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A SLUM ASSEMBLAGE IN MUMBAI:
EMERGENCE, ORGANIZATION, AND SOCIOSPATIAL MORPHOLOGY

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I, Reid Cooper, confirm that the work presented in the thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Reid Cooper

Abstract

Despite the current proliferation of research on slums, there remains an impasse in our ability to represent and understand informal residential settlements. This is largely due to the complexity and malleability of slums in the context of globalized flows of people, neoliberal economic and political restructuring, and processes of social marginalization and conflict. This thesis thus addresses the intellectual, representational, and political complexities associated with the global proliferation of slums so as to facilitate more just and egalitarian societies. As such, the aim of the study is to identify and examine emergent factors that contribute to social injustice and inequality in the context of ever transforming spatial, social, economic, and political processes. To do so, it examines the emergence, organization, and socio-spatial morphology of Ganesh Murthy Nagar, a squatter settlement in Mumbai, India.

Conceptually, the framework guiding my study is based on Deleuzoguattarian thought and draws upon assemblage theory in relation to contemporary research in critical Urban Studies. My methodology is oriented towards thick empirical description and addresses historical, ethnographic, and developmental perspectives. This approach contributes to three specific objectives of the thesis: to identify the functional components of the settlement-assemblage and trace their emergence and evolution in time; to map the constitutive associations inherent in the ordering of these components in and beyond the settlement; and to determine the components' constraining and enabling effects on other components in the assemblage.

My findings suggest that State policies promoting participatory governance have triggered the emergence of social hierarchies and the centralization of power within the settlement. In collusion with other endogenous social networks and State actors, a defensible space of dominance has been established that continues to assemble power from diverse relationships with developmental partners. Rather than advancing the positive potential of interventions, weaknesses with slum policies and their implementation have contributed to a settlement with unequal and unjust relations, a fragmented populace, and pervasive feelings of fear.

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List of Abbreviations

BBRA	Back Bay Reclamation Area
BBRS	Back Bay Reclamation Scheme
BEST	Brihanmumbai Electric Supply & Transport
BMC	Bombay Municipal Corporation
BMRDA	Brihanmumbai Metropolitan Regional development Agency
BRC	Bombay Reclamation Company
BTP	Bombay Town Planning Act
CBO	Community Based Organization
CM	Chief Minister
CRH	Committee for Right to Housing
CRZ	Coastal Regulation Zone
CSEIUS	Central Scheme of Environmental Improvement of Urban Slums
DP	Development plan
FIR	First information report
FSI	Floor space index
GES	Garrison Engineer Services
HDWA	Sri Ganesh Murthy Nagar Hutment Dwellers Welfare Association
MCGM	Municipal Corporation of Greater Mumbai
MLA	Member of the Legislative Assembly
MHADA	Maharashtra Housing and Area development Authority
MMRDA	Mumbai Metropolitan Regional Development Agency
MMRP	Mumbai Metropolitan Rail Project
MoEF	Ministry of Environment and Forests
M RTP	Metropolitan Rail Transportation Project
MUDP	Mumbai Urban Development Programme
MUIP	Mumbai Urban Infrastructure Project

NFSD	National Federation of Slum Dwellers
NGO	Non governmental organization
NHSS	Nivara Hakk Suraksha Samiti
NOC	Non Objection Clause
PAP	Project Affected Persons
PIL	Public Interest Litigation
SBC	Save Bombay Committee
SIP	Slum Improvement Program
SPA	Special Planning Area
SPARC	Society for the Preservation of Area Resource Centres
SRA	Slum Rehabilitation Authority
SRS	Slum Rehabilitation Scheme
SSP	Slum Sanitation Project
T&CP	Town and Country Planning Division
TDR	Transferable Development Rights
UBSP	Urban Basic Services Program
UDD	Urban Development Department
WDA	Water Department Archives
YUVA	Youth for Unity and Voluntary Action

Chapter I
Introduction

1.1 Introduction

This thesis engages in an attempt to address the intellectual, representational, and political complexities associated with the global proliferation of slum dwellers. In the context of planetary urbanization, where urban processes extend beyond city limits (Lefebvre 2003, [1970]; Schmid, 2005; Soja and Kanai, 2005; Madden, 2011), slums are rapidly proliferating and their presence and expansion have become undeniably important components of many contemporary cities. With the number of slum dwellers expected to triple to three billion people—or one third of humanity—by 2050 (UN Habitat, 2003), research into cities and slums has expanded dramatically. Yet, despite this research there remains an “urban impasse” (Thrift, 1993) in our ability to represent and understand cities and slums. This is largely due to their complexity and malleability within an evolving context characterized by economic restructuring, regulatory shifts, and social polarization, marginalization, inequality, and conflict. Thrift may have been the first to recognize that different and creative approaches to the way we understand and represent cities are necessary, but his call remains urgently relevant almost twenty years later (Brenner et al, 2011; Hernández, Kellet, and Allen, 2009; Roy, 2009; Taylor, 2004; Sassen, 2000; Soja, 2000). This thesis, then, heeds Thrift’s call by contributing to a new approach to, and conceptualization of, slums.

