Doing Social Research with Infrastructure
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When researching everyday social relations in Karachi, the conflict-ridden Pakistani megacity, my attention was drawn to the rapidly proliferating walls and security barriers across the city's neighbourhoods. In the absence of effective policing against crime, residents from all walks of life had turned towards practices of physical enclosure as a form of securing their neighbourhood on the inside from the dangerous city outside. Yet, despite investing in physical infrastructures of security (such as boundary walls, gates limiting entry points, and guarded security barriers regulating passage), residents continued to suffer from violent burglaries. Moreover, the security situation in the rest of the city continued to deteriorate. One particular incident became a catalyst moment within my research, forcing me to do sociology with 'infrastructures'. It was when I observed how seemingly fixed and inert obstacles such as walls, security gates and guarded barriers could oscillate between being impregnable barriers and porous, osmotic and fluid socio-material objects. In this chapter, I will explain how I studied infrastructures such as walls, gates and security barriers/checkposts as objects of sociological inquiry.

The Conundrum

I did not consciously intend on doing sociology with infrastructures. When I started my research project in 2010, I was interested in studying the relationship between the spatial form of Karachi, the socio-spatially polarised Pakistani megacity, with escalating urban violence. Between 2008-2010, the rapid decline in the security-situation of the city had meant that more and more citizens- from all walks of life- had started to retreat in what Teresa Caldeira (1996:303) famously refers to as 'fortified enclaves', i.e. 'privatised, enclosed and monitored spaces for residence, consumption, leisure, and work'. For upper-middle class Karachiites, to live 'safely' in the city meant to live in heavily guarded (and increasingly enclosed) neighbourhoods. Meanwhile government and private offices, malls, leisure clubs and even parks became more exclusive- only accessible being allowed passage past security check posts, and after walking through airport-style security gates. Yet, just as ordinary spaces within Karachi became heavily securitised, violent crime rates continued to escalate. My research project aimed to explore why, despite ongoing securitisation in the enclaved megacity, Karachi continued to become increasingly insecure.

In 2011, I visited Karachi on a preliminary fieldwork visit. By this time, I had scoured through literature on fortified enclaves and urban insecurity in comparable post-colonial cities. Through this literature, I had constructed an idea of what 'fortified enclaves' meant. The term most popularly referred to highly exclusive and heavily secured gated communities. Naturally, I started looking for these 'types' of enclaves in Karachi. I was immediately disappointed. At that time, commercially developed exclusive gated communities did not exist in Karachi in the way that they did in Latin American, African, Middle Eastern, or in Indian cities (Durrington, 2009; Falzon, 2004; Caldeira, 2020; Webster, Glasze, and Frantz, 2002). Karachi's version was a retrospectively developed 'fortified enclave'. Where either the housing society that developed the land decided to wall and gate the neighbourhood, or the residents of a neighbourhood (developed and managed by public municipal authorities) came together to place security barriers (with government permission) at entry and exit points into the otherwise open neighbourhoods.

In addition to this, despite being walled and gated, or in other cases enclosed with the help of guarded barriers, I found it difficult to categorise Karachi's enclaves as 'fortified enclaves' (Caldeira, 1996; 2020) or 'security parks' (Hook and Vrdoljak, 2002) in the way they had been described in the literature on residential enclaves. These neighbourhoods were hardly isolated spaces cut off from the wider city through the material infrastructures of security and segregation. In fact, given the urban social dynamics of Karachi, it was impossible for these gated and enclosed neighbourhoods to fully function as exclusive spaces that effectively restricted 'undesirable' traffic. This was because the 'undesirables', mostly the racialised and criminalised poor, were essential to the very running of the place (Graham and Kaker, 2014). The movement of municipality cleaners, maids, house guards, drivers, delivery men etc allowed daily life inside to function smoothly, while there was also regular movement of others such as tutors, friends, visitors. It seemed impossible for the guards to properly filter entry into enclaved neighbourhoods, as in most cases, there was no proper system of identification which allowed them to ensure that those entering were doing so for legitimate reasons.

