Municipal disconnect: On abject water and its urban infrastructures

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Abstract
Infrastructural practices, made by the manipulations of pumps, pipes and hydraulic expertise, play a critical role in managing urban populations. Drawing on two years of ethnographic research in Mumbai, in this article I show how Muslim settlers in a northern suburb, are being rendered abject residents of the city. Abjection isn’t not a lack of social and political entitlements, but a denial of them. As Muslim settlers are being pushed down to claim less desirable water through the deliberate inaction of city engineers and technocrats, this article shows the iterative process through which abjection is made through tenuous and contentious infrastructural connections between the government and the governed.

Keywords
water, citizenship, infrastructure, abjection, Mumbai, India

Introduction

For 15 years I am seeing that MP-MLA says ‘it’s coming – the line is coming’. What can I say. They don’t want to develop this area. They only see how can the votes be gathered. To gather goodwill, they say ‘we aren’t in power in the BMC, so we will construct a tank’. Like this, ten to twelve bore wells have been dug. Some of them are good and some are not, and some people rule them (logon ka raaj hai). But the bore well water is not potable. Some of the bore wells are next to the toilets. Gutter water seeps into them. Is this development or what? Ha? (in Shaikh, 2008)

I was talking with Asif, a long-time resident of Premnagar, a settlement in the northern suburbs of Mumbai.1 Seeing me interview Salim, another informant, in...
a neighborhood teashop, Asif had eagerly entered our conversation about the water problems in the settlement. Visibly upset, he spoke of how Premnagar’s residents have grown tired of waiting for the Mumbai Municipal Corporation (BMC) to improve, maintain and extend its water network into the settlement. State and federal legislators (MLAs and MPs) had expressed their helplessness at drawing water from the municipal system, he said, and instead sponsored the construction of bore wells in the area. On the one hand, these wells have provided some relief to settlers, providing them with much needed water at a price. Households pay set-up costs of approximately $100 each to connect to the well system, and also a monthly fee for the water from the bore well. Yet Asif and many others do not desire bore well water as much as treated municipal water. They see it as ‘backward’, ‘like water you get in the villages and farms’. Asif saw well water as dirty and impure; as water that reflects the neglect and abjection of the settlement’s residents by the city water department. Yet many in Premnagar have little choice. Over time, their municipal pipes, installed more than 40 years ago, have rusted, leaked, and slowly gone dry, and the municipal water department remains disinclined to replace them. As Asif and other Muslim settlers speak of how they are no longer able to claim modern, purified, treated, municipal water to which they once had access, in this article I draw attention to the manner in which the city’s water infrastructure articulates a process through which Muslim settlers are being rendered abject residents of the city.

In describing Premnagar’s population as abject, I seek to make a contribution to recent work that extends Julia Kristeva’s philosophical treatise on abjection. For Kristeva, abjection is a bodily response: ‘something that disgusts you, for example, you see something rotting and you want to vomit – it is an extremely strong feeling that is at once somatic and symbolic, which is above all a revolt against an external menace from which one wants to distance oneself, but of which one has the impression that it may menace us from the inside’ (Kristeva, 1982). Following Kristeva, James Ferguson (1999) and Michelle Murphy (2006) have shown how abjection performs a critical role in governing populations and constituting subjects. Abjection, Murphy suggests, ‘designates unlivable and uninhabitable zones of social life which are nonetheless densely populated by those who are not enjoying the status of subject, but whose living under the sign of the unlivable is required to circumscribe the domain of the subject’ (Murphy, 2006: 152). Likewise, by describing the ways in which those living on the African continent are being ‘disconnected’ by regimes of international trade and finance, Ferguson points out how abjection occurs within capitalism, not outside of it, by producing ‘a holding tank for those turned away at the development door, a residuum of economically discarded, disallowed and disconnected’ (Ferguson, 1999: 243). Abjection, therefore, is a social and political process through which particular populations are pushed beyond the biopolitical care of the state or other institutions, even as they remain central to the constitution of such social (or political) collectives.

Based on 22 months of fieldwork conducted in Mumbai between 2007 and 2010, this article focuses on the iterative process between state officials, subject populations and their intermediaries (municipal plumbers), through which abjection is
produced in Premnagar, a Muslim settlement in northern Mumbai. Over the last two decades, Premnagar’s residents have been steadily ‘disconnected’ from formally accessing water via the city’s municipal system. As Ferguson points out, to be disconnected is different from being unconnected (Ferguson, 1999). It is an active process through which subjects are pushed down, or cast out of social and political systems they could once access and claim. Disconnected by procedures and practices that would entitle them to claim water as legitimate citizens of the city’s municipal water department, I wish to think through how Premnagar’s residents are instead compelled to make surreptitious connections or use ‘dirty water’. The absence of legal water connections, and the proliferation of other hydraulic arrangements, point to powerful ways in which Premnagar’s residents are being actively produced not as legitimate urban citizens, but as abject residents of the city’s hydraulic state.2

Recent work on urban citizenship has pointed to the ways in which rules, laws and policies of cities and states make differentiated, informal, abject populations (Baviskar, 2003a; Bush, 2009; Holston, 2008; McGregor, 2008; Roy, 2003). Elsewhere, I draw on this work to show how settlers are marginalized by the city’s water policies that allocate more tenuous water quotas and connections to them (Anand, 2011). In addition, the water rules only allow those settlers that can prove their residence in the settlements prior to 1995 to apply for water connections. Tying the eligibility of a water connection to a state recognized claim over land is not unusual. As scholars of urban citizenship have pointed out, state programs and policies frequently draw on bourgeois notions of property and tenancy to determine who belongs in the city (Joyce, 2003) and who is subject to displacement (Harvey, 1996, 2008; Joyce, 2003; Smith, 1996). Indeed, these procedures continue to have critical implications for many ‘unrecognized’ citizens of the city in Mumbai and in many parts of the world (Davis, 2006).

The water shortages among Muslim settlers in Premnagar, however, are not because they are ‘unrecognized’ by formal state policies nor are they a result of economic marginalization. Even those settlers that have been resident in the settlement since the 1970s (and are thereby ‘recognized’ by the government) have water problems. Nor are their water difficulties a consequence of being unconnected to Mumbai’s water system. Many settlers in Premnagar have had formal connections to the city water network. Their complaints center more around how the water lines serving the settlement have not been maintained; that they have been allowed to remain leaky and go dry, even as more recent (and less legal) settlers living in neighboring settlements get access to good water.

