

Platforms as if people mattered

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In his 1973 book Small Is Beautiful, economist E. F. Schumacher observed that an ascendant ideology of “bigger is better” industrialism was driving humans to become the servants of machines. “If technology is felt to be becoming more and more inhuman,” he reflected, “we might do well to consider whether it is possible to have something better—a technology with a human face.” Taking up Schumacher’s call, this article considers the possibility of “small” digital platforms in the context of China’s contemporary ride-hailing industry. Through an ethnographic study of V Taxi, a grassroots community of taxi drivers, it explores how a human-centric platform for transportation services emerged, developed, and survived in a rapidly shifting economic and political landscape. The beauty and resilience of this platform lie in its ability to harness local social networks, enabling individual actors to share economic opportunities, skills, and knowledge. Through these practices of sharing, V Taxi members produce relational value, which strengthens community bonds. Drawing upon analytic frameworks from economic anthropology in conjunction with insights from science and technology studies, this article argues that “small” digital platforms can empower economic actors by enabling the production of relational value, thus protecting human agency and expanding human capabilities.

Keywords Sharing; Relational Value; Digital Platform; Human Capabilities; China

In Hangzhou, the burgeoning tech capital of China, V Taxi Team (V Chedui), a grassroots community of taxi drivers, began offering digitally mediated services well before the popularization of ride-hailing platforms like Uber and Didi.¹ In a city already renowned for its entrepreneurial spirit, V Taxi is something of a local legend. Newspapers have reported extensively on these tech-savvy cabbies and their pioneering use of digital technologies (Fu 2013; Hangzhou Net 2013a, 2013b). However, the novel use of technology is only one part of V Taxi’s story. As V Taxi members will tell you, their success has been driven equally by the community’s ability to harness social networks, facilitate practices of sharing, and produce social values in addition to economic value.

At its core, V Taxi is a community of entrepreneurial taxi drivers who share economic opportunities, skills, and knowledge. Each member is a professional driver who recruits and cultivates a personal pool of clients.² Whenever a member is unable to carry out an order, instead of turning it down, he or she shares it freely with his or her peers on the platform. Through this cooperative strategy, V Taxi drivers are able to generate the bulk of their incomes from prebooked trips.³ Not only does this increase the stability of their work but it also enhances their wages. In 2013, V Taxi members earned approximately CNY¥7,000–8,000/month (US\$1,018–1,164), roughly 50% more than the vast majority of Chinese taxi drivers.⁴ In addition to enjoying higher incomes, V Taxi drivers also engage in fulfilling social interaction. As Jiang Ye, the founder of V Taxi, put it, “Together, we train new drivers, share resources, and hang out after we get off work. V Taxi members are excited to come to work because the community is about more than driving” (interview, June 23, 2016).⁵

For V Taxi, value is produced through practices of “sharing,” or *gongxiang* in Mandarin (literally, “to enjoy together”). At the most basic level, drivers share client orders that they themselves are unable to fulfill. Although orders involve the exchange of money for a service, they function in V Taxi as “gifts” in the Maussian sense (Mauss 1989). This is because what is actually being shared is not orders per se but entitlements to those orders. Entitlements are earned through the cultivation of client relationships and thus are personal and inalienable to the drivers. Like

gifts, they are always shared freely; no commission is charged. The only expectation of reciprocity is for those who receive orders to pay it forward by sharing with other drivers in the future.

Such practices of sharing create new relationships and reinforce existing ones by producing relational value. Relational value, as defined by Julia Elyachar (2005, 7), is “the positive value attached to the creation, reproduction, and extension of relationships” in economic exchanges. Unlike resources or assets, relational value does not reside within individuals or among groups; rather, it is a “relational flow performed under certain circumstances through networks” (Elyachar 2005, 7). When individuals exhibit community mindedness in interactions with their peers, they produce a “value of generosity” that binds the community together and enables it to carry out its economic functions. In V Taxi, relational value involves feelings of fellowship, which encourage the sharing of economic opportunity. The sharing of opportunity, in turn, sustains the production of relational value and deepens the ties of the community.

V Taxi’s emphasis on “sharing” harkens back to an earlier era of *sharing economy*, when communities of actors used digital technologies to facilitate nonmonetary exchanges (Nadeem et al. 2015; Sundararajan 2016). Couchsurfing, for instance, enabled hosts to share their sofas in exchange for companionship and conversation rather than rent. However, since the early 2010s, these alternative forms of value creation were crowded out by “crowd-based capitalism” (Sundararajan 2016). Guided by a “bigger is better” ideology, platforms such as Uber and Airbnb created centralized algorithmic systems to efficiently coordinate users and their capital. In theory, the more user data these platforms collected, the better they could predict (and shape) user behavior, and the more efficient and cheaper their services would become. This hyperscalable model attracted billions of dollars of venture capital investment, which enabled these platforms to undercut the prices of their competitors and expand at lightning speed. After a brief period of intense competition, a few platforms emerged as virtual monopolies. This winner-takes-all approach to dividing up the sharing economy has been glorified in the tech sector, with prominent figures such as Peter Theil (2014) arguing that “monopolies are good for society” and “competition is for losers.”

