Motorbike Taxi Drivers, Ride-Share Apps, and the Modern Streetscape in Vietnam

JESSICA LOCKREM

Ho Chi Minh City is a metropolis of motorbikes. In 2016, there were 8.5 million motorbikes among the eight million people in Vietnam's economic capital (*Thanh Nien News* 2016). A Vietnamese expression illustrates the necessity of the motorbike for mobility: *không xe máy, không chân* (without a motorbike, without legs). Those who have motorbikes cannot imagine why anyone would choose to walk or travel by bicycle or bus. Those who do not, speak of their hope to get one. Members of the wealthy elite might drive a car or even employ drivers for their luxury automobiles. Those who can afford neither car nor motorbike might travel by bicycle, be transported by family members or friends, ride a bus, hire a car taxi, or go by motorbike taxi.

One major transportation planning study estimated the number of motorbike taxi drivers in Ho Chi Minh City to be in the tens of thousands (Almec Corporation 2004). Indeed, they are ubiquitous on the sidewalks of the city's inner districts. Particularly in the central business district, one does not need to walk more than a couple of blocks to find drivers perched on their motorbikes, ready to take customers to their destinations for as little as two dollars.

Recently, new actors have emerged alongside motorbike taxis: ride-share apps. Silicon Valley-based Uber and Southeast Asia-based Grab have set out to disrupt the taxi industry in Vietnamese cities. While other authors have examined these changes in terms of economic trends and business profits, this chapter examines motorbike taxi infrastructure and the introduction of ride-share apps at the scale of the street, through changes in drivers' practices and in their neighborhoods. Ride-share apps have begun to alter the landscape of motorbike taxis, affecting who is driving, who is riding, and the mechanics of how they are doing so. Transportation provides more than the circulation of people and goods for economic activity: it also shapes neighborhoods, lives, and how residents interact with one another. Transformations in transportation systems subsequently affect urban space. This study focuses on the scale of operators to analyze the impact of transportation infrastructure on communities.

This chapter is based on ethnographic fieldwork in Ho Chi Minh City from January to December 2013 and shorter field research trips in 2006, 2010, and 2016. I conducted participant observation and more than a hundred semistructured interviews with motorbike taxi drivers on street corners, at regional bus stations, and at the train station. I also conducted participant observation at a local transportation planning research institute, and I interviewed planners, including Vietnamese and foreign experts, working on major public transportation studies. In 2016, after Uber and Grab had both begun operating in Vietnam, I conducted interviews with Uber and Grab drivers and observed them on the city streets. (Throughout, to distinguish drivers who use a ride-share app from those who do not, I use the descriptors "Grab and Uber drivers" versus "motorbike taxi drivers.")

I build upon this fieldwork by examining how the infrastructure and technology of motorbike taxis inform how they occupy public urban space. Because motorbike taxi drivers spend many hours on the streets to find passengers, they fulfill more than just the mobility needs of passengers: they also participate in infrastructures of security, order, and information. Recently, ride-share apps have allowed for new drivers to profit from transporting passengers and have changed how drivers gain customers—now this is done through the ping of a smartphone. If Uber and Grab disrupt the motorbike taxi industry in Ho Chi Minh City, how might this change the urban landscape? I argue that Uber and Grab drivers embody a modern relationship with public urban space that the state has been working toward for decades.

Motorbike Taxi Drivers as Infrastructure

In 2004, when 78 percent of trips taken in Ho Chi Minh City were by motorbike, the city's People's Committee set a goal of increasing public transit usage from 5 percent to 50 percent of trips in less than a decade (Almec Corporation 2004). In the course of my research in 2013, I spent time in the offices of transportation firms working to achieve that goal through the planning and construction of two urban rail lines, the first such lines in the city. While I observed transportation planners using massive amounts of data from surveys and traffic observations to map rail routes and station locations, I was struck by how efficiently motorbike taxis served the city's transportation needs without central oversight or expensive new physical infrastructure.

The transportation planners spoke about motorbike taxis in two main ways. First, they acknowledged that the motorbike was a convenient mode of transportation, one that city residents would not easily abandon for rail transport. Second,

they acknowledged the importance of the motorbike taxi for the so-called last mile between the rail station and the passenger's destination. Indeed, motorbike taxi drivers are an integral part of Ho Chi Minh City's transportation infrastructure. Drivers are spread throughout the city, picking up passengers as they leave shopping centers, or responding to text messages from regular customers. Hundreds of motorbike taxi drivers can be found each day at regional bus stations, awaiting riders arriving from the surrounding provinces who cannot afford a car taxi. Drivers might transport a child to and from school each weekday, or take an elderly person to a weekly medical appointment. Drivers fortunate enough to sit on corners in touristy areas hope for a foreigner who can be convinced to pay more. When drivers are not with a passenger, they recline on their motorbikes, relaxing, observing, smoking, drinking iced coffee, napping, reading the newspaper, and calling out to potential customers.