Dependent largely on relations of class and property to explain structures of marginalization in the city, the literature on urban citizenship therefore has some difficulty in explaining the extraordinary difference and heterogeneity of infrastructure services within Mumbai’s settlements. How is it that some (less legal) settlements have access to good water, and other (older) settlements have trouble with their water services? In this article, I focus on the everyday practices of government, and the procedures of abjection to account for these differences. In so doing, I not
only wish to point to the way in which the technopolitical management of public infrastructures plays a critical role in disconnecting particular residents from the benefits of urban citizenship. I also wish to show how citizenship rights and entitlements are precarious, reversible and need to be constantly maintained through material, social and political work.

Infrastructural practices affected by the arrangements of pumps, pipes and valves play an important role in elucidating the political and social relations that constitute the city (Gandy, 2004; McFarlane and Rutherford, 2008; Star, 1999). They also figure and constitute the identities of those living in particular neighborhoods (Kooy and Bakker, 2008). Having neither the substantive rights of upper class residents (Holston and Appadurai, 1996) nor the ‘strategic leverage of electoral mobilization’ of others living in proximate settlements (Chatterjee, 2008a: 61), the abject residents of Premnagar need to mobilize ‘other kinds of connections and practices’ (Murphy, 2006: 157) beyond regular water connections to maintain their lives. To live in the city, they need to pay plumbers very high charges – either to connect them illegally to the municipal system or to the well water network, creating, in Murphy’s terms, ‘a densely populated elsewhere within the here’.

Pointing to these ‘other’ kinds of connections that pervade Premnagar, Mumbai’s hydraulic engineers view Premnagar’s residents as ‘not good’, and undeserving of hydraulic citizenship; as dirty, troublesome and threatening to the city’s water system and, by extension, to the viability of the city itself. These everyday discriminations are neither incidental nor exceptional. Rather, they constitute Mumbai’s public water system. The abjection produced by Mumbai’s water system does not require ignorance or a forgetting of history, nor is it a result of being governed at a distance (see Rose and Miller, 1992; Scott, 1998). As city engineers work with and around Premnagar’s population, I wish to suggest that abjection is a dialectical process produced out of deeply situated discursive relationships and material practices, where difference is constantly reproduced, enacted and foregrounded between people that have deep overlapping social histories. Critically, these differences are realized and reproduced through the production and management of urban infrastructure.

**Difficult areas**

Located between the proliferating information technology centers of Andheri and the more established middle-class residential enclaves of Goregaon, it is difficult to find Jogeshwari on a map of Mumbai. When conducting fieldwork between 2007 and 2008, residents would tell me of how new residential developments in Jogeshwari would advertise themselves as being located in Andheri. ‘No hi-fi people want to live in Jogeshwari’, a resident of Jogeshwari, Kamlesh, told me. ‘It is a “black area”’. Banks won’t give you a loan if you live here’, he said. It is also hard to get state identification such as a passport, license, or anything from state offices if you have a Jogeshwari address, residents often complained.
If Jogeshwari is ‘famous’ as some residents attest, it’s not for reasons that enable settlers to access urban services. Once located at the margins of the city, Jogeshwari has arrived periodically on the front pages of the newspapers as a site of religious violence; most notably in 1992, when the press featured it prominently as a location of intense violence against Muslims following the destruction of the Babri Masjid by Hindu fundamentalists in that year. The violence implicated leaders of the Hindu right-wing party, the Shiv Sena (Hansen, 2001; Srikrishna Commission, 1998). In the period of calm that followed, the lines between Hindu and Muslim settlers in many settlements across the city, including Jogeshwari, hardened, as each relocated to the areas in which they were the numerical majority (Sharma, 2000). Premnagar became an even denser Muslim ‘pocket’, and is now surrounded by Hindu bastis (settlements), whose residents support the Shiv Sena, the political party that has run the city’s government for the last two decades.3

Elsewhere, I have delved into the everyday politics of the city’s water supply, by describing how settlers, particularly those that support the Shiv Sena, have made significant qualitative improvements to their material infrastructures by claiming the services of the state through their elected patron politicians (Anand, 2011). I argue that the extent to which they have been able to do so has been enabled by the democratic practices of voting and protesting. Together, these practices have established a degree of precarious yet substantive citizenship for many settlers in the city (see also Chatterjee, 2004; Gupta and Sharma, 2006; Hansen, 2001). With many in Mumbai’s settlements identifying the provision of water services to be one of the primary responsibilities of their elected officials, settlers in several parts of the city have compelled their elected representatives to spend the funds and pressure the city administration to deliver water to them.4 One settlement where this has not happened, however, is Premnagar, whose water network has been slowly crumbling over time, and which presents its residents with particular difficulties.

The area that most residents call Premnagar appears on municipal survey maps as ‘Squatters Colony’. In the 1950s and 1960s, the area became a key resettlement site for many that were evicted from central areas of the city. After bulldozing their homes in different parts of a rapidly growing city, the Municipal Corporation allocated small plots of land to the displaced in Premnagar, then at the frontiers of the city. The names of its various neighborhoods – Bandra Plot, Colaba Plot, Andheri Plot – mark the areas from which the displaced were evicted in those decades.

Under various schemes for development, including the 1956 Slum Clearance Scheme, 1,957 families were moved from areas in south and central Mumbai and allotted open pitches of land measuring 15 by 20 feet within the Janata Squatters Colony. Despite its location at the time – distant and underdeveloped – the land in Janata Squatters Colony was particularly valuable and often preferred to other resettlement areas nearer to the centre of Mumbai, because it had a unique natural water supply. (Kothari and Contractor, 1999)
The Municipal Corporation gave the evictees ‘Vacant Land Tenancy’ documents, and permitted them to build their structures on their allotted areas. The conditions in Squatters Colony were, at first, better than in many other of the city’s settlements. Because the tenants were protected by the law, and also because the area had good access to water – both from the ground and from the city’s expanding water network – Premnagar grew rapidly. To develop sources of additional income, those with tenancy documents began to extend their homes to accommodate renters, extending their structures into unmarked areas that lay adjacent to the land allocated to them. Therefore, as evictees became tenants of the state, they used their legal status to build additional housing for many other subtenants, effectively becoming small-time landlords with reliable streams of rental income in a relatively small amount of time.

