions emerge, and in and  
35 outgroup perceptions drive group level voice behavior and 3) It is beneficial to understand voice  
36 in public spaces as both an individual level behavior, where individuals signaling who they are,  
37 and a group level behavior, where individuals act according to perceived group membership and  
38 status.  
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49         These findings illustrate how voice in public digital channels, such as online communities,  
50 is different from voice behavior in traditional settings, where voice takes place in dyadic meetings  
51 (Detert & Burris, 2007) or small teams (Satterstrom et al., 2021). This behavior where an  
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3 individual not only promotes an idea or complaint (Morrison, 2011), but also themselves, is likely  
4 a recurring theme in organizations where interactions occur over Slack (a digital workplace  
5 communication tool) and not the watercooler. For example, Turco (2016) highlight that social  
6 media shifts how work and decision making is conducted in modern organizations, and that the  
7 “iron cage of communication” is pried open, allowing workers a much wider berth of voicing.  
8 Leonardi and Treem (2020) uses the term ‘behavioral visibility’ to describe how individuals seek  
9 to make themselves noticed in digital channels, where they might otherwise not be seen. As an  
10 example, Cristea and Leonardi (2019) show how workers in distributed teams work hard to get  
11 noticed by managers at headquarters. Our findings highlight similar behavior; that workers seek  
12 to promote themselves and send signals to others. Thus, it is likely that our finding of voice framing  
13 connects to a broader issue of how workers seek to secure visibility and legitimacy when voicing  
14 in digital channels. We encourage future research to further knowledge of how workers seek  
15 visibility and legitimacy in digital channels.

### 32 33 **Contributions to understanding voice in digital channels**

34 We also add to the growing literature of how design of digital voice channels affects voice  
35 behavior (e.g., Ellmer & Reichel, 2021; Gegenhuber et al., 2021; McCloskey & McDonnell, 2018;  
36 Schou & Bucher, 2022).

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42 *First*, our findings suggest that voice behaviors may differ across voice channels due to  
43 differences in channel design – i.e., organizational proximity (official vs. unofficial), built-in status  
44 mechanisms (explicit vs. implicit status markers) or identifiability of participants (identifiable vs.  
45 anonymous). In the case of the two online communities, this translates into *two different voice*  
46 *profiles*. While our analysis draws out the same voice behaviors in both online communities, there  
47 are significant differences in *how* they frame their own voice and *how* they modulate other voices.  
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Generally, in the official Upwork community, voice is more upwards directed and directed towards

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3 specific recipients – often moderators or other agents of the organization. Conversations are more  
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5 centered around specific issues or potential solutions, yet at the same time more marked by  
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7 emotional tensions and ‘rivalries’ between voice factions. Conversely, on the unofficial Reddit  
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9 community, voice is more horizontal and more informal. Thus, our findings tease out how the  
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11 channel design shapes voice. However, we also find that the overall pattern of voice behavior, as  
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13 captured by our model, is largely similar. We, therefore, posit that channel design more moderates  
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15 voice behavior, rather than it mediates it. Simply, design may not be as important as other studies  
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17 have suggested (e.g. Ellmer & Reichel, 2021; Etter & Albu, 2021). We do not find evidence that  
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19 platforms may discourage critical voice through design as others have suggested (Ellmer &  
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21 Reichel, 2021; Gegenhuber et al., 2021). We find that voice on the official Upwork forum is also  
22  
23 quite critical. This finding contrasts with Gegenhuber et al.’s (2021) notion that platforms can  
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25 limit gig worker voice to constructive suggestions and cut out negative grievances on their forums.  
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31 *Second*, recent work has argued that it is possible for platforms to offer voice opportunities  
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33 to workers, but then control the voice, steering users through monitoring and nudging (Ellmer &  
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35 Reichel, 2021; Kougiannou & Mendonça, 2021), thus limiting what workers can voice on and  
36  
37 muting them if they become too critical (Gegenhuber et al. 2021). Our findings goes against this  
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39 notion. Although, moderators on the official community seek to mute voice by taking  
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41 conversations private, censoring posts or, in rare cases, banning users, this does not dampen  
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43 negative voice. In fact, there are even more negative perceptions voiced on the – heavily moderated  
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45 – official forum than on the unofficial. We point to an interesting dynamic here. Normally, research  
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47 assumes that when representatives ignore voice or seemingly punish workers for voicing, then  
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49 voice is naturally discouraged (Burriss et al., 2013; Morrison, 2011). However, our findings suggest  
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51 that the presence of active representatives of the organization, moderators working for Upwork,  
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3 provides workers with direct targets for voice that they do not have in the unofficial community.  
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5 Moderators attempting to stifle voices seemingly act as ‘lighting rods’ that attract and galvanize  
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7 negative voice and anger, especially when workers perceive that moderators ignore them or censor  
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9 them. Thus, while Gegenhuber et al., (2021) show that platforms can take away the “megaphones”,  
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11 i.e. the gig workers’ ability to voice grievances, and only offer them “microphones”, i.e. surveys  
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13 where they can voice suggestions, we find that workers more take control with official forum and  
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15 use it to voice their grievances, despite the presence of moderators and Upwork friendly workers  
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17 of higher status. This begs two questions: how general is it that platforms may lose control over  
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19 their forums and is it maybe a deliberate strategy to let workers “blow off steam<sup>8</sup>”? These questions  
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21 may be of interest to future research. These questions are also relevant for firms that more and  
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23 more rely on corporate social media as voice channels (Turco, 2016).  
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28 *Third*, our findings highlight how voice is constrained and enabled by the design of online  
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30 communities (Ellmer & Reichel, 2021). For example, our findings outline how clear status markers  
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32 and public access to profiles constrain voice. Not only can moderators – and thereby Upwork –  
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34 clearly identify ‘dissenting actors’, but higher status workers can also identify lower status workers  
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36 and attack or discredit them. This will likely reduce the psychological safety of lower status  
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38 workers, which in turn could lead them to remain silent (Morrison, 2011). While we cannot detect  
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40 whether workers choose to remain silent, it is likely that workers feel safer in the unofficial  
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42 community because they are anonymous and because faction building is less overt. The design  
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44 and governance of online communities may thus influence the voice climate and the psychological  
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46 safety felt by workers. Our findings point towards an interesting puzzle that future research may  
47  
48 attempt to resolve: On the one hand, organizational proximity may reduce psychological safety  
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56 <sup>8</sup> We thank an anonymous reviewer for this suggestion.  
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3 and thus *constrain worker voice*. On the other hand, organizational proximity (enacted through  
4 moderators) seems to act as a lightning rod that fuels negative reactions and may thus *enable*  
5 *worker voice*. We encourage future research on gig worker voice in digital voice channels to  
6 investigate such contradicting mechanisms more deeply.  
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12 *Overall*, our findings extend knowledge of how digital voice channel design influences  
13 voice. Most importantly, we suggest that channel design can work in contradicting ways. For  
14 example, we find that moderation may actually attract negative voice, rather than dampen it.  
15 Hence, while scholars have assumed that organizational proximity would constrain worker voice  
16 (Ellmer & Reichel, 2021; Gegenhuber et al., 2021), we find that it may also enable it.  
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### 23 **LIMITATIONS AND FUTURE RESEARCH**