From an economic anthropological perspective, the crowding out of values can be explained by corporations’ efforts to engineer universal social structures that are divorced from local contexts. On the surface, sharing economy companies seem to have internalized an important lesson from the substantivists, namely, that people’s economic and social lives cannot be decoupled (Carrier 2005; Polanyi [1944] 2001). Ride-hailing firms, for example, have explicitly designed platforms to facilitate social interactions in addition to economic exchanges. However, instead of embedding platforms within local social worlds (like V Taxi) or giving economic actors the freedom to connect the platform with their local contexts (like Craigslist), they designed universal structures that can be implemented in any context and promote only those activities that further the goal of profit maximization. In doing so, they ultimately constrain users, instead of enabling them to produce a heterogeneous range of values that hold communities and societies together (Graeber 2001; Mauss 1989; Polanyi 2001).

From a science and technology studies perspective, we can see how the platforms’ tendency to crowd out values becomes fixed in their technological designs. As Winner (1980, 128; see also Winner 1993) argued, the choices made about what matters “tend to become strongly fixed in material equipment, economic investment, and social habit,” namely, the shape of sociotechnological systems. In the ride-hailing industry, centralized algorithmic systems that so closely resemble Deleuze’s (1992) “control societies” make it almost impossible for economic actors to diverge from the predesigned paths (Rosenblat and Stark 2016). The laborer’s every action is controlled by omnipresent tracking, monitoring, and data feedback. Their sole purpose is to execute orders and conduct repetitive tasks (Gray and Suri 2019; O’Neil 2016; Rosenblat and Stark 2016). Under such conditions, where humans are treated as mere extensions of machines, laborers can hardly develop transferrable capabilities or form the social connections necessary to produce relational value.⁶

If we truly value the preservation of individual agency and the production of heterogeneous values, then we must explore alternative technological systems that facilitate economic activity while enabling nonmarket exchanges. One

proposal for what such a system might look like was offered nearly half a century ago, by British economist E. F. Schumacher (1973) in his book *Small Is Beautiful*. Schumacher argued that when it comes to new technologies, bigger is not always better. He believed that small, decentralized technologies have the greatest ability to empower local actors by enabling “production by the masses” (Schumacher 1973, 153), rather than mass production. For this reason, he called for a shift toward “technology with a human face” (Schumacher 1973, 146)—a type of bottom-up, appropriate technology that harnesses local knowledge, skills, and resources.

Does Schumacher’s proposal for “small technology” still apply in today’s digital age? If so, what should small technological platforms look like, and how ought they function? More pointedly, how might these platforms be used to expand, rather than limit, human agency and to enhance the production of heterogeneous values? It is in relation to these questions that the case of V Taxi yields new insights.

In this article, I provide an ethnographic account of V Taxi set against the backdrop of China’s rapidly shifting technological landscape. The data I use were collected during twenty months of dissertation fieldwork, spanning five years (2014–18). The central findings were derived from in-depth interviews with V Taxi members, casual conversations with on-demand drivers, participant observation during ride-alongs, and online observations of social networks (WeChat). Most of the relevant fieldwork was conducted in Hangzhou, though supplementary work was done in Shenzhen, Shanghai, and Lanzhou.⁷

In the following sections, this article introduces the history of V Taxi and the formulation of the community’s organizational structure. It illustrates how, through the harnessing of local social networks, V Taxi’s human-centric system empowers local economic actors. It goes on to show how members of the community produce relational value through practices of sharing and how relational value serves to strengthen the community. It then examines how the “smallness” of the system is maintained through the creation and maintenance of boundaries. Finally, it recounts the failed attempt of the community founder to centralize V Taxi and explains why he encountered resistance. Based on this ethnographic account, this article explores an alternative model for digital platforms, one that is more localized, socially embedded, and human-centric.

The history and structure of V Taxi Team

In November 2011, Jiang Ye, a local taxi driver in Hangzhou, had an idea. After seeing one of his customers use WeChat, a recently launched instant messaging platform, Jiang leveraged the networking power of a mobile app to create digitally mediated transportation services. Jiang Ye believed that a digital platform could solve a key problem for transportation service professionals, namely, the inability to cultivate and retain large pools of personal clients. Many experienced drivers like Jiang had long-term clients who frequently prebooked their services. Because prebookings are generally more lucrative than other orders, the more prebookings one has, the higher one’s income is. However, prebookings also come with opportunity costs; because drivers cannot control where real-time orders will take them, they must stop cruising the streets well in advance of prebooked orders and therefore forgo other potential fares. Additionally, whenever more than one client prebooks an order for the same time slot, the driver has to refuse an order and risk damaging the client relationship. Jiang, therefore, thought of a platform in which drivers could share orders with their peers in real time. Such a system not only enabled drivers to accept more prebookings (and thereby increase incomes) but also ensured that customers’ requests were consistently fulfilled.