These drivers are filling gaps left by inadequate public transportation, forming an example of "people as infrastructure" (Simone 2004), whereby people flexibly step in where state-planned infrastructure is lacking. AbdouMaliq Simone developed this concept based on his research in African cities, observing "half-built environments" where the infrastructure is "underdeveloped, overused, fragmented, and often makeshift" (425). Motorbike taxi drivers in Ho Chi Minh City fulfill a similar need for transportation for the poor that the city is not currently able to meet through public or other low-cost transport. Serving an estimated 5 percent of trips in the city, based on the last major transportation study (Almec Corporation 2004), the public city bus system is not a widely used form of transportation. Like all bus systems, it does not provide door-to-door transportation, and the transportation planners I observed often cited this as a hindrance to increasing the use of rail or bus transit. Particularly in Ho Chi Minh City, the system is not able to reach many areas where the roads are too narrow for buses or even small automobiles.

Motorbike taxis in Ho Chi Minh City exemplify an "incessantly flexible, mobile, and provisional" (Simone 2004, 407) infrastructure. Whereas roads and the public city bus system are largely planned by a central authority, and the car taxi industry is regulated by the city, motorbike taxis have a history of emerging organically where there is need. Busy areas, such as stations serving as hubs for buses from surrounding provinces, can support hundreds of drivers. An intersection in a downtown area might have eight drivers who rotate in that spot throughout the day, while a corner in a remote district might have two drivers. I interviewed drivers who had been serving the same corners for up to fifteen years. Others might sit at different corners depending on the time of day and availability of customers.

Disorder and the Vietnamese Streetscape

The flexibility of the motorbike taxi makes it an effective infrastructure, yet from the view of transportation planners, this flexibility is disorderly. Despite their integral role in transportation for many residents, motorbikes (particularly motorbike taxis) are not compatible with the state's efforts to create modern streetscapes. The Vietnamese state has practical reasons for wanting to create an orderly streetscape: namely, reducing traffic congestion, which is feared to impede economic growth and increase pollution, and fostering the image of an efficient city, which is hoped to encourage foreign investment. While residents have supported the city's efforts to clear the sidewalks of vendors and sidewalk cafés in the name of modernity (Harms 2012), viewing sidewalk vending as dirty, disorderly, and a nuisance, this opinion is not as widespread in Vietnam as it is elsewhere, partly because many Vietnamese enjoy buying snacks and eating meals on the street (Kim 2012).

Scholars have demonstrated that streets around the world are increasingly designated to fulfill the primary function of mobility, particularly for automobiles, in the name of modernist urbanism.² Efforts in Hanoi to outlaw cyclos (in some ways, the predecessors of motorbike taxis) were intended to create a "modern" cityscape, eliminating the "backward" elements of informal-sector activities (Drummond 2000, 2384–85). In Ho Chi Minh City, "behind the search for smoothly flowing traffic lurks a civilizing mission" (Harms 2011, 191). Cyclos and motorbike taxis do not fit the state's goals of automobility and modernity.

The Vietnamese state associates modernity with law and order, while motor-bike drivers regularly flout the rules of the road. Transportation planners, both local and foreign, often remarked to me that motorbike drivers were disorderly. One German transportation engineer, speaking to me about his research on road capacity analysis, claimed that driver behavior in Vietnam was "different from our countries, for sure." He spoke about the "undisciplined" behavior of motor-bike drivers. Another interlocutor, a local transportation planner working on traffic models in Vietnamese cities, wrote that motorbike drivers travel in "erratic and chaotic trajectories." Planners who use words such as "chaotic" and "undisciplined" are not offering value-free observations. They demonstrate what Junxi Qian (2014, 13) notes regarding China, that "the flexibility of motorcycle movements contradicted the entrenched notion of ordered urban traffic." The materiality of the motorbike (that is, its small size and two wheels) means it can move through the city more flexibly than a car can, and, therefore, the state sees the motorbike as something that needs to be controlled.

Ho Chi Minh City has constructed material infrastructures to limit the chaotic mobility of the motorbike. Curbs, lanes, one-way streets, and medians are elements of the built environment that transportation planners have instituted to create order in traffic (Truitt 2008, 2013; Harms 2011). Motorbike drivers regularly defy these elements, climbing over curbs and onto sidewalks to get around traffic jams, driving down one-way streets in the wrong direction, swerving through oncoming traffic to move over to the right-hand lane, and maneuvering through small breaks in cement medians to make U-turns. The agility of the motorbike means that it has speed (Sopranzetti 2014); it also means that the state cannot easily restrain the motorbike to create an orderly street.