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25 As an inductive study, our findings and conclusions are not without limitations. Most  
26 importantly, we cannot tie voice behavior directly to outcomes (organizational improvements),  
27 which happens to be a common problem with the voice construct (Satterstrom et al., 2021).  
28 However, we do note that Upwork has recently changed their connects policy again in late  
29 November 2020, this time favoring gig workers. Whether this is a result of the voicing, that we  
30 identify in this paper, is an open question. Furthermore, we perceive that our findings may tie into  
31 debates around inequality in organizations (Amis, Mair & Munir, 2020), given that we find a 'class  
32 conflict' between top rated and high earning workers and newer, lower rated and lower earning  
33 workers. Inequality in organizations is often driven by the existence of 'job turf', that is tasks that  
34 are exclusive to a specific worker (Wilmers, 2021). In the gig economy, workers fight over a  
35 limited number of clients on the platform. Thus, top-rated, high-status workers may seek to mute  
36 the voice of others to protect their turf and to limit competition of other workers. Our findings  
37 indicate that such behavior is taking place. However, we cannot tie this directly to inequality, i.e.  
38 differences in earnings. Thus, we suggest that future research investigates the link between  
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3 inequality and voice, in particular seeking to test whether workers may use voice to protect ‘turf’  
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5 and thus increase inequality.  
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8 Moreover, our findings indicate that channel design and moderation might affect workers’  
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10 psychological safety. However, we lack direct evidence here, such as interviews with workers or  
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12 surveys measuring their perceived psychological safety. We, therefore, encourage future research  
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14 in this area to extend and test our nascent theory that worker voice may be constrained when  
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16 workers are identifiable and subjected to moderation. Finally, given our focus on two communities  
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18 and particular events, we cannot track processes over time. This may be an important avenue for  
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20 future research, as prior studies have shown that actors develop their use of online communities  
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22 over time, finding ways to solve conflicts and provide more order (Massa & O’Mahony, 2021;  
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24 O’Mahony & Ferraro, 2007). As such, how workers use online communities to voice may change  
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26 over time, as they install rules and routines, which perhaps could foster more positive exchanges  
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28 between different worker groups.  
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### 32 33 **CONCLUSION**

34  
35 Our paper seeks to explore how voice is organized in two different digital voice channels.  
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37 Our resulting model draws out how the voice channel design has both direct and indirect effects  
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39 on voice behaviors. Furthermore, we identify two unique voice behaviors, through which voice is  
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41 organized: voice framing (signaling status, looking for alliances, distancing from outgroups) and  
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43 voice modulation (amplifying, muting). These behaviors help us understand how voice is  
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45 organized in different online communities. Our paper provides two overall contributions to the  
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47 literature on collective voice (e.g. Satterstrom et al., 2021) and the literature on voice in digital  
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49 voice channels (e.g. Gegenhuber et al., 2021).  
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54 Overall, our study points to new and interesting dynamics that separate gig worker voice in  
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56 digital channels from traditional organizations, as we find that workers include frames around their  
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3 voice, that they amplify and mute each based on perceived social identity and that channel design  
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5 and governance can work in contradicting ways. Yet, much more research is needed to deepen  
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7 understanding in this matter. We hope that our paper can inspire such future research.  
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## 12 REFERENCES