What was apparent, however, was how perceptions (and negotiations) of class position helped determine passage. For example, I never found it difficult to gain entry and move through guarded security barriers. Sometimes, I would get the odd question from guards asking where I was heading, or what my business in the neighbourhood was, but this was usually asked with little real interest or serious follow up. It was very clear that as a middle-class woman, I just seemed to 'belong'. The people who did find it difficult to cross or enter, however, were the maids, drivers, or other 'poor' service workers who came in to either work in the houses within these enclaved communities, or to meet their friends or relatives who worked there. These initial observations made me question the 'form' of the fortified enclave in the Karachi context. What 'constructed' fortified enclaves in Karachi? Was it material infrastructure, such as the boundary walls made of bricks and mortar? Was it the gate, the

security barrier, the physical signs next to each stating security warnings and rules of admission? Or was it the socio-technical infrastructures (the private security guards standing at entry and exit points, scanning people with their metal detectors, or with their gaze, and making judgement on whether to open the gates or barriers for whomever they were encountering?) that linked with the material infrastructures to constitute enclaved spaces? In any case, during my preliminary fieldwork, it became clear that to understand the production of securitised spaces in Karachi, I would have to study infrastructures of security in Karachi.

Infrastructure as object of inquiry and as method

Star and Ruhleder (1996) define infrastructure not by 'what' it is, but by asking 'when' it is. They argue that infrastructure is something that develops for people in practice. It is a system that is connected to different activities and structures. In this way, Star and Ruhleder (1996) define infrastructure as a relational concept- it means different things to different people, depending on how they encounter it or what use they get out of it. Reflecting on my initial encounters with the socio-material processes of security along enclave borders, Star and Ruhledar's conceptualisation of infrastructure made perfect sense to me. I realised that I should not be looked at enclaves as taken-for-granted bounded spaces, but as spaces that came into being through systems and practices of bordering.

As a result, I started to study infrastructures of security to understand the materialisation of enclaved spaces. A focus on infrastructure—as a networked material and socio-technical system—led me to understand how the fortified enclave didn't have to exist in perfect form as a walled, gated or enclosed space. Instead, walling, gating, and enclosing happened in the coming together of various material, technological, and social intersections. Walling, gating, ad enclosing was infrastructural. As a result, infrastructures became my object of inquiry, while also being my means for approaching my research. For my fieldwork, I took interactional encounters with enclaving infrastructures as my unit of analysis.

How do you do fieldwork with infrastructure? For me, the first step was identifying the infrastructure itself. During my preliminary fieldwork, I had made extensive fieldnotes on my personal experiences of crossing into fortified enclaves. I had identified that signs restricting entry, CCTV cameras, security guards, security barriers, gates, graffiti, flags (political/religious) all made me 'feel' that the space I was entering was exclusive. Working together, these symbolic, material, or human 'markers' of security operated as 'infrastructure'. Keeping these observations in mind, I selected three places which were 'enclaved' through different socio-material and discursive infrastructures communicating exclusivity and security. I then observed points of passage in each, for a prolonged period. I made notes on my own experiences of encountering these enclave infrastructures at entry-points different times of day. Sometimes on my own, and at others, accompanied by different

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people (middle class residents and non-residents, non-resident drivers, service workers (male and female) who worked inside). I made some trips by car, others on foot. I also observed some people entering on motorcycles and cycles.

Following each of these visits, I made notes on my interactions with the infrastructures. I made notes on how the infrastructures became 'visible' at some times, when I (or my companion) either slowed down intentionally in reactions to socio-material or discursive infrastructures. Or when I/we/they were slowed down by guards to be 'looked at' more carefully, or when I/we/they were completely stopped and questioned by the guards, who were an integral part of gating infrastructures. I carried out reflexive interviews with companions encountering these infrastructures with me. I also carried out interviews with others who encountered these infrastructures without me, as well as the guards who operated security gates and barriers.

What I found fascinating was how enclave entry points, as infrastructures, generated affect and subjectivity. The person standing by it, tasked with 'manning' it, gained power. The person encountering it, to move through it, either went on the defensive or tried to negotiate their power. But most significantly, the feelings and affects the infrastructures produced were also mediated through personal/individual subjectivities of those upholding and encountering the infrastructure. For example, I vividly remember my first experience of entering Askari III with my elderly Pashtun[1] taxi driver. Developed as a residence for retired army personnel, and managed and governed by the Cantonment Board (institution linked to Pakistan's omnipotent armed forces), Askari III had a reputation of being one of the most 'secure' enclaves in Karachi. It was also the only walled and gated community in the city at that time.