In the early 1970s, the state government passed the Maharashtra Slum Improvement Act, which required the city government to provide water connections to those living in recognized slums. While much of Premnagar, as a state resettlement area, already had a water network (built in the early 1950s; Kothari and Contractor, 1999), many additional households within the area came to be eligible for municipal services through this Act. During this time, many of Premnagar’s residents, located at a favorable location near the city’s water reservoirs, applied for and gained connections to the city’s hydraulic system. As a recognized slum, the city water department had extended dozens of public water standpipes for Premnagar’s residents under the new law. By the mid-1980s the municipal administration had extended water connections still further, from public standpipes to registered ‘housing societies’ of slum dwellers. Yet as neighboring settlements also grew rapidly during this time, Premnagar’s residents soon began experiencing water problems, problems which have only been exacerbated in the contemporary moment.

Given current municipal water schedules, Premnagar’s residents are required to wake up between 4:30 and 5:00 in the morning to collect their daily water supply. One morning I went to Premnagar, to ‘hang out’ with my friend Salim while he collected water. It was early, around 4:30 AM. The sun was not up yet, and halogen streetlights lit sections of the road. A poster of Gandhi smiled from the glowing police station in the settlement. On either side of the narrow road, silent figures walked back and forth, still very much in their sleep. Salim was awake, waiting for me outside his house. Still sleepy, I asked why he didn’t collect water later in the morning. Perhaps at 7:00 or so just before it went away? He told me that it was difficult to get water at that time once people at lower elevations woke up and opened their taps.

As we waited our turn, Salim pointed to the man that would give him a connection for fifteen minutes. Abdul, a thin fellow dressed in jeans and a vest, was moving back and forth faster than anyone else in the area. He looked quite busy, constantly connecting and disconnecting plastic pipes that went into different homes. ‘Salim-bhai, I will give you the pipe in ten, fifteen minutes, ok?’ he said, promisingly.
Salim lived in one of the larger houses in the settlement, where he employed half a dozen artisans making zari (finely embroidered cloth) for export markets. As part of a larger extended family that lived in the city, the nation and the region, Salim’s responsibilities were to organize the labor and materials necessary to manufacture the cloth and dispatch it to Kuwait, where Salim’s uncle would sell it to women’s clothing stores. Though he lived in one of the larger homes in the settlement, Salim’s family nevertheless had to share their water connection with five other homes. Every morning, Abdul would manage the distribution of water between these homes, rearranging the pipes as soon as each home received the water requirement. In return, the group gave Abdul ‘free water’.

The pump-pipe arrangement from which Salim got water originated on the side of the road some 30 meters from his home. We followed the plastic pipes downhill to their source, a surreptitious connection to the mains that lay on one side of the road. It joined the main water line under the pavement. Water seldom climbed up any further beyond this point, he told me. So they tapped the line here, and used their own temporary pipes and pumps to move the water into their household storage tanks at water time. Indeed, as I looked around, I noticed several serpentine pipes that crept down the hill and disappeared under the road for water.

Because of their class position in the settlement, it was Salim and not the women who was responsible for provisioning the household with water. It is not proper for the women of his family to work outside the home, he explained. We looked across the street, to another tapped line. Unlike Salim-bhai’s connection, where pipes delivered water from the pump to indoor water storage tanks, here over a dozen women waited in line to collect water in handas (vessels) at the pump itself. This was a charity pump, I learned, provided by a local resident for poorer households. When it was their turn in line, each woman would fill and carry her vessel home, before returning for more. It was the women of poorer households that had to collect and physically transport water home, thus pointing to ways in which gender and class are interpellated in the everyday work of water collection.

When we returned to Salim’s home we learnt from Abdul that it was now his turn. The motors whirred. Salim got the water pipe for a short time, during which he fixed it to another pipe that directed water to the storage tank inside his house. I was amazed seeing how this system worked. It was both hidden from sight (at other times of day) and yet easily accessible. There is water in the city. But for some (marked by religion, age, gender and class differences), to get it takes significantly more work.

Nevertheless, while the problems of inadequate water pressure were most visible for the women waiting in line across the street, it was evident that even Salim’s relatively more affluent household faced difficulties accessing water from the city’s pipes. Thus, where the water system differentiated residents within neighborhoods, I want to emphasize that it also materialized a shared set of experiences around the water network’s problems. Leaky pipes, low pressure water and the relatively higher elevations of the settlement made water supply difficult for all its residents regardless of their class position. Therefore all residents of the settlement were
compelled to make other arrangements to provision for their daily needs. To get water, many in Premnagar needed to make unauthorized connections with the help of plumbers at more distant locations, by fitting a series of pumps and plastic pipes to coax it, daily, into their storage tanks early in the morning.

Upset at being subject to a fickle water supply, most residents of Premnagar I spoke with did not celebrate the extraordinary designs of their pipe and pump networks. Desiring a reliable, treated supply, they instead complained about the state of the water mains, and the need for the city’s water department to attend to urgent maintenance works. In the absence of city workers, they complained about the unreliable connections they had to water – at some distance from their homes – through pumps and pipes that were not only expensive to install but also expensive to maintain.

Social engineering

Though BMC engineers knew that residents of Premnagar had water problems, it was not a place where they did much work. This is not to say that they didn’t work in the city’s settlements. In fact, their work lists – jotted down in cell phones and small notebooks – were always very long, and ensured they were always busy, and often working hard. They just weren’t as busy in Premnagar. In trying to understand how hydraulic works in Premnagar were consistently left out of BMC work plans, I followed the ways in which engineers of the city’s water department worked, particularly the manner in which they sorted legitimate complaints from those that were less urgent.

For example, Rané, one of three sub-engineers in the ward office, had to negotiate an impossible range of demands placed on his workday as he managed a ward with a population of over one million residents. At the same time, and every day, he had to attend to leakages on large service lines, and attend to councilor complaints of water quality, administrative meetings at the Municipal Head Office, and review applications for new connections brought to him by a never ending line of plumbers and politicians at the ward office. One of the most conscientious and hard-working municipal engineers I met, I often wondered how Rané managed the impossible demands on his workday.