- 13  
14 Amis, J. M., Mair, J., & Munir, K. A. (2020). The organizational reproduction of  
15 inequality. *Academy of Management Annals*, 14(1), 195-230.  
16 Bain, K., Kreps, T. A., Meikle, N. L., & Tenney, E. R. (2021). Amplifying voice in  
17 organizations. *Academy of Management Journal*, 64(4), 1288-1312.  
18 Bashshur, M. R., & Oc, B. 2015. When Voice Matters: A Multilevel Review of the Impact of  
19 Voice in Organizations. *Journal of Management*, 41(5): 1530–1554.  
20 Behfar, K. J., Cronin, M. A., & McCarthy, K. (2020). Realizing the upside of venting: The role  
21 of the “challenger listener”. *Academy of Management Discoveries*, 6(4), 609-630.  
22 Bucher, E. L., Schou, P. K., & Waldkirch, M. (2021). Pacifying the algorithm—Anticipatory  
23 compliance in the face of algorithmic management in the gig economy. *Organization*, 28(1),  
24 44-67.  
25  
26 Burris, E. R., McClean, E. J., Detert, J. R., & Quigley, T. J. (2022). The Agency to Implement  
27 Voice: How Target Hierarchical Position and Competence Changes the Relationship  
28 Between Voice and Individual Performance. *Organization Science*. Forthcoming  
29 Burris, E. R., Rockmann, K. W., & Kimmons, Y. S. (2017). The Value of Voice to Managers:  
30 Employee Identification and the Content of Voice. *Academy of Management Journal*,  
31 60(6): 2099–2125.  
32  
33 Cameron, L. D. (2022). “Making Out” While Driving: Relational and Efficiency Games in the  
34 Gig Economy. *Organization Science*, 33(1), 231-252.  
35 Cristea, I. C., & Leonardi, P. M. (2019). Get noticed and die trying: Signals, sacrifice, and the  
36 production of face time in distributed work. *Organization Science*, 30(3), 552-572.  
37 Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really  
38 open?. *Academy of Management Journal*, 50(4), 869-884.  
39 Detert, J. R., Burris, E. R., Harrison, D. A., & Martin, S. R. (2013). Voice Flows to and around  
40 Leaders: Understanding When Units Are Helped or Hurt by Employee Voice.  
41 *Administrative Science Quarterly*, 58(4): 624–668.  
42  
43 Duggan, J., Sherman, U., Carbery, R., & McDonnell, A. (2020). Algorithmic management and  
44 app-work in the gig economy: A research agenda for employment relations and  
45 HRM. *Human Resource Management Journal*, 30(1), 114-132.  
46  
47 Ellmer, M., & Reichel, A. (2021). Mind the channel! An affordance perspective on how digital  
48 voice channels encourage or discourage employee voice. *Human Resource Management  
49 Journal*, 31(1), 259-276.  
50  
51 Etter, M., & Albu, O. B. (2021). Activists in the dark: Social media algorithms and collective  
52 action in two social movement organizations. *Organization*, 28(1), 68-91.  
53 Faraj, S., von Krogh, G., Monteiro, E., & Lakhani, K. R. (2016). Special section introduction—  
54 Online community as space for knowledge flows. *Information systems research*, 27(4),  
55 668-684.  
56  
57  
58  
59  
60

- 1  
2  
3 Ferguson, J. E., & Soekijad, M. (2016). Multiple interests or unified voice? Online communities  
4 as intermediary spaces for development. *Journal of Information Technology*, 31(4), 358-  
5 381.
- 6  
7 Freeman, R. B., & Medoff, J. L. (1984). What do unions do. *Indus. & Lab. Rel. Rev.*, 38, 244.
- 8  
9 Gegenhuber, T., Ellmer, M., & Schüßler, E. (2021). Microphones, not megaphones: Functional  
10 crowdworker voice regimes on digital work platforms. *Human Relations*, 74(9), 1473-1503.
- 11  
12 Gioia, D. A., Corley, K. G. and Hamilton, A. L. (2013) 'Seeking Qualitative Rigor in Inductive  
13 Research: Notes on the Gioia Methodology', *Organizational Research Methods* 16(1): 15-  
14 31.
- 15  
16 Glaser, B., & Strauss, A. (1967). *The Discovery of Grounded Theory*. Mill Valley, CA  
17 Sociology Press.
- 18  
19 Gray, M. L., & Suri, S. (2019). *Ghost work: How to stop Silicon Valley from building a new  
20 global underclass*. Eamon Dolan Books.
- 21  
22 Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations,  
23 and states* (Vol. 25). Harvard university press.
- 24  
25 Hogg, M. A., & Terry, D. J. (2000). Social Identity and Self-Categorization Processes in  
26 Organizational Contexts. *Academy of Management Review*, 25(1), 121-140.
- 27  
28 Holland, P. J., Allen, B. C., & Cooper, B. K. (2013). Reducing burnout in Australian nurses: The  
29 role of employee direct voice and managerial responsiveness. *The International Journal of  
30 Human Resource Management*, 24(16), 3146-3162.
- 31  
32 Kalleberg, A. L. (2009). Precarious work, insecure workers: Employment relations in  
33 transition. *American Sociological Review*, 74(1), 1-22.
- 34  
35 Kalleberg, A. L., & Vallas, S. P. (2018). Probing precarious work: Theory, research, and  
36 politics. *Research in the Sociology of Work*, 31(1), 1-30.
- 37  
38 Karanović, J., Berends, H., & Engel, Y. (2021). Regulated dependence: Platform workers'  
39 responses to new forms of organizing. *Journal of Management Studies*, 58(4), 1070-1106.
- 40  
41 Karunakaran, A. (2022). Status-authority asymmetry between professions: The case of 911  
42 dispatchers and police officers. *Administrative Science Quarterly*, 67(2), 423-468.
- 43  
44 Kellogg, K. C. (2009). Operating room: Relational spaces and microinstitutional change in  
45 surgery. *American Journal of Sociology*, 115(3), 657-711.
- 46  
47 Kellogg, K. C., Valentine, M. A., & Christin, A. 2020. Algorithms at Work: The New Contested  
48 Terrain of Control. *Academy of Management Annals*, 14(1): 366-410.
- 49  
50 Kougiannou, N. K., & Mendonça, P. 2021. Breaking the Managerial Silencing of Worker Voice  
51 in Platform Capitalism: The Rise of a Food Courier Network. *British Journal of  
52 Management*, 32(3): 744-759.
- 53  
54 Leonardi, P. M., & Treem, J. W. (2020). Behavioral visibility: A new paradigm for organization  
55 studies in the age of digitization, digitalization, and datafication. *Organization  
56 Studies*, 41(12), 1601-1625.
- 57  
58 Locke, K., Feldman, M., & Golden-Biddle, K. (2022). Coding practices and iterativity: Beyond  
59 templates for analyzing qualitative data. *Organizational Research Methods*, 25(2), 262-284.
- 60  
Maffie, M. D. (2020). The Role of Digital Communities in Organizing Gig Workers. *Industrial  
Relations: A Journal of Economy and Society*. Forthcoming.
- Majchrzak, A., Faraj, S., Kane, G. C., & Azad, B. (2013). The contradictory influence of social  
media affordances on online communal knowledge sharing. *Journal of Computer-Mediated  
Communication*, 19(1), 38-55.