With this nascent idea, Jiang set out to digitize transportation services in Hangzhou. First, he registered a WeChat account under the name of Jiang Ye Taxi Service and set a photo of his taxi as his profile picture. Then, each time Jiang dropped someone off at the airport, he parked his car in the adjacent parking lot and used the “Search Nearby People” function of WeChat to send friend requests to passengers at the airport. As an experienced driver, Jiang knew that the most lucrative part of the business was the fares going to and from the airport, so he made frequent flyers his target clients. His strategy worked. New customers began adding him on WeChat and booking

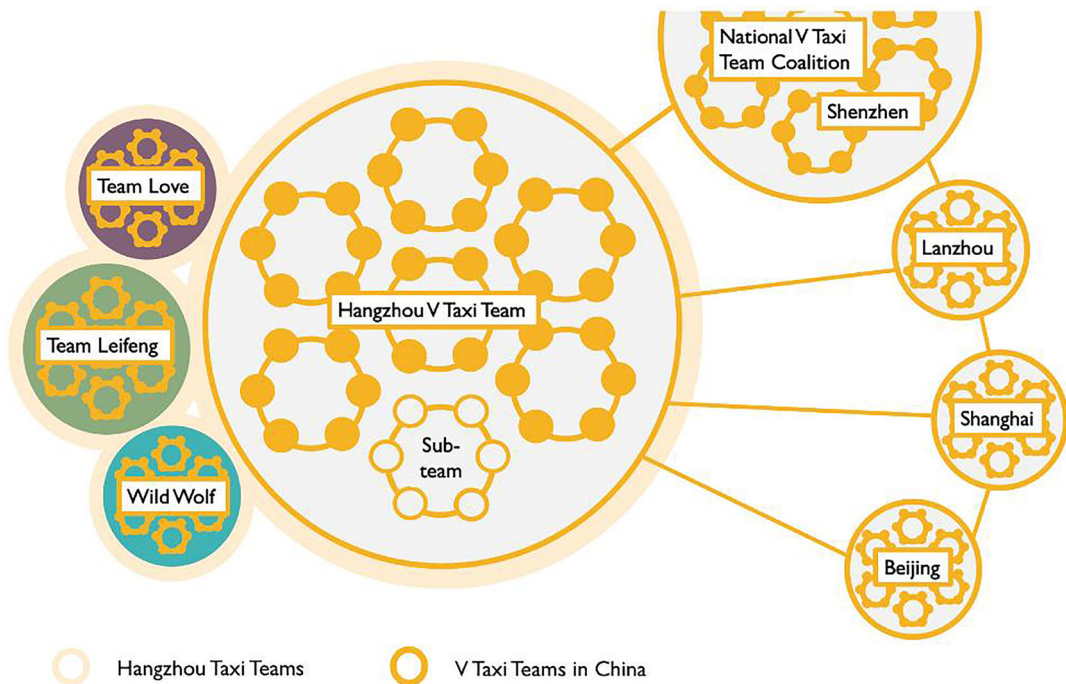


Figure 1 The concentric structure of Hangzhou V Taxi and their outward networks.

rides. Jiang then got four of his driver friends to join him and use the same method of scanning for customers. Within a couple of weeks, word of Jiang's new system had spread, and dozens of drivers around Hangzhou were requesting to join the group (Hangzhou Net 2013b).

On March 3, 2012, Jiang made the group official and called the inaugural meeting of founding partners. The first order of business was selecting an official name. Most members wanted to call themselves the Hangzhou WeChat Taxi Team. But, worried that the name might violate copyright, they shortened it to V Taxi Team (in the Hangzhou dialect, "We" and "V" are pronounced the same). The founding partners then outlined the group's basic organizational structure (Jiang, interview, June 23, 2016).

Many of the founders, including Jiang, felt that the structure of V Taxi should reflect how members of a community naturally form the deepest bonds with their immediate friends and weaker connections with more distal peers. This meant that rather than being flat, the organization would resemble a set of concentric spheres (Figure 1). Drivers would be situated in a close-knit subteam of eight to ten drivers, which would, in turn, be embedded within the larger V Taxi community. The entire community would then form cooperative networks with other taxi driver groups in Hangzhou as well as with V Taxi communities in other cities in China.

The founding members of V Taxi also designed a seniority-based managerial system and an apprenticeship program highly reminiscent of Chinese professional guilds (see Rowe 1984; Vogel 1980). At the top of the hierarchy, a group of senior members would serve as managers on a voluntary basis. This managerial board, with "Driver No. 1" Jiang Ye at its head, would create codes of conduct, establish basic regulations, and control the admission of new members. When the board admitted a new member to the group, they would assign him or her to a subteam and pair him or her up with a senior driver for a three-month apprenticeship. But, just like with guilds of the past, the candidate would first need to establish *guanxi* (interpersonal relations; see Yang 1994) through practices of gift

giving. One driver told me that he had to gift a computer to a senior driver to gain access to V Taxi (fieldnotes, June 4, 2016, Hangzhou).

While it is unlikely that the V Taxi founders studied the classical work of Fei Xiaotong ([1948] 1992), the organization they imagined perfectly mirrors Fei's theory of the traditional structure of Chinese society. According to Fei, every individual in China is situated within concentric spheres of relations that extend outward from the self, to the family, to the lineage, to the community, and finally, to the state. When people in society interact, they form "differential modes of association" (*cha xu ge ju*), which vary according to the degree of overlap of their respective spheres. So too with V Taxi, the distances of relations between individual members are not equal. The loyalty of each driver resides, first and foremost, with the other drivers in his or her subteam. Only more distally do their "spheres of relations" extend to encompass other V Taxi members and, finally, drivers in other organizations.

These spheres of relations produced vibrant yet varied social lives for the drivers. Subteam members talked on WeChat on a daily basis and often went out together for drinks or to play mahjong (fieldnotes, June 3, 2016, Hangzhou). The larger team established a communal fund, which was used to organize community-wide gatherings. These social interactions helped strengthen bonds, which enhanced interpersonal trust and facilitated economic activity.