When plumbers or petitioners came to his office with water problems, Rané would first evaluate the ethical legitimacy of the complainant. He would ask what the problem was, and where they lived. Were they educated? Did they talk properly? Though he was a hardworking officer without any obvious biases against Muslims, I did notice that few Muslims from Premnagar came to him with their problems. When I asked him why this was the case, he would often insist, in reply, that what plagued the residents of Premnagar was not short supply. ‘They are getting enough water’, he told me. Indeed, Rané was correct. As Salim’s early morning work also acknowledged, Premnagar was getting water. But why were its residents required to make such elaborate arrangements to get it?
Rané suggested that the problem in Premnagar was not the state of the decrepit network, but manifested in the attitude of its residents: ‘Vaha sar uthake nahi jeete hai [they do not live honorably (lit., with their heads held high)]’, he said. He went on to describe how the residents of Premnagar do not play by the city’s water rules. Instead of getting water legitimately, they were illegally tapping the lines. Furthermore, ‘nobody is coming to me to complain of short supply’, he said, and therefore he was limited in his ability to respond to their problems. He asked me to check whether residents who complained of water difficulties had actually taken the correct steps to rectify their problems at the water office.

‘Check with them – ask for copies of their complaints, check the BMC acknowledgment stamp, and date. No one will have this. They do not complain. They do not complain because they are not paying bills! When they are not paying bills, they can shout, but they cannot complain...’

Rané’s comment was telling. He was only inclined to help settlers who were ‘educated’ and behaved as good customers of the water department (see also Coelho, 2005). The problem with Premnagar’s residents, he suggested, was that they did not behave as appropriate subjects of government. They did not list their complaints in the appropriate fashion and he was therefore unable to help them. As he went on to describe the problems among Premnagar’s residents, he explained that settlers were in fact not able to make complaints in the department because they did not pay their water bills. Indeed, when people came to the water department with complaints, Rané and other officers would first ask to see a copy of their paid water bill. If residents were unable to produce these bills, Rané and others would refuse to attend to their problems until they paid their bills. That residents only became eligible subjects of his expertise after they paid their bills shows how the water department, despite being a public entity, recognizes residents more as customers than citizens, and provides a bureaucratic procedure through which public officials could discriminate between good and bad subjects, between residents that were eligible for their service and others that were not.

Residents however, complained that the BMC often billed them for water they never received. ‘Whether or not the water comes, the bills always come’, the members of a women’s savings group chimed in one day. While doing fieldwork, I was struck by how rarely water bills were based on actual consumption. Because over half the city’s water meters are not working, and also because state meter readers are unwilling to spend their days reading meters, in practice, settlers are often billed ‘estimated’ costs for water regardless of the water delivered to them.

Therefore, even when water connections go dry (following pressure or leakage problems), residents would continue to be billed for water in Premnagar. Relative to complaining about bills (an arduous process in the government office), it was easier to let the bills be, and to let arrears mount. They stopped going to the office to complain, and started making other arrangements instead. Engineers, too, were willing to let the situation remain, acting on the unpaid arrears only if a customer...
complained about water problems, by *refusing* to fix the problem until the bills were paid. For engineers like Rané, ‘non-payment’ was thus a technique of management; a way of excluding those that did not pay their bills from the attentions of the state.

Premnagar’s residents don’t just have problems because of bills. Because the settlement is at a slightly higher elevation, water supply has been difficult even for those residents that pay their water bills. To get water to Premnagar, engineers are required to ensure that the water level in the service reservoir is high enough to push water into the settlement with enough pressure. Yet because the area’s water system is so full of leakage, engineers have a difficult time in pressuring the system enough so that it delivers water up to Premnagar’s residents. Thus residents like Salim are compelled to draw water at high costs to their homes by using their own booster pumps.

Water systems depend on pressure to work, and booster pumps are illegal, because they evacuate the hydraulic pressure of the system even further. They preferentially divert water to those who use them from those who do not. Engineers thus saw the use of pumps as a social vice, a technology that while effective for the owner, also indicated their selfishness and lack of a public (or ‘social’) sensibility, as evidence of water theft; a practice that distinguished deserving populations from those that were ‘not good’.

For example, one afternoon, I talked about the challenges of water supply with Gupte, a city water engineer who was committed to the idea of a public system. He did not see ‘slum dwellers’, or ‘the poor’, as an undifferentiated category. For him, the slum dwellers of Premnagar were less deserving of public service than others. In December 2008, he elucidated his dispositions in an informal conversation we had in his office. I quote from my fieldnotes:

Gupte was fed up in his previous position as Field Engineer, he said, speaking of the phone calls he constantly had to take from different people (especially politicians). This job suited him more – overseeing the technical and physical state of the water mains. I told him of some of my work in Premnagar. He paused for a moment. ‘Premnagar is not a good area’, he announced. ‘On the other side, in Banjrekar wadi, people are good’, he continued, his sentence trailing. I asked what he meant – not a good area? Those people in Premnagar are ‘not loyal to Bombay’, he said. ‘In Banjrekar wadi, there are Marathi people. Not in Premnagar. There they are stealing the water – Muslim people – they are tampering with and damaging the mains.’ But it wasn’t just illegal tapping that caused the problem in Premnagar; it also had to do with where its residents were from. In Premnagar, people are generally from Uttar Pradesh (UP), he told me, ‘there [in Uttar Pradesh] they have the Ganga Yamuna…. they need ample water. So they find where water is good and settle in those areas of Mumbai.’

Gupte’s words turned uncomfortably in my head. As Gupte began to list Mumbai’s different ‘communities’ – Jain, Parsi, Muslim, Gujarati – by their
hydraulic practices, I learned how everyday cultural-political understandings of ‘native place’, religion and region are at work dividing the undifferentiated public for the technocrats in the city (see Herzfeld, 1992). By describing Muslims as not ‘loyal to Bombay’, Gupte draws on popular conceptions of Muslims in the city and the nation, recently given new life by the powerful Hindu right-wing parties (such as the Bharatiya Janata Party and the Shiv Sena) that run the city (Hansen, 1999, 2001; van der Veer, 2000). Drawing on these discourses, Gupte differentiates his public as good and bad, not just by the settlements they live in, but also by their native places, religious affiliations and hydraulic practices. For him, particular hydraulic practices are constitutive of particular communities. Gupte made clear that tampering with the mains is not something all poor people do; it is something characteristic of Muslim people, particularly those from UP and Bihar that ‘need more water’.