- 1  
2  
3 Martin, S. R., & Harrison, S. H. (2022). Upward mobility, the cleft habitus, and speaking up:  
4 How class transitions relate to individual and organizational antecedents of voice. *Academy*  
5 *of Management Journal*, 65(3), 813-841.
- 6 Martin, G., Parry, E., & Flowers, P. (2015). Do social media enhance constructive employee  
7 voice all of the time or just some of the time? *Human Resource Management*  
8 *Journal*, 25(4), 541-562.
- 9 Massa, F. G., & O'Mahony, S. (2021). Order from chaos: How networked activists self-organize  
10 by creating a participation architecture. *Administrative Science Quarterly*, 66(4), 1037-  
11 1083.
- 12 McCloskey, C., & McDonnell, A. (2018). Channels of employee voice: complementary or  
13 competing for space? *Industrial Relations Journal*, 49(2), 174-193.
- 14 McKenna, B., Myers, M. D., & Newman, M. (2017). Social media in qualitative research:  
15 Challenges and recommendations. *Information and Organization*, 27(2), 87-99.
- 16 Meijerink, J. and Keegan, E. (2019) Conceptualizing Human Resource Management in the Gig  
17 Economy: Toward a Platform Ecosystem Perspective, *Journal of Managerial Psychology*  
18 34(4): 214–32.
- 19 Morrison, E. W. (2011). Employee voice behavior: Integration and directions for future  
20 research. *Academy of Management Annals*, 5(1), 373-412.
- 21 Morrison, E. W. (2023). Employee voice and silence: Taking stock a decade later. *Annual*  
22 *Review of Organizational Psychology and Organizational Behavior*, Vol. 10:79-107
- 23 Mowbray, P. K., Wilkinson, A., & Tse, H. H. (2015). An integrative review of employee voice:  
24 Identifying a common conceptualization and research agenda. *International Journal of*  
25 *Management Reviews*, 17(3), 382-400.
- 26 O'Mahony, S., & Ferraro, F. (2007). The emergence of governance in an open source  
27 community. *Academy of Management Journal*, 50(5), 1079-1106.
- 28 Oyetunde, K., Prouska, R., & McKearney, A. (2022). Voice in non-traditional employment  
29 relationships: a review and future research directions. *The International Journal of Human*  
30 *Resource Management*, 33(1), 142-167.
- 31 Pennebaker, J. W., Francis, M. E., & Booth, R. J. (2001). Linguistic inquiry and word count:  
32 LIWC 2001. *Mahway: Lawrence Erlbaum Associates*, 71(2001), 2001.
- 33 Pennebaker, James W., Ryan L. Boyd, Kayla Jordan, and Kate Blackburn (2015). *The*  
34 *development and psychometric properties of LIWC 2015*. 2015.
- 35 Petriglieri, G., Ashford, S. J., & Wrzesniewski, A. (2019). Agony and ecstasy in the gig  
36 economy: Cultivating holding environments for precarious and personalized work  
37 identities. *Administrative Science Quarterly*, 64(1), 124-170.
- 38 Pofeldt, E. (2018). What Upwork's IPO Means for Freelancers. *Forbes*, October.
- 39 Rahman, H. A. (2021). The Invisible Cage: Workers' Reactivity to Opaque Algorithmic  
40 Evaluations. *Administrative Science Quarterly*, Forthcoming
- 41 Rosenblat, A., & Stark, L. (2016). Algorithmic labor and information asymmetries: A case study  
42 of Uber's drivers. *International journal of communication*, 10, 27.
- 43 Satterstrom, P., Kerrissey, M., & DiBenigno, J. (2021). The voice cultivation process: How team  
44 members can help upward voice live on to implementation. *Administrative Science*  
45 *Quarterly*, 66(2), 380-425.
- 46 Schou, P. K., & Bucher, E. (2022). Divided we fall: The breakdown of gig worker solidarity in  
47 online communities. *New Technology, Work and Employment*. Forthcoming
- 48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin  
4 & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (Vol. 33, pp. 94–104).
- 5 Tassinari, A., & Maccarrone, V. (2020). Riders on the storm: Workplace solidarity among gig  
6 economy couriers in Italy and the UK. *Work, Employment and Society*, 34(1), 35-54.
- 7 Toubiana, M., & Zietsma, C. (2017). The message is on the wall? Emotions, social media and  
8 the dynamics of institutional complexity. *Academy of Management Journal*, 60(3), 922-  
9 953.
- 10  
11 Turco, C. J. (2016). *The conversational firm: Rethinking bureaucracy in the age of social*  
12 *media*. Columbia University Press.
- 13 Upwork (2018). *Upwork Annual Report 2018*. Annual Report, Upwork.
- 14 Upwork (2020) ‘Upwork Community Guidelines’. Retrieved from  
15 [https://community.upwork.com/t5/Announcements/Upwork-Community-Guidelines/m-](https://community.upwork.com/t5/Announcements/Upwork-Community-Guidelines/m-p/259905)  
16 [p/259905](https://community.upwork.com/t5/Announcements/Upwork-Community-Guidelines/m-p/259905)
- 17  
18 Vaast, E., Safadi, H., Lapointe, L., & Negoita, B. (2017). Social Media Affordances for  
19 Connective Action: An Examination of Microblogging Use During the Gulf of Mexico Oil  
20 Spill. *MIS Quarterly*, 41(4).
- 21 Vallas, S., & Schor, J. B. (2020). What Do Platforms Do? Understanding the Gig  
22 Economy. *Annual Review of Sociology*, 46.
- 23 Waldkirch, M., Bucher, E., Schou, P. K., & Grünwald, E. (2021). Controlled by the algorithm,  
24 coached by the crowd—how HRM activities take shape on digital work platforms in the gig  
25 economy. *The International Journal of Human Resource Management*, 1-36.
- 26  
27 Wilkinson, A., Barry, M., & Morrison, E. (2020). Toward an integration of research on  
28 employee voice. *Human Resource Management Review*, 30(1), 100677.
- 29 Wilkinson, A., Gollan, P. J., Kalfa, S., & Xu, Y. (2018). Voices unheard: employee voice in the  
30 new century. *The International Journal of Human Resource Management* volume 29,  
31 2018
- 32  
33 Wilkinson, A., Knoll, M., Mowbray, P. K., & Dundon, T. (2021). New Trajectories in Worker  
34 Voice: Integrating and Applying Contemporary Challenges in the Organization of  
35 Work. *British Journal of Management*. Forthcoming.
- 36  
37 Wilmers, N. (2020). Job turf or variety: Task structure as a source of organizational  
38 inequality. *Administrative Science Quarterly*, 65(4), 1018-1057.
- 39 Wood, A. J., Lehdonvirta, V., & Graham, M. (2018). Workers of the Internet unite? Online  
40 freelancer organisation among remote gig economy workers in six Asian and African  
41 countries. *New Technology, Work and Employment*, 33(2), 95-112.
- 42  
43  
44  
45  
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**Table 1: Comparison of Voice in traditional organizations and on digital platforms**