V Taxi's organizational structure also succeeded in co-opting the localistic networks characteristic of blue-collar industries in urban China (Ding 2014; Lee 2006). Migrant drivers from the same area were generally allowed to band together to form their own subteams. These place-based subteams fostered a deeper sense of identity and group solidarity. But the V Taxi leaders were also wary of the strength of these localistic ties. After an incident in which a large group of drivers from northeast China split from V Taxi to form their own group, V Taxi adopted measures to diversify its community (Jiang, interview, June 23, 2016). Just like migrant entrepreneurs in China's construction industry who created a "diversified workforce so as to balance the influence of workers from different regions" (Guang 2005, 490), the leaders of V Taxi attempted to protect the community by balancing the composition of drivers from different provinces in China.

With this community-centered design, V Taxi achieved remarkable organic growth. From its official founding in March 2012 to its zenith in 2014, V Taxi grew its team of twenty into a thriving community of more than three hundred active driver-members. As knowledge of V Taxi spread outside of Hangzhou, communities of taxi drivers in other cities established their own V Taxi teams. In 2015, a national association of V Taxi was established in Shenzhen, the southern tech capital of China, and Yang Zifeng was appointed to serve as its director. In addition to organizing an annual national V Taxi conference, Yang has worked alongside municipal V Taxi leaders to link up community-based networks and provide seamless transportation service for intercity travelers across urban China (fieldnotes, April 23, 2018, Shenzhen).

A human-centric platform

Unlike platforms that depend on computational algorithms to process orders and match customers with drivers, the V Taxi platform relies principally on human agency. While this model may place an upper limit on the efficiency and speed at which orders are processed, it ultimately results in a far greater degree of transparency and accountability.

The flowchart in Figure 2 illustrates the flow of service requests within V Taxi. When a driver receives a client order that he or she is unable to fulfill, he or she reposts the request to his or her subteam's chat room. Every repost conforms to the standard format of [Time; Pick-Up Place; Destination], which conceals the identity and contact information of the client. If a member of the subteam responds, then a referral relationship is formed. However, if no one responds after a certain period of time, the driver reposts the same service request to the community chat room. All V Taxi members then have the opportunity to respond to the order. If (in the unlikely event that) still no one responds, the driver reposts the service request to a multicomunity chat room comprising drivers affiliated

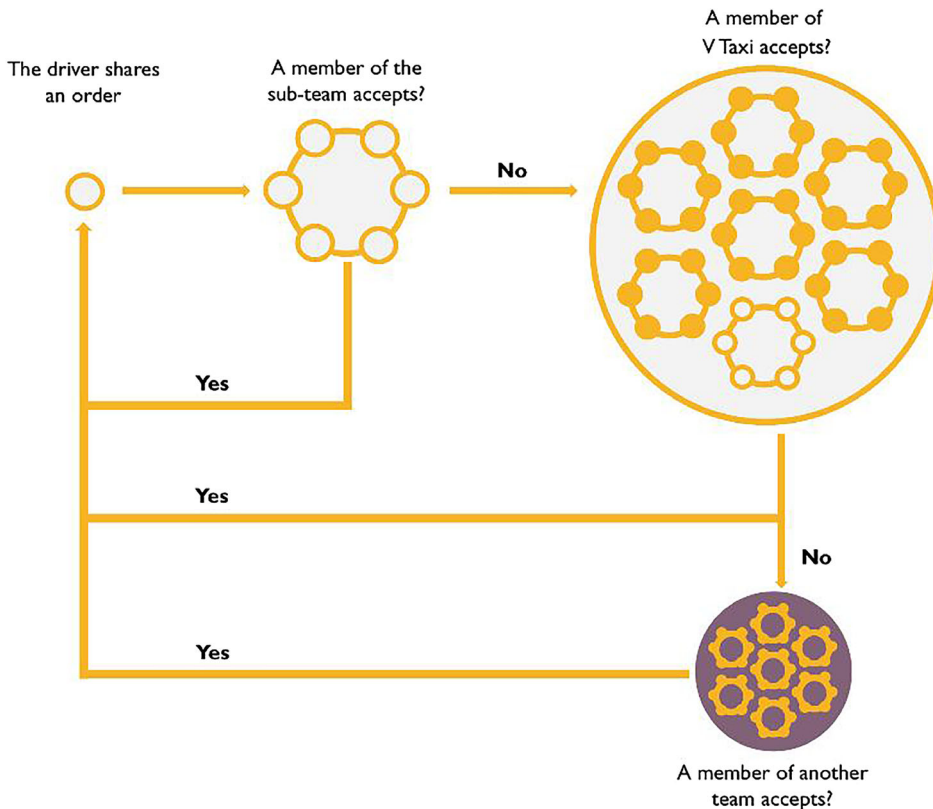


Figure 2 How a V Taxi order is processed.

with different taxi teams across Hangzhou. At any point in this chain, once a referral relationship is formed, the driver sends a message to his client with the number of the referred driver along with his or her contact information. Until the trip is complete, the sharing driver will keep in touch with the referred driver to ensure that his client is well serviced.