In referencing two different settlements in the neighborhood that he worked, Gupte didn’t rely on hearsay or rumor to justify his position. He quickly listed specific reasons to argue that his impressions were not prejudiced as much as they were based on situated experiences in the settlement, particularly around illegal connections. What Gupte did not acknowledge, however, were the pumping arrangements and maintenance works the department has carried out in Banjrekar wadi to make it ‘good’, and the maintenance works that engineers have not done in Premnagar that allow it to get ‘dirty’.

Engineers do not like working in dirty, congested areas, and not only because they associate dirty areas with ‘defiled, dangerous outsiders’ (Moore, 2008). ‘Dirty areas’ are also difficult places to work for engineers who want to make sure that their time and effort is well spent. For instance, one engineer explained, ‘if we go work in dirty areas, then it doesn’t even seem like we did anything there. And our work is such a thing that it doesn’t even last in congested areas.’ Thus, rather than get involved in the ‘headache’ of projects in dirty and congested areas – especially those as congested as Premnagar – he suggested it was better just to leave them alone and focus instead on less congested, more gentrified areas of the city, where the results and benefit of their work were more visible.

Settlements are particularly ‘congested’ in Mumbai because they are the primary supply of housing for the city’s serving classes. In the absence of any affordable housing in the city, people have little choice but to buy or rent one-room tenements in settlements. Muslim settlements are even more ‘congested’ because it is even more difficult for Muslims to acquire a home in most parts of the city (Appadurai, 2000). Cutting across class, landlords, developers and co-operative housing societies are unwilling to rent, lease or sell homes to Muslim families in the city. As Muslims try to settle any place that will let them, settlements like Premnagar have grown dramatically in size (not area) over the last two decades. The congestion that has ensued becomes the ground for further marginalization when engineers avoid working in them.

Of course, as Salim’s water arrangements show, even abject populations in congested areas need, draw and are able to get water. Not administered directly
by the municipal government, these connections are managed by other techno-political authorities that are uneasily connected to the municipal system. In Premnagar and other Muslim areas, the abjection produced by the municipal hydraulic system both draws on and has affected the power of plumbers in the locality.

Plumber Raj

In Premnagar, as in other parts of the city, plumbers are required by the city’s formal rules and informal practices to apply for water connections. They are what Hansen and Verkaaik (2009) call urban specialists: middlemen who connect slum dwellers to the services of the city. Made necessary by formal city water rules (that require licensed plumbers to make water connections) and informal practice (to navigate settlers through a differentiating regime of accessing water), plumbers are critical to Mumbai’s water system and, more particularly, to Premnagar. Working between the settler and the city engineer, plumbers have intimate knowledge of the city system and how it works, of how to find water in the city. When legitimate connections become difficult (as they have in Premnagar), plumbers can also take matters into their own hands.

Shortly before concluding fieldwork, I had dinner with a few of the city’s experienced water engineers. Again we spoke about Premnagar. They suggested that Premnagar’s problems weren’t uncommon. ‘All over the city, the Muslim bastis are always the problem’, Gupte said. He had experience in Dharavi too, ‘the plumbers there would guarantee reconnection up to three times if the [unauthorized] line was taken away’, he told me. When working in Dharavi, Gupte and his team would set out every Thursday to disconnect unauthorized lines amidst threats of violence. ‘The truck taking the illegal lines away looked like a sugarcane truck’, Gupte said, speaking of the volume of illegal pipes unearthed and confiscated by his department. Yet, the next week, ‘they came back’, he said. If Gupte was the hydraulic engineer in charge of the settlement, he certainly wasn’t the only one in control of its pipes.

City engineers have only very tenuous control over water in many of the city’s settlements. Long managed by local leaders and dadas, engineers frequently need their help in managing water connections in settlements (Hansen and Verkaaik, 2009). Yet these forms of mediation both enabled and disabled the engineers’ authority over the populations they were supposed to serve. Engineers told me that plumbers sometimes physically prevented residents from approaching them directly not only in the settlements but also in municipal offices. Gupte spoke of how even if someone wanted legal water, they would find it impossible to reach him to apply for a connection. ‘Plumbers won’t let people come to us’, he said. Rané agreed: ‘They sit outside my office, and when someone from Premnagar comes to the office, they don’t let them come inside to talk to me! What can I do?’, he complained. Engineers said that there was little they could do to rein in
plumbers who were critical not only in connecting settlers to the services of the
desire, but also critical in connecting state workers to the localities that they
wished to work in.

I had met Rafiq-bhai, a plumber by profession, in Rané’s offices, when he came
to apply for a water connection on behalf of one of his clients. Rané had said that
Rafiq-bhai was one of the good engineers of Premnagar, a diamond in the rough.
Later in the week, I set a time to meet with him. Not knowing that I was familiar
with the settlement, he came to the ‘border’ road on a motorcycle to pick me up. As
we walked through the settlement, Rafiq-bhai asked me if I was alarmed by the
crowds of men milling around the neighborhood. I said that I was familiar with the
neighborhood, having visited it on my own. He seemed surprised. Many city engi-
eers found it difficult to come here, he told me. They were scared to walk around
Premnagar, because it was a ‘danger area’. Rafiq-bhai’s concern revealed the
difficulty that engineers had working in Premnagar. They feared going into
Premnagar to do their work, a settlement that they actively saw as dangerous,
and needed to be escorted through for safety.

Rafiq-bhai, in contrast, knew many in the settlement, exchanging hellos every
few minutes till we reached the backroom of a small telephone shop. Soon after the
tea arrived, we began talking about the water system, and particularly about the
difficulties in Premnagar, where he was born in some 40 years prior. ‘You must
have noticed the difference between here and [the neighbouring settlement of] Meghwadi’, Rafiq-bhai began. I said I had: there were fewer finished roads,
more dust and garbage, and less order relative to Meghwadi. There was also
more of a water problem.