<b>Context</b>	<b>Workers in traditional organizations</b>	<b>Workers on digital Platforms, i.e. in the gig economy</b>
<b>Voice Channels</b>	Formal channel, i.e. a union that voices to management on behalf of the workers (McCloskey & McDonnell, 2018; Wilkinson et al., 2018), and informal channels, i.e. informal meetings between an employee and their manager (Detert & Burris, 2007).	Digital voice channels, in particular online communities. These can be official channels controlled by the platform (Gegenhuber et al., 2021), or unofficial channels such as Whatsapp or Reddit, which are not controlled by the platform (Schou & Bucher, 2022; Tassinari & Maccarone, 2020).
<b>Voice representation</b>	Professional associations or unions, who represent workers (Wilkinson et al., 2018), or veteran workers who feel secure and invested in the organization (Morrison, 2011).	Unclear, although moderators and community managers may take a representative role.
<b>Target for Voice</b>	Direct supervisor or top management.	Unclear as workers are not employed and do not have a direct supervisor.
<b>Voice Context</b>	Usually private, i.e. in meetings. Sometimes, in less private settings, such as teams.	Public.
<b>Level of analysis</b>	Usually individual level, i.e. the dyad between employee (alternatively union representative) and manager. Few new studies on voice as a collective phenomenon (e.g. Bain et al., 2022; Satterstrom et al., 2021).	Collective, voicing takes place in an open, public space.
<b>View of workers who voice</b>	Usually homogenous, i.e. workers either have a prosocial inclination to join together in collective voice (Barry & Wilkinson, 2016) or a prosocial inclination to want to improve their organization (Detert & Burris, 2007; Morrison, 2011).	Homogenous or heterogenous depending on platform type. Local platforms, such food delivery or ridesharing tend to have more homogenous groups of workers. Remote platforms, i.e. freelance platforms such as Upwork, have more heterogenous groups of workers (Schou & Bucher, 2022).
<b>Voice formation</b>	Organized through unions or through an organizational hierarchy (employee to manager) (Wilkinson et al., 2020).	Spontaneous and unorganized, e.g. emotional reaction to organizational action (Karanovic et al., 2021).



**Table 2: Official Upwork community vs. unofficial Reddit community**

		<b>Upwork Community</b> (official voice channel)	<b>Reddit Community</b> (unofficial voice channel)
Basic Profile	Purpose	Forum where customers can engage with each other and Upwork representatives	Unofficial [space] for Upwork clients and freelancers
	founded in	2015	2015
	size	6'900'000 members	14'900 members
	language	English only	mostly English
Anonymity	member information	members are identifiable by name, picture, Upwork profile, work history	members are anonymous
Status	membership status	formal status labels Community Guru Community Leader Ace Contributor Active Member Moderator	no formal status labels
	post status	kudos	upvotes, downvotes, awards
	Order or posts	newest posts first	most upvoted posts first
Governance	organizational presence	official forum created by Upwork Upwork employees moderate and take place in conversations	unofficial forum created by workers no official presence of Upwork
	community guidelines	extensive guidelines heavily enforced	minimal guidelines sparingly enforced

**Table 3: T-test of mean differences between official and reddit community**

	Official		Reddit		Delta $\Delta$	t-test p-value	
	mean	std dev	mean	std dev	mean diff		
Word Count	80,46	93,77	48,05	70,90	32,41	0,000	***
affect	5,09	6,59	6,53	10,85	-1,44	0,000	***
posemo	3,78	6,16	4,68	10,03	-0,90	0,000	***
negemo	1,28	2,79	1,80	4,72	-0,53	0,000	***
anx	0,12	0,59	0,19	1,66	-0,07	0,003	***
anger	0,33	1,92	0,63	3,32	-0,30	0,000	***
sad	0,31	0,95	0,35	1,48	-0,04	0,105	<i>ns</i>
social	8,87	6,79	8,77	8,74	0,09	0,560	<i>ns</i>
informal	0,96	4,01	2,88	9,02	-1,92	0,000	***
swear	0,03	0,38	0,55	4,10	-0,52	0,000	***
netspeak	0,30	2,51	1,36	6,47	-1,06	0,000	***