Speed is not the only attraction for the motorbike owner. The motorbike is a symbol of new individual freedoms and economic reforms in late socialist Vietnam (Truitt 2008), as well as of "new hedonist values, a shift from a culture of discipline towards a culture of pleasure" (Freire 2009, 73). Motorbike taxi drivers are assumed to be some of the worst violators of traffic laws, a statement I came across often in conversations with residents. Indeed, I came to expect that motorbike taxi drivers would disregard the rules of the road when they became inconvenient. On one ride, my driver, Mr. Hoa,³ drove on the sidewalk, in the wrong direction, and in lanes reserved for four-wheeled vehicles—all in the first five minutes of the ride. It was faster to do so. Indeed, motorbike taxi drivers take pride in flouting the conventions of orderly traffic. Driving on sidewalks or over medians gives them the feeling that they have command over their motorbikes and over the city streets. They take pride in dominating the roads. The roads are the domain of motorbike taxi drivers, their arena of expertise, the place where they are in control.

Yet these drivers are associated with disorder for more than just their driving behavior. Their very presence on the street corners of the city makes them an aspect of urban disorder—much in the same way as the state views street traders as elements of a backward subsistence economy who are hindering the state's efforts to achieve modern, rational economic development. The Vietnamese state has worked to present Vietnamese cities as modern, civilized, and ordered, and their economies as rational and under the control of the state. The lower-class status of motorbike taxi drivers adds to their association with disorder. Furthermore, their customers belong to the lower and lower-middle classes (Vu and Mateo-Babiano 2013). Motorbike taxi drivers and street traders are private entrepreneurs using public space for private gain, without being taxed or consistently regulated by the city. Thus, they are a visible indicator that the state does not have control over the economy or over urban space.

Urban scholars have argued that the state needs to rethink mobility and traffic in a more humane way, framing inclusionary transportation planning efforts as issues of urban spatial justice and the right to the city.⁶ In Vietnam, mobile food vendors and motorbike taxi drivers depend on being able to use public space for income. Harassing and fining drivers threatens their livelihoods. While city officials have not been as aggressive at banning motorbike taxi drivers as they have been toward food vendors, some drivers described mild harassment from police, sometimes resulting in parking tickets for waiting on sidewalks. This practice is similar to other entrepreneurial sidewalk activities that are illegal but in practice are tolerated and only sporadically fined.⁷

Rather than banning motorbike taxi drivers outright, city officials have attempted to organize them: registering them, keeping lists of their names and license numbers, issuing uniforms for them, and circumscribing where they may wait for passengers. How closely motorbike taxis are regulated by the city varies depending on location. At the time of my research, station authorities at busy transportation hubs maintained control over who was permitted to wait for customers, and either charged the drivers fees or required them to direct traffic in lieu of paying a fee. In terms of daily operations, the drivers organized among themselves. For example, at the bustling East Bus Station, serving both regional and local buses, the security manager in charge of overseeing motorbike taxi drivers showed me a list of 410 drivers registered at the station. The list was divided into five groups according to where drivers were allowed to approach passengers. Drivers in each group paid fees to the bus station, wore uniforms, and set their own rules for how to approach and share passengers. One driver described the atmosphere before the registration system was implemented as lacking order, with drivers often getting into fights over passengers.

Although the administrators in the bus station offices collected the drivers' fees, approved new drivers, and maintained lists of registered drivers, the drivers themselves managed how they shared customers. For one group at the East Bus Station, this system centered on the driver board. The board was displayed on a pole above some benches in the drivers' waiting area. Metal clips, each with a different driver number, hung on wires draped across the board. Precisely every fifteen minutes, one of the drivers grabbed a pile of either green or yellow armbands from the desk and started calling off the first ten numbers from the board. As his number was called, the driver stood and grabbed an armband, put it on over his uniform, and headed out to the pavement to approach passengers.⁸ Any drivers who did not find customers within those fifteen minutes returned to the waiting area and deposited their numbers on the board to wait for another chance.

The system benefited the drivers in many ways. It was more efficient and comfortable to have a smaller group of drivers trying to approach customers at any one time. Drivers did not need to yell over or jostle one another to get to the front

of a large group. Attempting to gain customers was therefore a calmer, less aggressive task. When it was not their turn, drivers were able to take a break from the sun and from standing or jogging after buses.

Some motorbike taxi drivers in District 1, the central business district, were part of a more formal self-managing security and order program. This program was devised to protect passengers from unscrupulous drivers and to ensure safety within the neighborhood by empowering drivers to maintain security. Drivers in the program wore olive green helmets with bold yellow lettering that included a four-digit driver number and a phrase meaning "self-managing security and order." They also wore a uniform: a loose, light-blue, button-down shirt with a yellow emblem including a Vietnamese flag on the upper arm. Above the emblem were the words "Liên đoàn lao động Q. 1" (District 1 Labor Union), and underneath that "Nghiệp đoàn xe ôm Phường Bến Nghé" (Ben Nghe Ward Motorbike Taxi Driver Union).