To ensure the smooth functioning of this system, V Taxi enforces strict tech-related requirements. Every car must be equipped with at least two smartphones, a wireless hotspot, a wireless amplifier, and a touchpad (Hangzhou Net 2013a). Every member must develop technological literacy with all of these devices as well as demonstrate his or her proficiency in using WeChat, posting order requests on the platform, and claiming requests shared by other members. A junior driver told me that the first thing he learned during his three-month apprenticeship was “how to @.” As he explained, when a driver responds to a shared order, he must @ the repost in order for his response to be legitimate. Similarly, the sharing driver must acknowledge the first person to respond to his request by @-ing that driver. The bilateral @-ing signifies the establishment of a referral relationship and ends the service request process (interview, June 4, 2016, Hangzhou).

To further streamline operations, the identities of V Taxi drivers are numerically coded. When new members join the group, they are assigned unique identification numbers. These numbers become the primary mode of identifying individual members and are used for all community communications. Even when drivers develop close relationships with their peers, they continue to refer to each other by their codes. However, to soften the impersonality and show respect and intimacy, most drivers append “brother” or “sister” to the numbers. You often hear them referring to each other as “Brother 6” (*Liu ge*) or “Sister 108” (*Yaolingba jie*). Such terms

mimic forms of address in Chinese families, in which siblings refer to each other by ranking instead of by name (e.g., third brother, *san ge*). The strange combination of technical anonymity and kinship terminology reflects the ingenuity of drivers and the community's ability to produce intimate relationships in a technologically mediated system.

Though the operation of V Taxi depends on mobile technologies, the platform's human-centric design affords it a high degree of transparency and accountability. This is because the system is structured to ensure that the order-sharing process is open and disputable. As we have seen, service requests are posted in open forums and are thus subject to the scrutiny of every community member. If there is a dispute about impartiality, drivers may request external verification or may call on a senior community member to arbitrate. For instance, technical glitches on WeChat sometimes cause a driver to see him or herself as the first respondent to a request, while the sharing driver claims otherwise. In such cases, the aggrieved driver may request a screenshot as evidence or ask a senior manager to review the dispute. To be sure, this commitment to transparency comes at a cost. Jiang Ye said that he used to spend so much time settling disputes that he became "far more intimate with my phone than my wife" (interview, June 23, 2016). But by providing access to the inner workings of the system, drivers are better able to establish trust and more willing to share economic opportunities.

Machine-centric platforms like Uber and Didi are, by contrast, "complex and mathematically grounded social material blackbox[es]" that resist questioning (Anderson 2011, 540). Their computational algorithms are intrinsically unknowable to the people whose actions they coordinate, and their decisions are near-impossible to contest. As I learned through fieldwork, on-demand drivers often experience frustration with the perceived injustice of algorithms. Drivers report that algorithms sometimes miscalculate their miles, fares, and subsidies—all of which result in reduced earnings; a few even claim that they have been unjustly fined or had their accounts suspended after algorithms misreported fraudulent behavior. Such frustrations are compounded by the lack of viable channels for seeking recourse. Drivers who call customer service hotlines to lodge complaints report experiencing long wait times that interrupt their work. And even for those who do get through, it is often difficult to provide sufficient evidence that an error has been made. "If Didi were a person, it would have already been murdered a thousand times," quipped one on-demand driver. "We truly hate it, and often feel wronged by the platform. But when we reach out to the company, the people who answer the phone are just other migrant workers. How can we argue with them?" (interview, March 5, 2018, Shanghai).

Expanding human capability

Another area in which human- and machine-centric platforms diverge is investment in human capabilities. Since corporations such as Didi and Uber use humans primarily as extensions of their proprietary technologies, they tend to focus little on the training of their drivers. Instead, they dedicate their resources to technological advancement, betting on the belief that, in the near future, fleets of autonomous driving vehicles will be cruising the streets. In one public presentation, a researcher from Didi tried to assure his audience that they need not worry about job displacement, because autonomous vehicles will still require drivers to "sit inside of them" for at least the next decade. However, the presenter made no indication that the company would endeavor to provide drivers with skills that might enable them to gradually transition to other jobs (fieldnotes, May 11, 2018, Beijing).

While technological advancement and human capabilities are often portrayed as oppositional binaries, anthropologists have pointed out that the adoption of new technologies also allows for the enskillment of workers. As Grasseni (2007, 10) and other authors argued in *Skilled Vision*, "there is no fixed algebra of skill and machine by which an increase of technology means a decrease of [human] skill." This is because, with the advent of any new technology, workers must acquire new skills and apply their embodied knowledge to make the technology useful (Frost 2017). My ethnography of the V Taxi community corroborates this line of argumentation and further

identifies that the key to expanding human capabilities is designing technological systems with space for humans to share skills and knowledge and establish social relations.

In the V Taxi community, the new-member three-month apprenticeship teaches them to recruit and retain clients. A critical component of this training is the honing of communication skills. Each driver receives instruction on how to identify a customer's interests and how to spark conversation. I was told that when new drivers go on trips, their mentors ask them to record (with consent) their conversations with customers. After the trips are completed, the mentor listens to the recordings, analyzing how well the driver engaged with the customer's interests, identifying which conversational strategies worked and which might have been inappropriate. According to V Taxi veterans, the skills imparted through this training are key to cultivating a loyal clientele. One mentor stated, "If one cannot find where the customers' interests lie, how does one expect to retain them as long-term clients?" (interview, June 7, 2016, Hangzhou). Perhaps the strongest evidence of the value of such training is the extent to which it has been emulated. Yang Zifeng, the leader of the Shenzhen team, once said that V Taxi is referred to as "the training school" by outside drivers, because so many who went through V Taxi's apprentice program later split off to found their own successful organizations (interview, April 23, 2018, Shenzhen). While this high rate of defection may not be ideal for V Taxi, it has contributed to the spread of knowledge and skills throughout communities of drivers across China.

