

“Gig Communities”: Rediscovering Gig Work Practices Via Community-of-Practice Lens

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With the rise of digital platforms and the gig economy, the organization and management of work through digital technologies has become a topic of special interest within management and organization studies. However, the existing literature have adopted a platform-oriented perspective to explore the new governance strategies of algorithmically-mediated systems and how gig workers respond to changing work conditions, new governance techniques, and encroachments on their autonomy, which presented a limited part of gig work (Kellogg, Valentine, & Christin, 2020, Cameron & Rahman, 2021). However, if one examines closely the everyday lives of gig workers, one finds that they are not, in fact, atomized task performers. Rather, they are social beings who spend significant portions of their workdays “gathering” in communities, from street corner Cafes in Indonesia to online chat rooms in China, where they share knowledge, learn new skills, and innovate collective strategies to further their own interests. These communities provide the social locus for the production and innovation of practices, and the formation of distinct social rules and moral norms. Therefore, to comprehensively understand gig economy, I propose that it could be of great value to adopt a community-based theoretical framework to examine the complexity of gig work.

In this article I adopt the anthropological framework of “Communities-of-Practice” (CoPs) to investigate how communities of gig workers engage in collective processes of “learning, practicing, and innovating” (Lave 1988; Lave & Wenger 1991; Brown & Duguid 1991). Drawing upon the author’s ethnographic research in China over 20 months (2014-2019), the article shows how gig communities innovate new ways to bridge the divide between technological systems and lived realities and advance their own interests through the production of different types of practice, namely *technical practice*, *situated practice*, and *illicit practice*. By revealing the complexity of gig communities through these different modes of practices, the article proposes that platforms are dynamic *multi-nodal* structure: gig workers form distinct communities which enable them to engage in collaborative as well as disruptive practices in pursuit of ends which may or may not align with those of the platform companies.

Theoretical Framework: Applying Community-of-Practice to Platform Studies

“Communities of practice” are groups of actors who “share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Wenger-Trayner and Wenger-Trayner 2015). This concept, first proposed by Lave and Wenger (1991) in their pioneering study, *Situated Learning*, conceptualizes the locale in which individuals learn skills, practice work, and acquire social identities in an integrated way. Duguid and Brown (1991) added “innovating” to the list of processes that occur within communities-of-practice. They argued that communities of professionals “bridge the gap between their organization’s static canonical view and the challenge of changing practice” by innovating new ways of doing things that sustain the proper-functioning of the business system (Duguid and Brown 1991, 50).

While the “Communities-of-Practice” framework has gained popularity within managerial science, it is often co-opted as a “new, tractable management tool” that deviates significantly

from Lave and Wenger's original conceptualization (Duguid 2008). For example, as Contu and Wilmott (2003, 283) argued, Lave and Wenger's emphasis on the embeddedness of learning within relations of power was entirely displaced by a "managerial preoccupation with harnessing (reified) "communities of practice" to the fulfillment of (reified) corporate objectives." This ends-based usage has led to the widely held misconception that "all communities of practice would be beneficial to corporations" (Duguid 2008, 6). But in reality, CoPs are independent social organizations with their social values and moral norms, which sometimes help further managerial goals, but sometimes upend them.

My article follows the call for more productive dialogues and engagements between the lenses of analyzing CoP, namely the learning, innovating, and defending lens as outlined by Nicolini et al. (2022), in order to reinvigorate it as a critical academic lens. It attempt to expand CoP and challenge some current applications from three aspects, (1) through an examination of "technical practice," I articulate *innovation* that is inherent in the learning process in gig communities, (2) I explore "situated practice" to understand the hybridity of physical and virtual interaction and emphasize the placeness of gig communities, and (3) I highlight the "disruptive practice" that are cultivated and supported in gig communities.