Elsewhere, motorbike taxi drivers largely operate outside of city regulation. Rather than operate under a central authority with established rules, smaller groups of drivers on street corners have come to regulate themselves. For example, drivers in my neighborhood explained which drivers were allowed to "fish" for passengers in which area. These rules of the street were made clear to me early in my research in 2013, when I accepted a ride from a motorbike taxi driver driving past my new home, only to incite a verbal kerfuffle between him and a driver perched on the nearest corner. This ended with the driver who had the unwritten right to the sidewalk revving his engine and driving into the other driver. Months later, after I had spent many hours getting to know my neighborhood drivers, I asked the local driver about the incident. He explained that the other driver was not supposed to approach prospective passengers on this street. Lack of central planning does not mean there are not rules among drivers.

Community, Information, and Order

Motorbike taxi drivers fulfill roles in the city that concrete and steel cannot. They are "quintessential urban figures" (Hansen and Verkaaik 2009, 6), residents who have a special knowledge of the city and who command resources that are crucial to its functioning. Drivers are embedded in neighborhoods, creating community, providing knowledge by giving directions, and serving as informal security in public space.

They have a personal stake in the well-being of their communities that is evident in how they conduct their work. When I asked drivers how they had come to sit on a particular corner, they often described being no longer able to work in

construction or other physically demanding jobs, and a neighbor inviting them to join other drivers at their corner. I asked one driver why he would invite a friend to join his territory if there were already so many drivers there, with apparently few passengers. He looked at me with a bit of disbelief and said that if you have two bowls of rice, you give one to someone in need. If someone needs a job, you let them join you, even if the passengers are then divided among a greater number of drivers. Drivers also told me stories of allowing drivers in need—perhaps someone whose family member had a new health issue, or whose student fees were due to take additional passengers out of turn. I found drivers at the East Bus Station collecting funds among themselves to send to a driver who had to return to his home village after being injured in a collision. Such charity extended beyond the community of drivers: they gave free rides to high school students arriving in Ho Chi Minh City for college entrance exams, recognizing that these students did not have the money to pay for a ride. I observed many such acts of caring for the community during my fieldwork, something that initially surprised me because of drivers' low daily earnings but that I came to understand as reciprocity within communities.

Motorbike taxi drivers also play a role in maintaining security in their neighborhoods. One driver, Mr. Hung, a member of the self-managing security and order program in District 1, told me that the local security police (*công an*) had issued him his helmet, shirt, and driver number as a way for them to more easily manage drivers and protect passengers. When I asked about the drivers who did not wear a uniform, which was far more common throughout the city, and gestured toward a driver sitting nearby, Mr. Hung explained that the police occasionally ask to see their papers to ensure that they are registered drivers. If the police find drivers who are not in the organization, then the police may suspect that they live in other areas and are attempting to pass as local drivers. Mr. Hung added that if a registered driver stole from a passenger, the passenger would know the driver's number, and the police could track him down. Mr. Hung warned me not to travel with a driver who did not have a badge, pointing to the emblem on his uniform. He cautioned that someone could pose as a driver but really seek to steal from passengers.

Mr. Hung also spoke about motorbike taxi drivers' roles in protecting the neighborhood. He appeared to take satisfaction in protecting foreigners and locals from crimes such as theft. "I entered the group to combat petty theft so that foreigners could come and visit," he told me in Vietnamese. "We have this organization to promote security and order." He remarked that drivers had directly intervened when they saw a theft. He attended monthly Ben Nghe Ward meetings as the leader of the motorbike taxi driver labor union, and he reported on the

drivers' activities such as helping to combat crime. In response, the police issued certificates of merit as appreciation. Another driver told me similar stories of protecting people from thieves. He described the time he chased a thief and retrieved a purse for a tourist. The security and order program in Ben Nghe Ward transformed the motorbike taxi drivers from a sign of the state's inability to control the street into a visible presence of the state, inscribed on their helmets and uniforms.

Motorbike taxi drivers even play an important role in preventing crime before it takes place. These men, who spend many hours on the same street corner each day, are integral to the neighborhood, and astute observers. Jane Jacobs (1993), writing about American cities, famously claimed that a neighborhood is safer with more "eyes upon the street." The more people are in the public space of the street and watching activities there, the more crime is prevented from occurring. She wrote: "This is something everyone already knows: a well-used city street is apt to be a safe street. A deserted city street is apt to be unsafe. . . . There must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the street" (44–45). Jacobs argued that merchants at small neighborhood stores are especially good at fulfilling this role, for they are a constant presence, and they are motivated to keep the streets safe because doing so is good for business. She wrote of the importance for those who watch the streets to know the neighborhood and its people, and to be able to spot suspicious activity and those who do not belong.

Thus, by being present, motorbike taxi drivers discourage thieves who do not want to be witnessed stealing a purse or phone. Drivers often work ten hours or more a day, and even on particularly busy days, they spend many hours waiting on their motorbikes. Their ability to maintain an unobtrusive presence allows them to keep an eye on the activities of the street. They are not the police; they are of the neighborhood. It is their ambiguous status within the legal and social land-scape of the city that places them in such an effective position as the eyes upon the street.