Symbol	Meaning
<i>ns</i>	$P > 0.05$
*	$P \leq 0.05$
**	$P \leq 0.01$
***	$P \leq 0.001$

**Table 4: Data Structure with additional quotes**

Level	Aggregate Dimensions	Voice Mechanisms	Representative Quotes
<b>Individual level behavior</b>	Voice Framing	Signaling Status	<i>"I'm an established person and I'm saying [the change] is a big deal"</i>
			<i>"As a Top-Rated Freelancer, I personally think that this is a very bad move"</i>
			<i>"I'm Top Rated in writing and editing. But [...] when I'm gone, I'm gone. Not coming back."</i>
			<i>"Well, I am an established pro (have my own business, website, a decade of experience, clients outside of Upwork, yadda yadda), and Upwork makes me wanna run away and never come back."</i>
		Alliance Building	<i>"The fact that I'm not personally affected doesn't mean I can't understand the issues impacting other freelancers, [...]In fact, I've often raised issues with Upwork that don't affect me at all, precisely because I'm not the person who needs protection."</i>
			<i>"[Name, other Guru] - You are the poster boy for freelancers!!!"</i>
			<i>"In my country, [...]the minimum wage is \$1.28 [...] I know most don't care for other countries, but the point given is the change is REALLY impactful for us."</i>
			<i>"[Andrea] ...indeed you are definitely a professional and a valuable member of this marketplace."</i>
		Distancing from outgroups	<i>"Tiny investment for someone who is already established, not someone who is starting out. I've said it before and I'll say it again: For me Upwork was a way out of a financial mess I was in, but if these policies would've been in place when I started out, I couldn't have afforded it."</i>
			<i>"While majority may shop on price, there's many that shop on value, and there's always some that will shop for the best. Don't join the race to the bottom on price. Stand firm on delivering and getting paid for the value of your work and keep working on delivering higher-valued work"</i>
			<i>"For me to have to compete with novices or charlatans, it's a headache."</i>
			<i>"So, [Alex], maybe someone in India or in that part of the world should start their version of Upwork. Upwork is a business."</i>

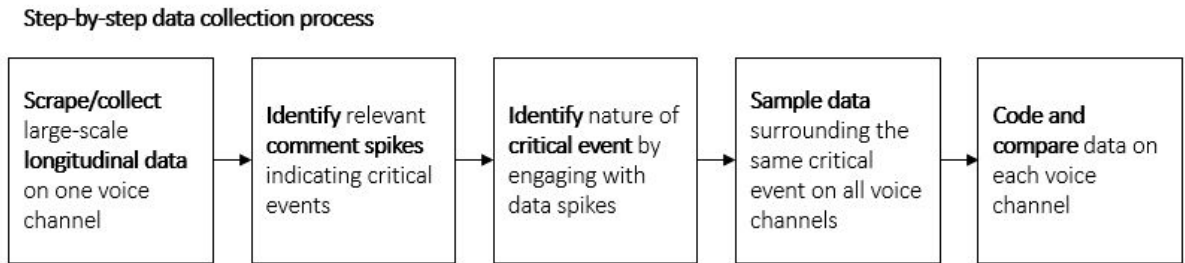
Level	Aggregate Dimensions	Voice Mechanisms	<i>Representative Quotes</i>
<b>Group level behavior</b>	Voice Modulation	Amplifying	<b><i>Agreement</i></b>
			<i>"Best response I've read on here so far. I, for one, will just stop using Upwork as a freelancer."</i>
			<i>"Preach it, sister! You have absolutely, positively, hands-down, flat-out nailed it!"</i>
			<i>"Very Important point is raised by you. Thank you."</i>
			<i>"100 kudos for this post."</i>
			<i>"Beautiful, ughhhh beautiful. Thank you for clarifying what no one else could. I love you [username]."</i>
			<b><i>Vouching</i></b>
			<i>"This is a fantastic idea, I think it makes a lot of sense. I'm a frequent freelancer, and occasional client, and this ticks the boxes on both sides of the equation."</i>
			<i>"Think about it. What [Name] is saying is, in so many words, EXACTLY what seasoned FLers [Freelancers] have been posting for years."</i>
			<i>"I've started doing this too. Most of the time, they completely understand."</i>
			<b><i>Expanding</i></b>
			<i>"This! Plus the fact that different people might spend different numbers of connects to propose for the same project. That's no way to run a railroad. I have no objection to paying for connects in theory, but some aspects of this new policy are going to be a dumpster fire."</i>
			<i>"In this case, may need to raise the price for the placement of work? Then customers will be more responsible in creating a job."</i>
			<i>"That's actually a nice idea -- charge a token amount that could be (fully? partially?) refunded if the job is closed with or without hiring."</i>
			<b><i>Justifying</i></b>
<i>"There's no reason to be rude to Valeria or any of the other moderators. They aren't making policy. Generally, it's safe to assume the more controversial the topic, the more constraints are in force about what they can and cannot say. Their JOB is to communicate 'the party line.'"</i>			
<i>"Do you have the same perspective for your own business? Do you, for instance, work at a loss for clients in depressed economic areas, because they have less money?"</i>			