The cultivation of communication skills not only distinguishes the service of V Taxi drivers from ordinary drivers but also makes their work more meaningful. Brother 25, a veteran V Taxi member, once told me a story about an old client, a businessperson who traveled frequently between Beijing and Hangzhou. One time while the client was on a business trip, the client's elderly father fell ill. The first person the client called was Brother 25. "I asked him which hospital I should take his father to and he replied, 'To whichever hospital you think is the best. I trust your judgment'" (interview, October 17, 2017, Hangzhou). There are many such stories of driver–client friendships. While seemingly trivial, to V Taxi members, these moments give them the sense that they are more than drivers. "Taxi drivers are probably the lowest rung of professions in our society," explained Brother 25. "We don't have fancy cars or shiny uniforms. The reason clients stick with us is because we treat each other like family. ... In this little space I have met so many different kinds of people, and some of them have become my true friends, the kind you can grab a drink with after work."

The training that V Taxi provides might well be interpreted as part of a broader effort to transform individuals into "private" or "enterprising selves" in China's postsocialist market economy (Rose 1990; Zhang and Ong 2008). But it also differs in one key respect. Unlike the archetypical "enterprising selves," who make autonomous decisions to cope with uncertainty (Rose 1990), the ideal V Taxi driver realizes his optimal self by engaging in nonmarket activities (such as sharing resources, skills, and knowledge) with his fellow community members. This pursuit of "enjoying together" immaterial things complicates narratives of an overwhelming trend of individualization in China's marketization processes (Yan 2009; Zhang and Ong 2008).

Small and beautiful

"Small and beautiful" (*xiao er mei*) is the exact phrase that Jiang Ye, the founder of V Taxi Team, used to describe his community-based organization (interview, November 4, 2017, Beijing). Unlike corporate ride-hailing platforms that seek to become as large as possible as quickly as possible, V Taxi endeavored to preserve its sense of "smallness." Its members actively formed and maintained community boundaries, which they viewed as being of equal importance to practices of sharing. For them, "sharing" did not imply creating equal access to common-pool resources. To the contrary, sharing could occur only within the confines of clearly delineated boundaries, such as the mutual observance of "personal property" (i.e., drivers' clientele). It is these boundaries that enabled the community to function and underpinned the system's sustainability.

The importance of boundaries was illustrated most clearly to me during my first trip to the airport with Brother 315, a junior driver in V Taxi. As I rode and chatted with Brother 315, I noticed a stack of business cards with the V Taxi logo in a holder on the dashboard. To my surprise, though, throughout the trip, Brother 315 never offered me one. Just as I was stepping out of the car, I asked, “Why didn’t you offer me your business card?” With an almost apologetic smile, he said, “Because you are Brother 25’s client. If I offered you my card, it would be considered poaching. That’s not the way we do things. But if you are happy with my service, you are more than welcome to take one” (fieldnotes, June 9, 2016, Hangzhou).

This simple act showed me that relational value can be produced through the upholding of boundaries. In V Taxi, there are no formal mechanisms governing community members’ behavior. No one is monitoring a driver’s actions, nor is there much risk of being caught should one try to poach a client. However, by choosing to respect established norms and forgo the possibility of small personal gain, drivers produce relational value and strengthen the bonds of the community. The taboo against poaching thus establishes a basis of mutual trust and enables drivers to form long-term relationships with their clientele.

However, these boundaries are not immutable. The protection of clients applies only to personal orders that are shared freely and in good faith. If a driver attempts to monetize his or her relationship with a client by reselling the order to another driver, then he or she alters the nature of that relationship such that it falls outside the boundaries of sharing. As one senior community member explained, “If a driver sells his order, then he opens up the moral wall protecting his clientele. Other drivers would therefore be justified in poaching them.” “Even worse,” he continued, “if the clients learn that you are selling their orders, then they will abandon you in a heartbeat for a more trustworthy driver” (interview, October 17, 2017, Hangzhou).

Similarly, the taboo against monetization does not extend to orders from on-demand platforms. Once, when I was borrowing a driver’s phone to browse through the V Taxi discussion board, I noticed a number of orders written in the form of “Trip from A to B, 10 A.M. on Thursday, 10 yuan.” Curious, I asked him to explain why there were prices appended to the orders. He told me that trips formatted in that way originated from ride-hailing platforms like Didi (fieldnotes, October 16, 2017, Hangzhou). Because those trips are assigned by impersonal algorithms, V Taxi members have no moral qualms with selling them. Indeed, some members even employed hacking software, such as “accelerators” and “GPS movers,” to snatch up the most profitable trips on Didi and then sell them to their peers for a small profit. By clearly delineating the boundary between personal and impersonal orders, the community enables members to generate additional income without corrupting the ethics of sharing.