This article also contributes to the literature of platform studies by explicating the multifaceted nature of gig work and thus reveal their complex relationship with digital platform companies. In dominant platform literature, gig workers are often treated as unskilled laborers. They are often portrayed as "lone rangers" operating within technological systems that constantly direct, monitor, and manage their actions (Chen 2017; Rosenblat 2018; Lei 2021). Even when collective actions are explored, they are overly focused on resistance, legal actions in traditional labor framework (Tassinari and Maccarrone, 2020; Kellogg 2020, 367). By examining more comprehensively the practices of gig workers in community settings, my work shows that that gig workers invest in the production and exchange of knowledge, the learning and mastery of new skills, and the development of novel work strategies. I attempt to move beyond reductive characterizations of gig workers as mere suppliers of labor and unpack the under-examined complexity of platform-worker relations.

Methodological Approach

This article mainly draws upon the ethnographic data I collected on communities of gig workers in China's ride-hailing industry during 20-month of fieldwork in eastern China (2014-2019). During this time, I gained access to five communities of drivers for digital platforms such as Didi and Uber. Gaining access to these closed communities was difficult given somewhat illicit nature of their activities, so I worked as a Didi driver briefly to familiarize myself with the practices of being a ride-hailing driver so I can speak more intelligently about them. In these communities, I observed and recorded daily social and professional interactions, paying special attention to the types of knowledge being generated through said interactions. I then conducted more than 120 in-depth interviews with drivers, through which I deepened my understanding of the communities' activities and verified my interpretations.

Selected Data and Analysis:

Technical Practice

In the gig communities I studied, technical practices are constantly being shared and updated to help drivers learn to decipher algorithmically generated data provided by the platform. One example of this is how drivers came to form deeper understanding about hotspots of surge pricing and modify their driving practices. Surge pricing is one of the tools ride-hailing platforms use to re-allocate resources. Whenever there is a supply-demand disparity in a certain area, platforms would institute a price surge; the goal is to attract more drivers to the area to smooth out the disparity (Figure 1). For a long time, drivers in one of my observed communities thought the surge pricing map is a true reflection of the demand on the ground, until one day a driver closely compared his customer's interface with his. He found the "realities" represented on the two interfaces are completely different: While there were a lot of surges on the driver's interface, there was none at the customer's interface. At the same time, many drivers started to discover that very often when they finally arrived at the hotspot areas, the surges were already gone. The drivers thus came to the understanding that the surge pricing is not so much a true reflection of "the market" but rather a tool of engineering. They started to interpret the map as a way to "trick" them to those highlighted areas that the platform predicts high demand in the near future, and they slowly disregarded the map as a helpful "guide" to maximize income.

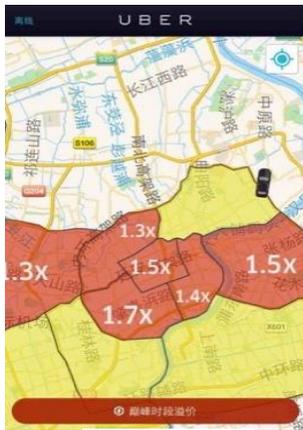


Figure 1.

This type of learning resembles the learning process that takes place in the copy machine reps' community in Julian Orr's ethnography (1996). Drivers aggregate individual experience and share best practices so that each can advance in his or her own pursuit of profit maximization. Although it is important to note their individuals not only transmit information, but they interpret given information, produce knowledge, and attach meaning to it. And their interpretation of a certain technology could be very different from that of the official discourse from platform companies.

Situated Practice

Gig communities feature geographic and relational proximity. Since most gig work is highly localized (e.g. on-demand driving, food delivery, task-based services), gig workers need to develop deep knowledge of their situated context to achieve their goals, and this makes them more likely to associate with others in the same geographic locale. Additionally, gig communities that engage in the production of illicit knowledge tend to prefer offline gatherings and recruit new members through their kinship and friendship networks. For all of these reasons, gig communities tend to be more work-oriented, geographically bound, and personal.