I learned from Rafiq-bhai that the water problem had been there for some time.
The network had not been upgraded for years, despite the growing population in
the area. ‘The Ramgadh line (which brought water into the settlement) is over-
worked’, he said. So instead, people brought water a great distance from the main
road, from the pipe that borders Meghwadi. He said that he had recently spent one
lakh Rupees ($2000) making a water connection for a Premnagar resident by join-
ing him to the water main at Meghwadi.

Rafiq-bhai pointed to the overworked and un repaired water lines as the pri-
mary problem with Premnagar’s water supply. Its fickle lines have a smaller
capacity than the lines serving the adjacent settlements. For instance, in
Meghwadi, a settlement that backs (and is backed by) the Shiv Sena, councilors
and engineers have worked towards installing large lines, between 300 and
450 mm, that deliver six to eight times more water than the 150 mm lines that
service Premnagar. Premnagar has largely been bypassed by such pipe upgrading
projects. Rafiq-bhai recognized this to be a political matter: ‘they [are] not inter-
ested in the Muslim vote. They never came into the settlement to see the prob-
lem’, he told me. Not compelled by councilors to work in the settlement, city
engineers today approve water connections at its borders, leaving it to plumbers
like Rafiq-bhai to extend and maintain connections from these locations, to the
uncounted homes within Premnagar.
As we finished our interview, Rafiq-bhai asked if my study could help alleviate the water problems of the area. I told him that it might, but that I didn’t think the problems in Premnagar were of insufficient knowledge. Engineers, in fact, knew quite a lot about Premnagar. They knew who the plumbers were, which ones stole water, the state of the main lines, and that it was difficult to get water in the settlement without the use of booster pumps. They also knew the extent of the network, and that it was insufficient for the actually residing population of Premnagar. They just let the area- and its problems- be. He paused for a second and agreed. The problems in Premnagar did not arise because engineers were not aware of its problems. ‘It’s about bhed bhav [discrimination]’, he said, his voice trailing.

Earlier that day, Rafiq-bhai had had gone to the office to get approval for a water application. It was the day before the Diwali break, and not many others were at the office. The Assistant Engineer told him that plumbers shouldn’t be working that day, and that matters would be attended to after Diwali. As a plumber, Rafiq-bhai saw this to be an allusion to and attack on his religious identity. Is he a bad plumber (or a bad person) because he is working the day before Diwali? Because he is not Hindu? Rafiq-bhai told me why he was upset:

On every issue they make things difficult… The Assistant Engineer asked me ‘why should I help you?’ I got so upset. He has known me for so long, and yet he asks me this question? So I say, ‘If it’s about money, how much are we talking about- 500? 1000? 2000? Tell me!’ Rane is not like that. If you pay money or don’t pay, he follows the rules and does the work. Not everyone is like that.

While very upset about this incident, Rafiq-bhai took care to distinguish the good engineers from the bad ones. Rafiq-bhai was annoyed with the Assistant Engineer because he refused to acknowledge the relationship that they shared prior to appearing at his office on the day before Diwali. The Assistant Engineer foregrounded their difference as something that preceded and defined the relationship, a difference that was based on their religious identity. This upset Rafiq-bhai. Justifiably, Rafiq-bhai recognized that a Hindu-Marathi plumber wouldn’t be treated the same way. The Diwali holiday had become a way for the engineer to discriminate against Rafiq-bhai and identify him as one of ‘those people’ who did not respect the culture of the state, by working the day before Diwali.

**Municipal disconnect**

Both engineers and activists agree that predominantly Muslim bastis have severe water problems and draw water extensively through unauthorized connections. In Premnagar, residents and engineers dispute whether unauthorized water connections are a response to water difficulties, or their cause. Either way, to the extent that residents of Premnagar get water from municipal pipes, they largely do so through unauthorized connections made by plumbers.
Plumbers and settlers in Premnagar say they prefer unauthorized connections for a number of reasons. First, it does away with the trouble of requiring the long list of documents and ‘ID proofs’ required by the formal water application. Second, plumbers do not need the formal consent of municipal engineers to make unauthorized connections. They are thus exempt from the ‘hassles’ and the time required to get engineers to do their work. As Rafiq-bhai points out, many (not all) engineers are often interested in making things more difficult. Third, the raw materials and labor for illegal connections cost as much as they do for legal connections. With the municipal system not providing any subsidies or assistance for settlers to connect legally to the water system, settlers often save on the bribes and payments that they would have to pay to connect to the system. Finally, they are saved the hassle of getting billed for water they (may or may not) receive.

Plumbers told me that all an illegal connection needs is a competent plumber who has knowledge of which parts of the area’s crumbling network still have water, the ‘daring’ to do the connection themselves, and a series of small payments to ‘manage’ the police and other authorities. For those struggling with the unwieldy procedures of dealing with the state for unreliable water connections, this is an attractive proposition, poignantly captured in a meditative documentary made by two residents of Premnagar, Shali Shaikh and Ismail Sharif. I quote:

If 10 percent are legal and 90 percent are illegal, what is the reason for that? When we asked the common person, the public, ‘why is it that illegal are more and legal less?’ we got to know that when it was legal, for some years water would come... But slowly the water became less in both the lines; the water became less in the line of those who paid the bill and it became less even in the line of those who did not pay the bill. Because it became less, people went to plumbers. There is one thing – nobody from the basti went directly to the BMC. They went to the plumbers. And what did the plumbers do? They said that since there is no water even after paying the bill, we will take water from such a line, which will give you abundant water, and you won’t have to pay a bill. Once you give a one-time payment, it will be done. In this way the illegal process started growing here...

Now what would happen, what the plumbers do when they bring it illegally: If they take money from two people first they will bring it to those two people. Then slowly what they do is...the houses in between – plumbers would tell them, ‘I will bring you a line, if you give me Rs. 5,000 [$100]’. And then they would give a connection from the same line...and then the next one. (Shaikh, 2008)

In contrast to legal connections that take time to process, plumbers make illegal connections quickly. They draw on the legal network to locate and tap its ever-changing flows of water for a substantial fee. As they add new connections upstream of the lines of their older customers, the initial connections soon go dry, requiring residents to make new connections with the same plumbers every couple of years. Therefore, not only do Premnagar’s residents pay rather large
set-up costs, but they also do so repeatedly. ‘Premnagar plumber ka khazana hai [Premnagar is a treasury of/for plumbers],’ a plumber told me one day. Indeed, not only does Premnagar have a wealth of plumbers but, amidst all the financial opportunities, it is a treasury for plumbers as well.