Motorbike taxi drivers are such good neighbors not only because of their watchfulness, but also because of their knowledge and chatter. In a very practical way, motorbike taxi drivers possess essential information about the city that is not otherwise easily found, even for long-term residents of neighboring districts. Whenever I spent a few hours sitting with drivers, there would inevitably be a handful of motorists who would stop to ask for directions. When arranging to meet someone, friends often told me to ask a motorbike taxi driver for directions once I arrived at a particular street. Dense networks of alleyways and opaque numbering systems make the knowledge of motorbike taxi drivers indispensable.

Drivers have also been conscripted explicitly to maintain traffic order at transit hubs. Rather than pay fees to pick up passengers at the East Bus Station, one group of drivers I observed directed traffic at the entrance to the station. The group supplied two drivers from 5:00 a.m. until 4:00 p.m. A white board hung near their territory and listed one-hour shifts over the following three days, with a driver's number and name assigned to each shift. At the beginning of each hour, a driver picked up a baton, donned a red armband with yellow letters spelling out *trật tự* (order), and walked to the station entrance to direct traffic.

At the train station, motorbike taxi drivers similarly took turns maintaining order in traffic. They also had red-and-gold armbands that read *trật tự* and carried whistles. Once, I observed an older driver blowing his whistle at two young people on a motorbike. They did not heed his directions to move to a different lane, and he became so angry at their defiance that he lightly slapped the driver on the arm. Here, as elsewhere, I noted drivers taking their responsibilities to maintain order seriously.

Ride-Share Apps and Disruption

Many of the benefits that motorbike taxi drivers provide within their own communities and at transportation hubs are a result of the time that drivers spend with each other and on the streets. To some people on the outside, this time represents idle hours that could be better used. In 2013, two transportation planners proposed a system whereby motorbike taxi drivers would be organized into larger collectives, dispatched from centers, and equipped with meters, much like traditional taxis (Vu and Mateo-Babiano 2013). The planners' reasoning was that if drivers were organized in this way, they could drive fewer hours per day, transport more passengers during the time they worked, and not spend so many unproductive hours on the streets. This conceptualization of a central dispatching system for motorbike taxi drivers sounds a lot like Uber or Grab, and by the time of my research in 2016, both Uber and Grab were operating in Vietnam.

These ride-share app companies have set out to disrupt the taxi industry in Vietnam. "Disruption" has become a hackneyed term used in entrepreneurial circles to describe how Uber and other technology companies are interacting with established industries—selling a cheaper product, less profitably at first, to eventually take over an industry (Christensen 1997). In Ho Chi Minh City, Uber and Grab aim to pull customers away from traditional motorbike taxi drivers and to attract new passengers, offering a new option for the tech-savvy members of the middle class who have access to smartphones.

In the process, Uber and Grab are creating communities of drivers that inhabit urban space differently and interact with the surrounding community in new ways. The smartphone technology of the ride-share app means that ride-share drivers do not need to spend many hours on the sidewalk looking for passengers, nor do they need to develop relationships with neighbors to guarantee regular customers. But because ride-sharing necessitates an expensive smartphone, ride-share drivers and passengers are noticeably wealthier and younger—an infrastructural inequality that, as incomes in Vietnam continue to rise, will disproportionately leave older, poorer motorbike taxi drivers behind.

In contrast to the business sense of "disruption," the word has very different connotations in social science research on infrastructure, where it signifies not innovation and profit making, but breakdown and decay. Infrastructure is visible only when it fails, whereas when it is running as it should, it fades into the background (Star 1999; Larkin 2013). This idea of visibility and invisibility characterizes the privilege of the Global North. In the Global South, where citizens struggle to improvise reliable transportation, water, and communication systems, infrastructure is more commonly foregrounded out of necessity (Graham 2010). This is the case even though decades of infrastructural neglect and austerity in the United States and Europe have proved that there is no longer a clear demarcation between the infrastructure-rich North and the improvising South (Howe et al. 2016).

Motorbike taxis have been one such improvisation in Ho Chi Minh City: when many people could not afford motorbikes and the city did not provide sufficient public transit, motorbike taxi drivers found their market. A motorbike taxi driver told me during my first interview at the East Bus Station in 2013—with a dozen other drivers nodding as he spoke—that with incomes rising, they were seeing fewer customers. At the time of my research in 2016, motorbike taxi drivers did not see Uber and Grab as threats, at least not yet. However, it is possible these rideshare apps will come to disrupt (in the entrepreneurship sense of the word) the motorbike taxi industry. In 2016, I observed ride-share apps altering how drivers interact with the streetscape and how they create community with one another and the surrounding neighborhood. Were Grab and Uber to dominate the industry, they would disrupt not only the motorbike taxi industry, but also the infrastructure of order, security, and knowledge that the motorbike taxi drivers have maintained.