By producing and sharing situated practices, gig workers are not just "making things work," more importantly, they are playing the role of *co-conspirators* who help disruptive platforms like Uber to operate in a legal gray zone and realize exponential growth in their early stage of development. For an example, during the fastest growing period of the ride-hailing industry in China (2013-2016), the practice of using non-commercial vehicles for on-demand driving was not formally permitted by law. In many major metropolises in China, government agents set up impromptu check-up points in airports, train stations, and busy intersections to catch on-demand drivers. If caught, the drivers would face harsh punishment with cash fine between 10,000-30,000 RMB (~1,500-4,600 USD).



Figure 2.

In order to avoid these sporadic checking, in my observed communities, drivers established robust systems of reporting and sharing. First, they inform each other about locations where the agents set up check-up points in real-time. Scrolling through the chats, one could see many messages reading, “law enforcement at the intersection xx road & xx street!” and “many police at level-1 of high-speed rail station right now, be careful comrades!” These reports sometimes are accompanied by pictures to show the setup of the checkpoint. Collectively, community members figure out what is permissible in local context and how to best evade law enforcement. Their ingenious strategies have greatly facilitated the rise of disruption platforms while the legality of their existence was being negotiated.

Disruptive Practice

The last and perhaps least explored category of practice is disruptive practice gig workers produce, sustain, and even moralize in gig communities. These disruptive practices aim to circumvent normal working of the platform, exploit loopholes in its technological and managerial systems, and evade algorithmic monitoring and punishment.

During the high-growth period of ride-hailing platforms in China (2015-2016), Didi and Uber launched a protracted subsidy war against each other. At the peak of irrational spending, for every trip a driver fulfilled, they could earn three or four times the base fare in cash subsidies. This gap created interesting opportunities for arbitraging. Within months of the campaign’s launch, thousands of drivers, hackers, fraudulent accounts peddlers, and other informal actors congregated around the ride-hailing industry. By coordinating their activities in hundreds of gig communities, these individuals identified technological and managerial loopholes in Uber and Didi’s platforms and devised strategies for faking trips. Trip-faking became a massive phenomenon. Drivers I spoke with commonly invoked the idiom “nine out of ten drivers fake trips, and the other one just doesn’t know how.” This quip might not be far from the truth. As of May 2015, an investor of Uber disclosed that fake orders made up 30-40% of the company’s total business in China (Qu and Yu 2015).

Gig communities played a crucial role in facilitating these hacking practices. Drivers are constantly sharing tips on how to best fake trips while being detected by the platforms. Tips include, for instance, one should always try to alternate between different platforms to reap the most subsidy; one should try to complete some real orders in between the fake ones in order to avoid suspicion. Those who have rich knowledge about hacking became the center of the community. Besides the circulation of knowledge for hacking, gig communities also directly facilitate collaborative hacking among their members. While low-level hacking could be done individually or among a few friends, high-level hacking requires the assistance of professional hackers. To get frequent fake trips, drivers have to rely on “nurses,” professionals who could surpass this technological hurdle with hacking software/hardware, customer accounts, phone

numbers, and bank accounts. These professionals got the nickname “nurse” because they use needle-like pins on ride-hailing interfaces as “tool of the trade.”

The production of illicit knowledge and normalization of disruptive practices in gig communities could be attributed to, in my opinion, the long-standing antagonistic relationship between gig labor and digital platforms. Unlike the apprentices in Lave’s ethnography who could move from periphery to the center of community-of-practice through learning and practicing, workers in gig communities are unfortunately trapped in the periphery (Lave and Wenger 1991; Yanow 2004). They are “prevented from participating more fully, not as individuals but as a category,” and the knowledge and innovation they produced are “systematically kept at arm’s length from organizational policy and decision-making” (Yanow 2004, S22). Given their inability to enter or even understand the “center” of the platform, gig workers thus formed their own communities-of-practice in which they can progress to the center. Therefore, I argue that a digital platform is neither a CoP in Lave and Wenger’s sense (a center and a moving periphery), nor a CoP in Yanow’s sense (a center and a permanent periphery). Instead, it is a *multinodal* structure with multiple CoPs structured respectively around platform managers and gig workers.

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