Legal or not, most connections to Premnagar are unauthorized today. Residents depend on plumbers to connect them to the system discreetly. As they mediate connections to the city’s piped network, plumbers have been able to exert a significant degree of control over the area and its residents. City officials have varying degrees of knowledge about their activities, but say they are powerless to stop them. With a registered voting population of more than 40,000 adults, and likely as many children and unregistered citizens dependent on this network, officials express a helplessness both at giving legal connections and, in the absence of a reliable system, cutting illegal ones.

Their precarious position was instantiated in late 2007 when the engineers attempted to enforce the law while expanding the network. Largely due to his significant clout in the BMC administration, the Shiv Sena councilor from the neighboring settlement of Meghwadi had managed to support the construction of a larger pipeline for his residents. During the works, the councilor insisted that dozens of illegal connections serving Premnagar’s residents made on ‘his’ line be cut. As engineers prepared to cut these connections, Premnagar’s plumbers physically prevented them from doing so. Ahmed, a septuagenarian plumber from the area, explained the standoff:

Recently, the [Shiv Sena] councilor of the nearby ward cut all the connections on this line, saying that these were illegal connections. He said he was doing something good. The plumbers of this area said, ‘Ok, if you cut this line, then we won’t let you fix the new 18-inch line.’ So the road stayed dug open for some time while this was happening. We threatened the engineers from showing their faces in the area if they dared cut any more connections. Finally, our group met him [the councilor] with the engineers and we agreed to a compromise. They gave us a separate new six-inch line and we made legal connections to it. I myself saved the lives of three engineers in this whole matter.

The negotiations took approximately three weeks. During this time, the road remained dug up, quite literally exposing the contentious state of the city’s infrastructure. When the ‘compromise’ was reached, many more connections were remade. Some of these were legal. As other plumbers told me later, many other (illegal) lines were also joined, after being fitted with stolen and non-functioning water meters so as to look legal. Even before these connections could be questioned, they were subsequently buried under two feet of cement and concrete, safe from the gaze of the municipal engineers.

These days, while engineers have a limited amount of control over the water that enters the settlement, they have almost no authority over the system within Premnagar’s boundaries. City engineers cite the regressive social and
environmental conditions produced out of their inaction as challenges to their effectiveness. They can justify not working to rehabilitate, repair, and expand the capacity and pressures of Premnagar’s lines by pointing to the damage inflicted on the network by illegal connections. Hacking into existing lines, and making them even more porous to the claims of their clients, plumbers are able to make the ‘not good’ area habitable; they make it possible to live in. And in doing so, they also make the area ‘not good’ for city engineers to work in. Their illegal connections serve to justify the engineers’ disdain for the area and its people, and work to continually reproduce Premnagar as an abject area undeserving of their substantive attentions.

Not all of Premnagar’s water needs are met through the surreptitious appropriation of the municipal water network. Having confronted water difficulties and a leaky system for some time now, residents have also begun returning to draw water from wells that were heavily used before the arrival of city water supplies in the early 1970s. Following the extension of tap water supplies, many of these wells had fallen into disuse and disrepair. But with the municipal connections in the settlement getting increasingly leaky and unreliable, it is to these wells and subterranean water that many now return. Elsewhere, I show how wells produce different forms of political authority and regimes of belonging in the city (Anand, 2011; see also Giglioli and Swyngedouw, 2008). Nevertheless, here, I would like to return to Asif, who opened this article by asking whether the provision of well water, contaminated with sewage, could be called development.

Asif was angry about the way in which ‘gutter water’, and not treated municipal supplies, was being made available to Premnagar’s residents. Like Asif, many in the city, including its municipal officers, see bore well water as dirty and undesirable. Drawn from the ground, contaminated by unknown mixtures of the chemicals and sewage of urban life, and not subject to the politics, procedures and purifications of techno-science, settlers and experts alike argue that water from urban wells is unfit for drinking, and a danger to health. I do not wish to question the purity of their claims here (see Koos and Bakker, 2008). What matters is that Asif and other residents of Premnagar find it deeply offensive to be subjected to well water, water that is believed to be contaminated with all the dirt to which a modern water supply was a response. For them, this water is itself abject, lying below the surface of modern citizenship. Associating wells with village life, Asif expresses outrage at being made to drink it in the city. To drink well water, Asif suggests, is to literally imbibe a toxic and dangerous form of hydraulic subjectification, one which marks their own bodies as dirty, dangerous and abject; a material practice that instantiates how their bodies are not clean enough to be considered and treated as citizens of the city.

Conclusion

In one of anthropology’s classic texts, *The Gift*, Marcel Mauss (1925) famously argued that all forms of exchange draw upon and produce particular kinds of
moral communities. In Mumbai, as in other places, the ways in which people provision for their daily water needs describe and produce the ways in which they can claim substantive urban citizenship (Holston and Appadurai, 1996). By pointing to the ways in which Muslim settlers have trouble accessing water from the municipal system, I wish to draw attention to the processes and practices by which they are being constituted as abject residents of the city. Deemed dirty and ‘not good’, Muslim settlers, even those that had formal access to water at one point, are being substantively disconnected from legally accessing water in the city. As managers of the municipal water system, hydraulic engineers know Premnagar, its porous pipes, plumbers, and water problems very well, and yet leave them aside. The zone of abjection that is Premnagar has not been produced by ignorance but by the chauvinistic cultural politics of the city (Baviskar, 2003b), a politics in which each group intimately knows, lives with, and is marked by difference.

As Nugent points out, ‘the ability to engage in everyday bureaucratic practice is itself an expression and result of power relations’ (2006: 301). In this article, I have shown how Muslim settlers of Premnagar have been unable to reach, access, and move the experts and employees of the city’s hydraulic system. Though they desire treated city water, they are unable to constitute themselves as deserving citizens of the city’s water department today. Marked as dirty, outsiders, illegal and Muslim, Premnagar’s residents are unable to access the city water department as citizens, or as ‘political society’ (Chatterjee, 2004). Their access to the public system today is mediated and policed by plumbers who have an ambiguous and difficult relationship with the engineers of the water department. With plumbers happy to avoid the problems of negotiating at the water department, they now manage and authorize access to the settlement’s pipes on their own.