1			<i>"Did you think it was a charity?"</i>
2			
3			
4		Muting	<b><i>Attacking</i></b>
5			<i>"You have to be an Upwork employees."</i>
6			
7			
8			<i>"You seem to love what you're seeing and congrats for seeing yourself as an expert. I wonder where you'll be getting food for your children if Upwork wasn't there."</i>
9			
10			
11			
12			<i>"I can see that you're deeply confused. [...] You should really educate yourself about this or get some guidance from an attorney or accountant, because it is dangerous for someone with so little understanding of the basic business structure [...] to be attempting to run his/her own business."</i>
13			
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16			
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19			<i>"[Ivan], instead of all the negative posting you are doing on the community site, maybe you should try to figure out why you have only had four jobs in over a year. Is it because no one wants to buy what you are offering?"</i>
20			
21			
22			
23			
24			<b><i>Top-Down Moderation</i></b>
25			<i>"A few posts have been removed from this thread as they were in violation of Community Guidelines. Please, note that personal attacks and posting consistently overly negative content is against our Guidelines and will be removed. ~ [Moderator]"</i>
26			
27			
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30			<i>"My words were neither offensive nor obscene/profane. But by all means-- let the moderators edit to their hearts' content. And never forget that Nero fiddled while Rome burned."</i>
31			
32			
33			
34			<i>Moderator: "What's this ad hominem dude? that response makes perfect sense. Try to correct it, I dare you. Don't be a douchebag"</i>
35			
36			
37			
38			<i>I hear ya, they edited one of my posts and it wasn't even close to profane. It's infuriating to me to know they've read and moderated my post but failed to answer a single one of my questions.</i>
39			
40			
41			
42			<b><i>Selective Engagement</i></b>
43			
44			<i>"Again - why do you only respond to posts in order to confirm charges and are still unable to address negative points or concerns ? How can you be so overtly ignorant?"</i>
45			
46			
47			
48			<i>"Thank you [Moderator] for repeating exactly the changes being put in place and completely ignoring my question."</i>
49			
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51			<i>"You were disrespectful when you replied my comments yesterday.....i have decided to only respond to people with constructive criticism, and not someone who jumps around the place insulting people."</i>
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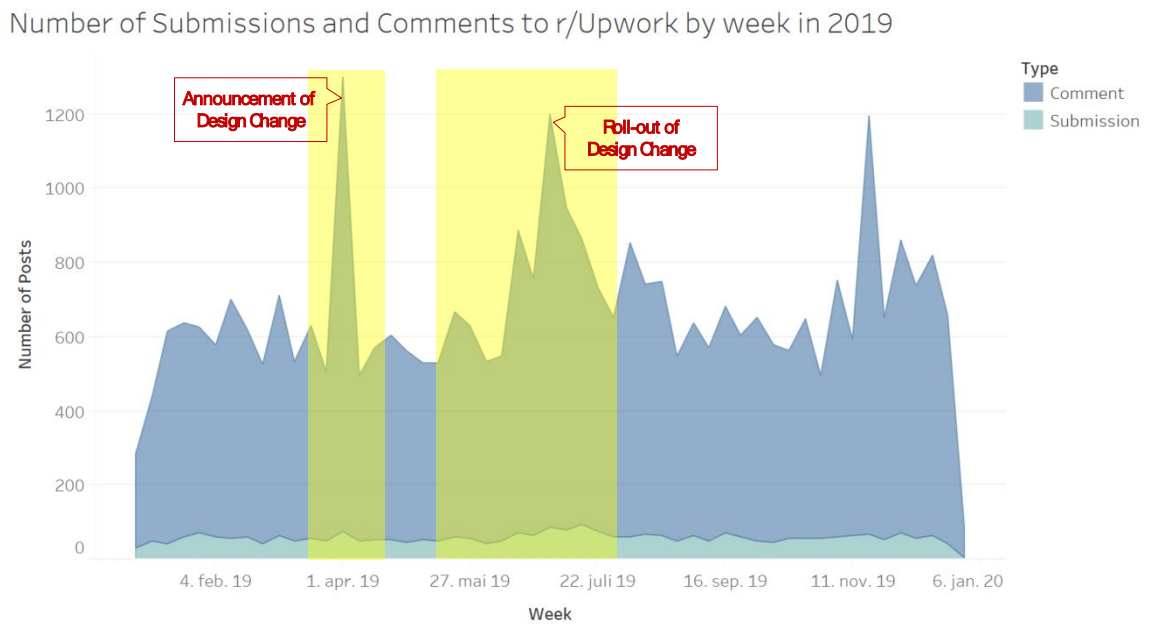
Level	Aggregate Dimensions	Voice Mechanisms	<i>Representative Quotes</i>
Community	Form of Voice	Problem Solving Message Content	<i>"Upwork could've at least added a time limit after which the inactive job is automatically closed and everyone is refunded."</i>
		<i>"If Upwork wants to help professional freelancers, they should instead crack down on job postings with rock-bottom budgets."</i>	
		<i>"Upwork could've at least added a time limit after which the inactive job is automatically closed and everyone is refunded. I'm not against paid bidding itself, but I don't want to just send my money down the drain literally half of the time."</i>	
		<i>"Lower the fee from 20% to 15% on the first \$500 and proportionally on the higher amounts."</i>	
		Venting message content	<i>"So taking away a percentage of our payments is not enough for Upwork???</i> <i>Bullshit"</i>
		<i>"This is how they give us thanks after taking 20% from us on our hard working.!!!"</i>	
		<i>"I hope this change bites you in your **Edited for Community Guidelines**!"</i>	
		Upward voice (voice directed towards moderator)	<i>"You're being very mean and unfair to us the freelancers."</i>
		<i>"Understand I am not arguing with you, [Moderator]. I am indebted to Upwork and I want the community to succeed. Explain to me why this job is special for a client who spends maybe \$133 a month? I spend that per week in fees and VAT. No one gives me preferential anything."</i>	
		<i>"I hope you realise you've made things much more difficult for new freelancers."</i>	
		<i>"Dear team of Upwork, Thanks for these years of being the best site for freelancers. Also, I am so sad to know that you are quitting."</i>	
		Horizontal voice (voice directed towards other workers)	<i>"This platform doesn't exist without us, the freelancers. I'll admit, it's not likely but what if all of us left the platform or maybe boycotted it for a couple of weeks? If we took a little money out of Upwork's pockets would they notice? Just a thought"</i>
		<i>"At best we can create a word of mouth campaign that slows down people from signing up here. "</i>	
<i>if everybody agrees to do not pay [Upwork] will be forced to come back to 'free memberships</i>			
<i>"freelancers seem to believe a mass exodus from Upwork would hurt the company and "show them" they made the wrong decision. But, I think a mass</i>			