Ride-share drivers inhabit urban space in a way that more closely resembles the modern ideal that the Vietnamese state has been attempting to create for decades. I observed Uber and Grab motorbike drivers in 2016, soon after they began operating in Ho Chi Minh City. Already, it was clear that ride-share apps were impacting

the use of space in the city. If ride-share apps eventually gain most or all of the motorbike taxi market, it may mean that drivers will no longer be a constant presence in communities, providing informal security, giving directions to countless lost drivers, or just being friendly neighbors. With major changes in transportation infrastructure, there are ripple effects in the social fabric of the city—in this case, the loss of important figures on the streets and important sources of income for many families.

The Uber and Grab apps in Vietnam are the same apps that one uses in the United States, Singapore, or anywhere else these companies operate. Using one of the apps in Ho Chi Minh City, I first indicated that I preferred a motorbike rather than a car. I then indicated my destination, and the app gave me an estimated fare. My Grab driver arrived at my location within minutes. This process is markedly different from the alternative process of walking to a street corner that has a motorbike taxi driver, describing the destination, and then negotiating a price. Many (though not all) drivers for Grab wear new, shiny green-and-white helmets bearing the Grab logo, and jackets with the same colors and logo. Once I noticed the jackets, I began to see the drivers seemingly everywhere in traffic.

Class differences between the two groups of drivers were particularly apparent when I asked one group about the other. Asked if they would consider driving for Uber or Grab, motorbike taxi drivers immediately said no. Some said that they had never heard of the apps. Others said that they heard there were high fees for driving with the ride-share companies—rumors that I found had circulated among many of the long-time motorbike taxi drivers. In fact, a smartphone is indeed a high barrier to entry for drivers who earn fifteen dollars on a particularly good day.

Conversely, when I asked the Uber and Grab drivers about the motorbike taxi drivers, they were often dismissive. Motorbike taxi drivers were not worthy of their attention; after all, they did not share the same customer demographic. Ride-share drivers did not see themselves as similar to those older drivers. A few, though, told me rumors (always second- or third-hand) of motorbike taxi drivers becoming aggressive. According to the stories, a Grab driver would pull up to a customer, perhaps on the same corner as a waiting motorbike taxi driver, and the motorbike taxi driver would get angry, even physically aggressive with the Grab driver. When I asked a group of motorbike taxi drivers at the East Bus Station about these stories, they denied that such things would ever happen. The rumors propagated a sentiment I heard often during my research, one found in many newspaper articles about motorbike taxi drivers: they are disorderly, and one should be wary of their motives. These assumptions are steeped in classism. While groups of motorbike taxi drivers trust one another, and many are a welcome part of neighborhoods, when they

are perceived as an undifferentiated, unfamiliar mass, they can arouse suspicion on the part of other drivers, the media, and residents.

Compared to motorbike taxi drivers, Uber and Grab drivers do not need to spend as much time in public space when they are not driving. Because passengers summon them through an app, some wait at home or in a coffee shop for passengers, rather than on sidewalks. On one trip, I walked out of my hotel to find my driver exiting the small convenience store next door, where he appeared to be an owner. Whereas many motorbike taxi drivers enter the business after leaving another line of work (most often they have been soldiers, construction workers, or truck drivers), the Grab and Uber drivers with whom I spoke also had other jobs or were university students. This further informs the nature of the drivers' communities: motorbike taxi drivers work together for years, for many hours every day, while Uber and Grab drivers often work part-time between other commitments.

However, Uber and Grab drivers are not completely absent from public space. These drivers do not wait at the same intersections as the long-time motorbike taxi drivers, nor would they be welcome to do so. However, they do gather in large groups in the busy central business district during the day. Outside of Bitexco, the tallest skyscraper in Ho Chi Minh City in 2016, I observed more than a dozen Grab drivers waiting together. According to my interviews, it is not uncommon for a motorbike taxi driver to have been posted at a particular corner for twenty years, but these ride-share drivers were new to the area. They were noticeably inward-looking—chatting with each other, and looking at one another rather than the neighborhood—since they did not need to keep a lookout for passengers.

Ride-share apps are not creating new opportunities for existing motorbike taxi drivers to work more efficiently, as the study by Vu Anh Tuan and Iderlina B. Mateo-Babiano (2013) had predicted the use of meters and call centers would do. Rather, they are creating part-time opportunities for wealthier youths who have access to smartphones and the desire to use them. Ride-share drivers do not need to form a community with one another or with the surrounding space to gain passengers, and thus they do not need to invest in neighborhoods or support infrastructures of order, security, and knowledge.

Conclusion

Motorbike taxi drivers have been essential to Ho Chi Minh City: their very presence helps the city function. They are found throughout the city, on street corners, at major transportation hubs, and within neighborhoods. They provide an important transportation service for anyone without a vehicle who needs to travel quickly

and relatively inexpensively. They provide vital knowledge by giving directions to countless lost residents and visitors; and because they are embedded in their neighborhoods, they create community, providing a reliable set of eyes upon the street and informal security in public space. Drivers are an integral part of their neighborhoods, blending in with residents, neighbors, and street vendors on densely populated streets.