Engineers point to the water usage practices of Premnagar’s settlers to illustrate why they are undeserving urban residents. While representatives and employees of Mumbai’s municipal government see Premnagar as a place out of their control, they overlook how they have steadily relinquished their control by not carrying out infrastructure upgrading in the settlement. The abjection that their inaction produces is also a condition of its possibility. As exclusion provokes the symptoms of abjection – the lack of cleanliness and health – it also compels other hydraulic practices that reaffirm and reproduce the ways in which engineers see Premnagar and its residents.

In drawing attention to the iterative process through which settlers and engineers constitute Premnagar’s abject water supply, this article seeks to connect studies of urban infrastructure (Gandy, 2004, 2008; McFarlane, 2008) and those of citizenship and the state (Ferguson, 1999; Gupta, 1995; Holston, 2008; Mitchell, 1991), to understand how abjection is effected in the postcolonial city through the everyday management and maintenance of public infrastructure. With the discourses of belonging in/to Mumbai being rendered not just by class, but also through religious and regionalist lenses, in this article I have sought to show how large populations of Mumbai’s residents are being
disconnected from urban citizenship by the everyday administration of the city’s water supply.

As the city’s hydraulic infrastructure is claimed and configured for the wealthy residents of ‘civil society’ on one hand, and a majoritarian ‘political society’ on the other, Muslim settlers in Premnagar are being rendered abject residents of the city. This is not to say that abjection is a resilient and durable process. As is manifest by the ever-precarious negotiations between city engineers, plumbers, and Premnagar’s residents, abjection is an incomplete and reversible form of social control, one that while iterative is also full of its own instabilities, leaks and slippages of authority.

Acknowledgements

I am grateful to Hannah Appel, Elif Babul, James Ferguson, Maura Finkelstein, Akhil Gupta, Ramah McKay, Robert Samet, Rania Sweis, Sylvia Yanagisako, and Austin Zeiderman for helpful comments made on the draft. The article was initially presented on the panel ‘Social Suffering and the City’, at the American Anthropological Association’s Annual meeting in fall 2009, and benefited from very helpful comments, particularly from Philippe Bourgois. A subsequent version of the article was also presented at the International Conference on Urban Ecologies in Asia, hosted at the Hong Kong Institute for the Humanities and Social Sciences in spring 2010. I am grateful to Anne Rademacher and K. Sivaramakrishnan for providing valuable suggestions for improvement. Finally, I would like to thank the editors of this special issue, Bruce O’Neill and Dennis Rodgers, for their patience, insight and encouragement.

Funding

This research was carried out with the financial support of Stanford University, the Social Science Research Council, the Wenner-Gren Foundation, and the National Science Foundation, for which I am very grateful.

Notes

1. Staying away from what is evoked by the words ‘slum’ and ‘slum dweller’ (see Desai, 2003; Echanove and Srivastava, 2009; Ghannam, 2002), in this article I use the terms ‘settlement’ and ‘settler’. In part, this is a better translation of the word ‘basti’, which is frequently used to describe settlements in Mumbai. In their respective languages, bastis and settlements more accurately refer to the processes through which urban ground has been made. Where I do use the word slum dweller it is to reference the legal category or state systems of housing classification through which slum dwellers (and slums) come to be known.

2. In describing the procedures of municipal disconnection, by no means do I wish to suggest that Premnagar’s residents do not receive water. As the opening quote and the article show, Premnagar’s residents now receive water in several different ways. By focusing on the inefficacy of formal connections, I wish to describe the ways in which they are constituted as undeserving subjects of the formal city water supply system, and the attentions of its engineers.
3. Of course, as densely populated settlements, Premnagar and the neighboring settlements of Meghwadi, Janata Colony, and Hari Nagar continue to be rather diverse, filled with persons of varied faiths hailing from different parts of the country (including Mumbai).

4. A recent article in the *Indian Express* on the disbursement of local area development funds details how city, state and federal legislators are all pressured by their constituencies to invest in water connection. For instance, a Member of Parliament points out: 'I would like to spend my funds on setting up a library, buying computers for schools, building laboratories for colleges and other welfare activities, which [councilors] generally overlook. But 90 per cent of the demand is typically for drainage lines or water connection' (*Indian Express*, 2011).

5. Recognized settlers (like those living in Premnagar) can, with (about 12 of) their neighbors, register co-operative housing societies with the state housing authority. These 'societies' could then directly apply and be billed for water connections by the city authority at subsidized rates.

6. Perhaps conditioned by my own proclivities, I would often speak to settlers in Premnagar about the temporality of water collection. Did they like waking up so early to collect water? Would it be more desirable at different times of the day? The answers I would receive were sometimes surprising, and indicated how people's routines were adjusted to the water times. Some spoke of how the work of water collection was more quickly done in the morning – *phat-a-phat*. Once completed, they could go about their workdays without interruption. Others said that because they collected water so early, people were less likely to get into fights over water.

7. This practice thereby troubles contemporary debates about privatization that overlook ways in which the workers' public utilities also legitimate their work through the language of private service provision (Baviskar, 2003b; Bakker, 2007).

8. Engineers could also point to other 'constraints' that precluded their efficacy in the settlements including citywide water shortages, pending permissions for various city works as well as extra-legal connections that made improvements in a given area impossible.

9. Engineers too would tell me of how meters were seldom read, but expressed an inability to compel meter readers to do their work. They have lately proposed electronic solutions to compel engineers to make the rounds to read meters.

10. Used by settlers and upper-class residents all over the city, booster pumps are a technology that draws from the public pipelines more water than would otherwise flow into a home.

11. I use the term 'serving classes' following the example of A. Jockin, President of the National Slum Dwellers Federation. Faced with the decline of organized industrial labor, and the rise of informalized labor working in homes, construction sites, shopping malls and security firms, I find the term serving class a better descriptor of laborers in the city.

12. City engineers knew that Premnagar’s population was several times greater than the official census population in 2001. Yet they expressed an inability to design the network for its actual population, and used the smaller registered population in their calculations.

13. Taking bribes did not qualify engineers as bad, if they did the work. Recognizing that state officials often acted in public and private capacities (Gupta, 1995), Rafiq-bhai had nothing but praise for engineers like Rané. Despite their willingness to take money, they did the work.
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