As we got closer to the bright red and white striped security barriers at gate, my nervousness intensified. It was my first visit to Askari III, and I was hoping we could enter the community without any connection to any resident on the inside. My driver was aware of my lack of connection, and assured me he'd get us through. The security barriers were open, but a visibly young, uniformed guard slowed the vehicle down, and asked the driver what business he has in the neighbourhood in an overly stern tone. The driver, clearly experienced in such questioning answered with haughty confidence. 'I'm transporting major sahab's begum, he'll be upset that you've stopped our car', he said. He then rolled his window up. The young guard gingerly walked back over to the side and waved us through. The driver, who had clearly experienced many check posts in his past, had used his age and his connection to power (my mythical husband, a major in the army) to negotiate his way in. Further along in my fieldwork, I learned how male, Pashtun domestic workers moving into such spaces on foot and on

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[1] ethnic identity. Outside of FATA, Balochistan and NWFP, where Pashtuns are from, the ethnic group is popularly racisialised as being prone to violence. In Karachi especially, working class Pashtuns are criminalised for their association with politico-criminal gangs, land mafias, and taliban.

personal work would never have been allowed in without considerable checks and questioning. They may be eventually allowed in after having to give up their national identity card (NIC) to the guard on the gates for the duration of their visit, or perhaps a phone call to the house they would be visiting for permission.

The process of walling and gating as infrastructural went beyond the labour of the guard. Through my observations and interviews, I found how other objects and technologies such as CCTV cameras, street signs, graffiti, guns and uniforms (for guards) made a difference to access and perceptions of access. For example, Minhas, a young pashtun driver explained how he used to be able to pass through Clifton Block 7 (an unwalled, privately enclosed neighbourhood, where access was restricted by guards at security barriers at different entry/exit points). This was because one of the security guards at the gate belonged to his village. The cultural association, even though they did not know each other personally, worked to erode the privately hired security guards' professional barriers. However, Minhas said this was no longer the case, and the guard had to 'do his job properly now', because the residents association managing 'enclaving' of Clifton Block 7 had set up CCTV cameras at entry exit points to 'check the guards and surveill people entering the neighbourhood'.

Similarly, when visiting of Sultanabad, a Pashtun ethnic enclave which was popularly considered as a 'no-go area', I realised that despite being physically 'open' and 'uwalled', neighbourhood space could easily be considered a type of 'fortified enclave'. The political graffiti on street walls, and religious and political flags hoisted up on multiple rooftops gave a strong sense of identity to Sultanabad. The enclave infrastructures, in this instance, were largely performative and discursive. I realised this when asked a rickshaw driver to take me to a drive into Sultanabad, as far as the rickshaw could enter. The driver, a mohajir (shia), flat out refused, saying 'this place is not safe for me, I'm not welcome here'. The political graffiti on the walls, and the political and religious flags clearly communicated territorialisation of the space by the pashtun nationalist Awami National Party and the Jamati Islami (JI), who were known to be violently opposed to the ethnic mohajir Muttahida Qaumi Movement and Shia sect Muslims during periods of heightened political violence in Karachi. As a visibly middle class Pakistani woman, I was clearly out of place in the neighbourhood. Given my gender and class position, and my political neutrality to neighbourhood-level politics, I felt less 'vulnerable' to potentially violent confrontation from local community members known to police the neighbourhood. Even though I was not explicitly questioned by local community watch groups who operated within the socio-politically homogenous enclave, I did feel very uncomfortable . I was very 'noticeable' as a 'guest', as people would stop the local and ask questions on who I was and why I was visiting.

Using Infrastructures as object of inquiry and method allowed me to question the truth of the material form of a physical space. We know what a wall is, when we see it. It separates and divides. We know a gate is an entry way to a place. But can a wall exist without brick and mortar, and still be a wall? For whom is this possible and at what points/moments? Moreover,

using infrastructure as method attuned me to the networked and relational properties of the different technologies, materials and performances that worked to produce exclusivity and security. It allowed me to consider otherwise inert materials to be both lively and agential. As the well-developed literature on the politics of infrastructure explains, infrastructure is more than about networked systems or objects. It is an articulation of urban inequality and struggles over power (Amin, 2014; Coutard and Rutherford, 2015; Angelo and Hentschel, 2015; Graham, 2010; Graham and Marvin, 2014; Simone, 2015).

In Conclusion

I would suggest not to be worried if things do not go as planned. When we read other people's account of 'doing research', it feels very smooth and put together. However, doing research is a process. Things go wrong, you may not get the answers you expected. You might think your research is flawed. Instead, take a step back and see what's in front of you. My biggest break came from my first 'problem'. The gated communities I had read about in literature seemed to be put together differently. I didn't find these existed or operated in the same way in Karachi, a city where urban form and socio-political relations in the city were markedly different from American, South American, and African contexts. Could we call a place a gated community if it didn't have walls and gates? And that's the kind of question that motivated me to do sociology with walls and gates as 'infrastructures'. In using infrastructures as objects of inquiry and as method, I was able to study walls and gates as important sociological objects. Objects that are otherwise ignored in sociological research.

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