Some motorbike taxi drivers find it grueling to be out for long hours and would appreciate a way to find more passengers, yet this is not the goal of every driver. Some enjoy the time they spend on the sidewalks, or at least view it as a better alternative than being at home. One driver, Mr. Hung, told me that though he received a pension, he became a motorbike taxi driver because it was good for him to get out of the house. At the East Bus Station, even though drivers worked fixed hours, I often saw them staying at the station and talking with friends long after their shifts were over, in no hurry to go home. Dispatching drivers from a central office would disrupt the community and friendship that drivers have created among themselves and the ways that they benefit the surrounding neighborhood.

The emergence of ride-share apps in Vietnam has begun to alter how this urban space is embodied. The motorbike, with its openness, allows drivers to interact freely with their environment. Motorbike taxi drivers must be receptive to those around them, to find passengers and make their living. In Vietnamese, to go by motorbike taxi is to *xe ôm* (literally, to go by hugging), because of the close proximity between driver and passenger. This nearness extends to the relationship between the driver and the neighborhood, an intimacy built up over many years. Motorbike taxi drivers fulfill unintended roles in neighborhoods—building community, relaying information, and keeping order.

Uber and Grab drivers, in contrast, interact mostly with one another rather than with the community. Ride-share apps do not completely cut the drivers off from neighborhoods, but they create a more fleeting relationship between drivers and their surroundings. Ride-share app drivers do not need to establish relationships with residents to find customers, and as a younger, wealthier group that serves a more middle-class customer base, these drivers are changing the class dimensions of how drivers relate to the city. If Uber and Grab continue to gain more passengers at the expense of motorbike taxi drivers not using the apps, Ho Chi Minh City's street corners may look very different in the future.

The state and transportation planners have tried to rein in the flexibility of motorbike taxi drivers—both the versatility of the motorbike, which allows it to more easily flout traffic regulations, and the practice of fishing for customers, which drivers largely regulate themselves and which allows expansive idle time—all in the name of order and modernity. While the state has not yet been able to

control motorbike taxi drivers' practices through regulations, the technology introduced by Uber and Grab is fostering the modern streetscape that the state has long attempted to create.

Notes

- 1. I thank Dominic Boyer, Erik Harms, Max Hirsh, Cymene Howe, Till Mostowlansky, and two anonymous reviewers for incisive comments, and Anna J. Barańczak and Jeanne Ferris for careful editing.
 - 2. See, for example, Holston 1989; Scott 1998; Amato 2004; Truitt 2008.
 - 3. Pseudonyms are used throughout.
 - 4. See Leshkowich 2005; Lincoln 2008; Harms 2009, 2012; Kim 2012, 2015.
 - 5. See, for example, Lincoln 2008; Harms 2012; Schwenkel 2012.
- 6. See Lefebvre 1991,1996; Czeglédy 2004; Blomley 2007; Richardson and Jensen 2008; Soja 2010; Harvey 2012; Qian 2014.
 - 7. See Leshkowich 2005; Lincoln 2008; Kim 2012; Turner and Schoenberger 2012.
- 8. I use male pronouns because I observed only one woman motorbike taxi driver among the hundreds of men drivers at the East Bus Station, and I did not observe her seeking customers with this system.

References

- Almec Corporation. 2004. The Study on Urban Transport Master Plan and Feasibility Study in Ho Chi Minh Metropolitan Area (HOUTRANS): Final Report. Vol. 2: Master Plan Study. Tokyo: Japan International Cooperation Agency; Ministry of Transport, Socialist Republic of Vietnam; Ho Chi Minh City People's Committee.
- Amato, Joseph Anthony. 2004. On Foot: A History of Walking. New York: New York University Press.
- Blomley, Nicholas. 2007. "How to Turn a Beggar into a Bus Stop: Law, Traffic and the 'Function of the Place." *Urban Studies* 44 (9): 1697–1712.
- Christensen, Clayton M. 1997. *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail.* Boston: Harvard Business School Press.
- Czeglédy, André P. 2004. "Getting around Town: Transportation and the Built Environment in Post-Apartheid South Africa." *City & Society* 16 (2): 63–92.
- Drummond, Lisa B. W. 2000. "Street Scenes: Practices of Public and Private Space in Urban Vietnam." *Urban Studies* 37 (12): 2377–2391.
- Freire, Alexandre Dormeier. 2009. "Motorbikes against Ho Chi Minh? Or the Consumption Icons of a Social Transformation in Vietnam." *Copenhagen Journal of Asian Studies* 27 (1): 67–87.
- Graham, Stephen. 2010. "When Infrastructures Fail." In *Disrupted Cities: When Infrastructure Fails*, edited by Stephen Graham, 1–26. New York: Routledge.
- Hansen, Thomas Blom, and Oskar Verkaaik. 2009. "Introduction: Urban Charisma on Everyday Mythologies in the City." *Critique of Anthropology* 29 (1): 5–26.