Members of V Taxi also recognize that creating a sensible boundary around admission to the group is important for guaranteeing that the basic economic needs of its members are met. In the past, during V Taxi’s initial period of growth, the acceptance rate of new members outstripped the expansion of drivers’ client bases. This caused a decline in the ratio of orders to drivers on the platform, thus resulting in a fall in average income. For this reason, the community decided to cap its total membership at 320. As a senior driver explained, “for a while we existing members couldn’t ‘get full’ with the orders being generated, so we stopped accepting new members. ... Because when drivers cannot ‘get full’ they will start to poach clients, cut corners, and breach the bottom line of morality” (interview, June 7, 2016, Hangzhou). In other words, V Taxi members understood that the healthy production of relational values cannot be sustained without a concomitant production of economic value.

Maintaining the smallness of the community is also important for building strong social relations. It takes time for drivers to learn to trust one another and engage in meaningful sharing. If the team size is too big, it is almost impossible for drivers to get personally acquainted with all other team members. This is why merely capping the team size did not resolve the internal problems that emerged after the team expanded to more than two hundred members. Many drivers found it hard to develop trust toward their peers and so began sharing orders only within their subteams. This resulted in the formation of cliques and a gradual reduction of the efficiency of the system.

Centralizing V Taxi

Team leader Jiang faced a dilemma: He could either reduce the size of the community to a more manageable level or adopt a different model that would allow for continued expansion. The choice came at a moment in mid-2014 when V Taxi faced an existential threat. Uber had just entered the market. Many suspected that Didi, a company that originally served only taxis, would soon also expand into the realm of private cars.⁸ Jiang feared that the shifting tide of the industry would eventually force out small, community-based organizations. The only path forward he believed was through growth: to develop a more machine-centric platform for V Taxi in order to allow more drivers and clients to use the platform (Jiang, interview, November 4, 2017, Beijing).

In early 2014, Jiang Ye hired a group of computer programmers to help him develop a centralized system for receiving and dispatching client orders. In Jiang's new system, clients would affiliate with V Taxi's official WeChat account (rather than with individual drivers) and would post service requests directly to the platform. Requests, once posted, would be immediately relayed to the client's preferred driver. If that driver was unavailable, then the request would be recirculated within the community. However, not every driver would see the requests at the same time. A ten-tier hierarchy would rank drivers according to their performance evaluations. Level 1 drivers would receive requests first, Level 2 drivers would be able to view them one minute later, and so on down the pyramid. This whole process would be fully automated to handle the largest possible volume of orders.

To ensure a fair distribution of opportunity within the community, Jiang's system included another novel feature: digital tokens. Digital tokens, referred to as "gold coins" in the community, would entitle members to claim orders. Whenever a driver contributed an order to the platform, he would be awarded a certain number of gold coins. Conversely, whenever a driver wished to claim an order, he would need to pay a requisite number of gold coins. If a driver were short of coins but still wanted orders, he could purchase additional gold coins (with real money) from the V Taxi bank controlled by Jiang Ye. From Jiang's perspective, this new system would not only enable greater efficiency and scalability but also preserve the core interests of drivers. Drivers would always get first dibs and unrestricted access to their own clients' orders. They would also be actively rewarded for recruiting new clients and bringing more opportunities to the platform. The ten-tier hierarchy would also provide an incentive to improve service performance (Jiang, interview, November 4, 2017, Beijing).

However, when the new system was unrolled, it was met with mistrust and protest. Many drivers felt that it corroded several key features of V Taxi's human-centric design. First, the centralization of orders undermined the personal ownership of client relations. Drivers worried that if more clients began placing orders directly on the platform, they would slowly lose their interlocutory power. As one driver predicted, "the clients will soon associate with the official V Taxi account, not us drivers" (fieldnotes, October, 16, 2017, Hangzhou). Another driver with similar concerns asked, "What happens when we want to leave the team? Will we be able to take our clients with us? I don't think that's likely" (fieldnotes, October, 16, 2017, Hangzhou).

Second, the automation of order allocation eliminated volition from sharing practices. In the original V Taxi system, drivers made conscious decisions about whether to share orders. As was previously discussed, on the old system, drivers may have felt tempted to monetize their client relations by selling orders to peers. But by not doing so—by instead choosing to adhere to the principle of sharing—they demonstrated their commitment to the community and thus produced relational value. When this process is automated, however, orders are no longer under drivers' control. Without control, drivers could no longer exercise agency and produce relational value through voluntarily sharing orders.

Third, the introduction of digital tokens reduced system transparency and accountability. Members neither knew the total number of coins in circulation nor had access to audit the processes of coin assignment. Drivers began asking questions like "Why is Jiang Ye solely responsible for creating and dispensing new coins?" and "How do we know the system is not rigged for his personal gain?" One driver told me that once Jiang awarded him a large number of gold coins for a personal favor, which inadvertently made him wonder, where do these coins come

from (fieldnotes, October, 16, 2017, Hangzhou)? This process of black-boxing, which mirrored that of corporate ride-hailing platforms like Didi, proved antithetical to the transparency present in the original system.

For these and other reasons, Jiang's new platform proved short-lived. In fall 2014, Jiang left the community he founded to join Didi as an operational manager. Many team members interpreted Jiang's move as a betrayal. For them, Didi represented an existential threat—a corporation with a very different vision for the industry that would destroy or devour any alternative platforms. For Jiang to abandon V Taxi for Didi was, according to one member, tantamount to deciding to “exterminate his offspring” (*jueren menhu*) (interview, October 17, 2017, Hangzhou).