*exodus of freelancers is exactly what this change was designed to trigger."*

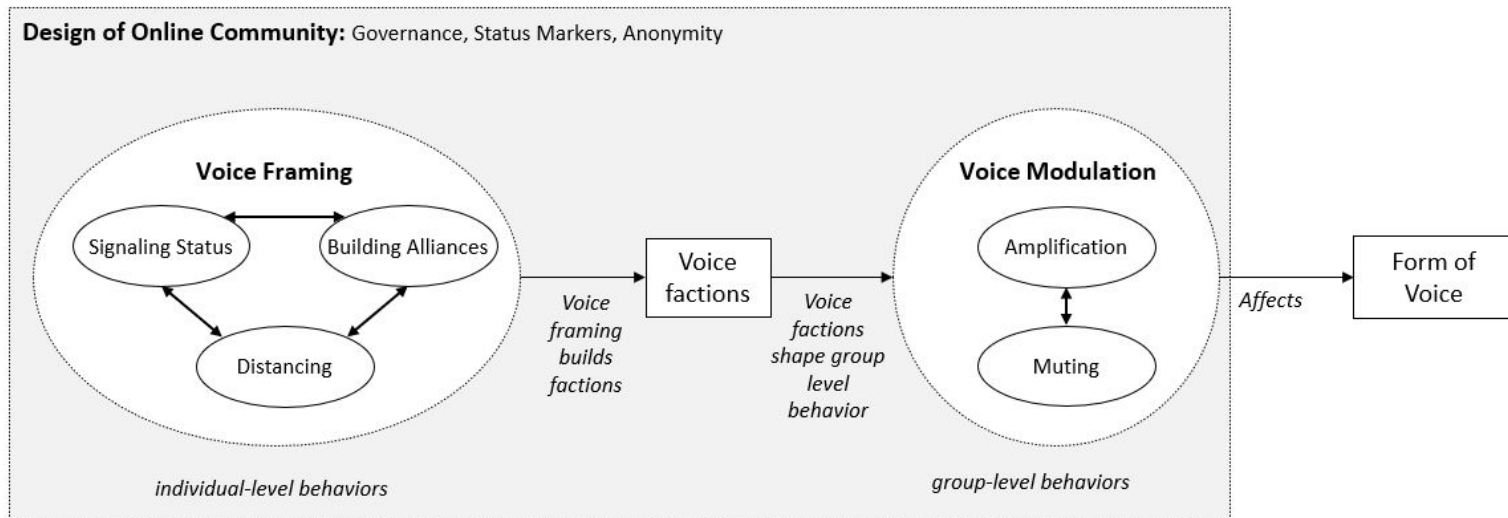
**Figure 1: Data Collection process**



**Figure 2: Spikes in comment volume coinciding with a critical event**



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3 **Figure 3: Model of how voice takes form in digital voice channels**  
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## APPENDIX

### Appendix A: Description of overall community reaction to the change

The decision to monetize client outreach and charge workers for client proposals constitutes a substantial design change that is discussed extensively and controversially across both voice channels. Immediate reactions following the announcement include *negative comments* (Reddit: 41%, Upwork: 54%), *positive comments* (Reddit: 17%, Upwork: 12%), *mixed comments* (Reddit: 16%, Upwork: 3%) and *neutral comments* (Reddit: 25%, Upwork: 31%).

*Negative* comments are dominant on both channels, however, they are significantly more pronounced on the official channel where over half of all comments are critical. Negative reactions include outrage at the added financial burden to workers (too expensive), skepticism about whether the change can be meaningfully implemented (too complicated) as well as perceptions that the change is unfair to specific groups of workers (exploiting new workers and low-wage workers). The frustration expressed in negative comments is either directed towards the design change, towards the platform or towards top management. Some workers even express their frustration by stating an intention to leave the platform. One worker on the official forum described being “*absolutely livid*” about the design change and felt that Upwork was “*blatantly preying on freelancers*”.

*Positive* reactions are also present on both channels, but they are much less prevalent than negative reactions. The unofficial Reddit community is overall more positive towards the design change than the official community. Users who agree with the design change point towards the possibility that this will “*clean up the platform*” by weeding out non-serious workers and reducing ‘spam’. One worker remarks that the change may be good as it “*leads to higher rates, less scammers, and less proposal spamming*”. Or – succinctly put by a worker on Reddit – it might generally reduce the number of workers, leading to “*less competition and more money for me*.”

*Mixed* reactions are in overall quite rare, but they occur more often on the Reddit community. Here, some workers turn to the community to share their current and often still formative thinking about the design change: “*I haven't had time to process the information yet. On one hand, I don't think this will hurt me very much, but it will probably hurt newer members.*” Mixed responses often lay out pros and cons or they detail a journey from being against the change initially and coming around to seeing positive aspects as well: “*My first reaction was definitely WTF, but now that I think about it, [...] the fees are pretty negligible for anyone using the platform extensively.*”

*Neutral* reactions make up between a quarter (Reddit) and a third (Upwork) of all comments. Some workers refrain from sharing value judgements because they don't have enough information about the change and its potential implications yet: “*I'm undecided on this. [...] I guess we'll have to wait and see what happens.*” To remedy this uncertainty, many workers post questions about the precise implementation of the change. Furthermore, there are some workers who are uninterested in the design change per se, but rather comment towards the entertainment value of the ongoing discussion: “*Prepare your popcorn [...]. There's so many threads and the outrage and rage are hilarious.*”

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