- Harms, Erik. 2009. "Vietnam's Civilizing Process and the Retreat from the Street: A Turtle's Eye View from Ho Chi Minh City." *City & Society* 21 (2): 182–206.
- Harms, Erik. 2011. *Saigon's Edge: On the Margins of Ho Chi Minh City*. Minneapolis: University of Minnesota Press.
- Harms, Erik. 2012. "Beauty as Control in the New Saigon: Eviction, New Urban Zones, and Atomized Dissent in a Southeast Asian City." *American Ethnologist* 39 (4): 735–750.
- Harvey, David. 2012. *Rebel Cities: From the Right to the City to the Urban Revolution*. London: Verso.
- Holston, James. 1989. *The Modernist City: An Anthropological Critique of Brasília*. Chicago: University of Chicago Press.
- Howe, Cymene, Jessica Lockrem, Hannah Appel, Edward Hackett, Dominic Boyer, Randal Hall, Matthew Schneider-Mayerson, et al. 2016. "Paradoxical Infrastructures: Ruins, Retrofit, and Risk." *Science, Technology, & Human Values* 41 (3): 547–565.
- Jacobs, Jane. 1993. *The Death and Life of Great American Cities*. Modern Library ed. New York: Modern Library.
- Kim, Annette M. 2012. "The Mixed-Use Sidewalk." *Journal of the American Planning Association* 78 (3): 225–238.
- Kim, Annette M. 2015. *Sidewalk City: Remapping Public Space in Ho Chi Minh City*. Chicago: University of Chicago Press.
- Larkin, Brian. 2013. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology* 42 (1): 327–343.
- Lefebvre, Henri. 1991. *The Production of Space*. Oxford, UK: Blackwell.
- ——. 1996. *Writings on Cities*. Edited by Eleonore Kofman and Elizabeth Lebas. Oxford, UK: Blackwell.
- Leshkowich, Ann Marie. 2005. "Feminine Disorder: State Campaigns against Street Traders in Socialist and Late Socialist Viet Nam." In *Le Viet Nam au feminin: Viet Nam: Women's Realities*, edited by Gisele Bousquet and Nora Taylor, 187–207. Paris: Les Indes Savantes.
- Lincoln, Martha. 2008. "Report from the Field: Street Vendors and the Informal Sector in Hanoi." *Dialectical Anthropology* 32 (3): 261–265.
- Qian, Junxi. 2014. "No Right to the Street: Motorcycle Taxis, Discourse Production and the Regulation of Unruly Mobility." In "Producing and Consuming China's New Urban Space: State, Market and Society." Special issue, *Urban Studies* 52 (15): 1–26.
- Richardson, Tim, and Ole B. Jensen. 2008. "How Mobility Systems Produce Inequality: Making Mobile Subject Types on the Bangkok Sky Train." *Built Environment* 34 (2): 218–231.
- Schwenkel, Christina. 2012. "Civilizing the City: Socialist Ruins and Urban Renewal in Central Vietnam." *Positions: Asia Critique* 20 (2): 437–470.
- Scott, James C. 1998. Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven, CT: Yale University Press.
- Simone, AbdouMaliq. 2004. "People as Infrastructure: Intersecting Fragments in Johannesburg." *Public Culture* 16 (3): 407–429.
- Soja, Edward W. 2010. *Seeking Spatial Justice*. Minneapolis: University of Minnesota Press.

- Sopranzetti, Claudio. 2014. "Owners of the Map: Mobility and Mobilization among Motorcycle Taxi Drivers in Bangkok." *City & Society* 26 (1): 120–143.
- Star, Susan Leigh. 1999. "The Ethnography of Infrastructure." *American Behavioral Scientist* 43 (3): 377–391.
- *Thanh Nien News*. 2016. "Ho Chi Minh City Now Has 7.4 Million Motorbikes, and Counting." January 6. http://www.thanhniennews.com/society/ho-chi-minh-city-now-has -74-million-motorbikes-and-counting-57787.html.
- Truitt, Allison. 2008. "On the Back of a Motorbike: Middle-Class Mobility in Ho Chi Minh City, Vietnam." *American Ethnologist* 35 (1): 3–19.
- Truitt, Allison. 2013. *Dreaming of Money in Ho Chi Minh City*. Seattle: University of Washington Press.
- Turner, Sarah, and Laura Schoenberger. 2012. "Street Vendor Livelihoods and Everyday Politics in Hanoi, Vietnam: The Seeds of a Diverse Economy?" *Urban Studies* 49 (5): 1027–1044.
- Vu Anh Tuan and Iderlina B. Mateo-Babiano. 2013. "Motorcycle Taxi Service in Vietnam: Its Socioeconomic Impacts and Policy Considerations." *Journal of the East Asia Society for Transportation Studies* 10: 13–28.