Jiang Ye always said that his driving ambition was to create value on the largest possible scale. Both his effort to centralize the V Taxi platform and his later decision to leave the community for Didi can be interpreted in this light. But I think that Jiang's actions were misguided. As the eventual spread of V Taxi to other cities and the establishment of the V Taxi National Association proved, V Taxi's model could be adopted by many more drivers. But such growth was achieved through a bottom-up process that preserved the hierarchical structure of sharing. Conversely, Jiang's attempt to centralize the platform ultimately disrupted community bonds and reduced the individual agency of drivers. As a result, the new system (while more efficient and scalable from a narrow technological standpoint) inhibited the production of relational value as well as the sharing of knowledge, friendship, and social values. In other words, the central values that had been created in the V Taxi community could not be replicated through the imposition of a centralized model.

Conclusion

The case of V Taxi provides a powerful illustration of how, in our current age, “small technology” can still be used to empower local economic actors. The V Taxi community created a sociotechnological system that both reflects and reinforces the values of its members. Instead of deskilling drivers, the system harnesses their skills and knowledge and encourages the development of their capabilities. Instead of atomizing drivers, the system operates through spheres of loyalty that mirror the social structure of Chinese society. And instead of centralizing decision-making processes, the system treats drivers as moral agents who are capable of thinking beyond their immediate self-interests. The success of V Taxi's model resides in the fact that it is not only an economic organization but a moral community that reproduces shared values.

Upon first glance, V Taxi might seem like an aberration, an organization that has survived rapid economic change only by virtue of existing within a market niche. But V Taxi was never insulated from the rest of society. Like all transportation service providers, the community was deeply disrupted by the rise of ride-hailing platforms, but unlike many, it was able to weather the storm. To be sure, years of fierce (and some would argue unfair) competition from Uber China, Didi, and Kuaidi (now all subsumed under Didi Chuxing) took their toll on the community; when I left my fieldwork in 2018, the original Hangzhou team had shrunk to around one hundred member-drivers, about one-third its size during the boom years of 2013–14. But membership numbers were stable, and the V Taxi network continued to expand to ever more cities across China. The dynamic new head of the national association, Leader Yang, had even begun to develop new revenue streams for V Taxi, including wedding car bookings, roadside emergency assistance, and other specialized services.

As my ethnography has shown, it was exactly the human-centricity and social embeddedness of V Taxi that made the community more resilient and adaptable to change. When competition from ride-hailing platforms heated up, V Taxi did not forbid its members from operating on those platforms; instead, it delineated clear boundaries between commercial orders (which could be sold) and personal orders (which had to be shared). When the community founder, Jiang Ye, later attempted to centralize V Taxi, members opposed him and fought to preserve the community's original human-centric structure. In the face of challenges both external and internal, the production of relational value strengthened the bonds that held the community together.

This article serves not only as a critique of ride-hailing platforms like Didi and Uber but also as a constructive proposal of what more human technologies might look like. As David Graeber (2001, xiii) so eloquently argued,

if one takes up the Maussian project with too much uncritical enthusiasm, one ends up with a naive relativism utterly blind to power. But if one is too rigorous and single-minded about one's critical project, one can easily slip into a view of social reality so cynical, of a world so utterly creased with power and domination, that it becomes impossible to imagine how anything could really change.

Here I have attempted to delineate one possible alternative future: "small" digital platforms in China's contemporary ride-hailing industry that are effective and agentive.

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Notes

- 1 Didi is a transportation network company based in Beijing, China. It provides services ranging from on-demand cars and taxis to buses and bikes. Its platform serves 45 million users in five countries (<https://www.didiglobal.com/>).
- 2 Except for a very small percentage (7%) of drivers who own their medallion, most cab drivers in Hangzhou affiliate with licensed companies to obtain rights to operate taxis. Drivers pay a monthly mandatory fee to these companies, ranging from CNY¥4,000 to CNY¥8,000/month (US\$582.20–1,164.40) in 2016.
- 3 In addition to prebooked trips, V Taxi drivers would cruise the streets as other cabbies and pick up orders on platforms such as Didi and Kuaidi to supplement their income.
- 4 According to Chen (2018), as of 2016, 93% of taxi drivers in China earn less than CNY¥5,000/month (US\$851.80).
- 5 All the names of study participants have been anonymized in this article, except for the names of Hangzhou V Taxi founder Jiang Ye and Shenzhen V Taxi leader Yang Zifeng. They authorized the author to use their real names.
- 6 Some on-demand drivers also form communities on various social platforms to share knowledge and seek friendship, but such groups are relatively transitory and disorganized.
- 7 In addition to Hangzhou, the primary field site, the author also conducted research in Shenzhen, the headquarters of the V Taxi national association, and Lanzhou, one of the largest cities in northwest China. In order to protect drivers' privacy and avoid disrupting their daily work, interviews were primarily conducted during trips to and from airports and train stations. Additional interviews with key informants were conducted in restaurants, by telephone, and over WeChat. Because of the atomized and peripatetic nature of taxi-driving, the author chose to study communities of drivers through digital ethnography, observing their interactions in WeChat groups.
- 8 When Didi was first founded, its ride-hailing platform only served registered taxi drivers. It only launched its private car service in May 2015, half a year after Uber launched its ride-hailing platform People's Uber in China.

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