The overall aim of the thesis is to understand how inequalities and injustice emerge and continue to evolve in a squatter settlement called Ganesh Murthy Nagar in Mumbai, India. To address this aim I examine the emergence, organization, and socio-spatial morphology of the squatter settlement. This broad examination entails an investigation of important components of the settlement such as residents and their social groupings, land, hutments, infrastructural provisions, politicians, policies, real estate developers, and State employees. The thesis brings these various actors and their operating logics together in an innovative approach to slums, which treats the settlement as an assemblage: or a constellation of heterogeneous components and their reciprocal relations that are gathered into a functional system. Ganesh Murthy is thus examined as a system that provides land, shelter, essential services, and societal regulation, amongst other things. The various components of the settlement assemblage are understood to have a degree of autonomy based on their inherent properties; however, the potential capacities of components are interlinked such that they

constrain or enable each other. It is this relational dynamic that localizes emergent processes of organization, which operationalize the settlement as a functional system. An assemblage approach to understanding Ganesh Murthy Nagar is thus oriented towards analysing processes of gathering, assembling, alignment, dissolution and realignment in the context of ever transforming flows of matter and energy. These processes are particularly relevant to slum dwellers who gather and align various sociomaterials towards creating their built environment. The empirical and intensive orientation of an assemblage approach, together with its understanding of processual relationships that cannot be reduced to individual properties, avoids over-generalized and reductionist pitfalls that limit the analytical purchase of much current research on slums.

Contemporary research into slums is often characterized by exaggeration and overgeneralization (e.g. Davis, 2006; De Soto, 2000). A contemporary focus on globalization and related concerns of neo-liberalism and structural adjustment can tend to stretch observations in order to increase their explanatory power (Gilbert, 2009). In the past, these have spurred large multilateral funding agencies like the World Bank, UN-Habitat, and others to adopt recommendations towards achieving global solutions, without adequate consideration of the diverse power relations in local contexts. The World Bank's adoption of "community participation" as a prerequisite for funding infrastructural interventions (World Bank, 2003) in slums is an example of a well intentioned, but sometimes ill-fitting policy directive (See Chapter VII). At a more local level, broad definitions, policies, and policy implementation practices adopted by the State of Maharashtra may not be ideally formulated to address the large variation in slums found within the state. For example, the Maharashtra Slum Areas (Improvement, Clearance & Redevelopment) Act of 1971 defines a slum as (Section 2): "any area that is a source of danger to the health, safety and convenience of the public of that area, or by reason of the area having inadequate or no basic amenities, or being insanitary, squalid, overcrowded or otherwise." In fact, there is a lot of variation in Mumbai's slums in terms of land ownership, age of the settlement, nature of the built components, geographic location, and density. By failing to acknowledge this diversity, opportunities to address problems related to specific slums or groupings of slums may be squandered. The same lack of specificity may also cripple policies towards redeveloping and providing infrastructure to slums and

can result in dramatic cases of injustice as described in this thesis. As Gilbert (2009: 38) states, overgeneralization “perverts our understanding of the nature of poverty and distorts policy making.”

Where over-generalized research observations may limit the production of appropriate local interventions, concurrently, contemporary research on slums often exhibits a narrow focus on individual components, which may lead to partial understandings of their functionality. Here, studies limit their focus to one or several components in a slum to the exclusion of other important causal factors. Many reasons contribute to the prevalence of narrowly focused studies, including budget and time constraints and ideological and theoretical positions that *a priori* limit the scope of studies. Whatever the causes may be, there appears to be a movement away from intensive engagements with slums (e.g. Pearlman, 1979; Lobo, 1992) that often result in more holistic accounts. Instead, much slum-based research focuses on one aspect of a slum, or more likely several slums, to produce thematically based research concerned with such things as water provision (Zérah, 2000; Crow and McPike, 2009), sanitation (McFarlane, 2008; Sharma and Bhide, 2005), gangs (Klein, 2005; Moser, 2004), and policy implications (Patel, 2005; Sivam and Karuppanan, 2002) to name a few. These studies do generate important information toward our understanding of slums, however, in the course of this research it has become apparent that a more holistic approach that attempts to assemble the various functional components of a slum can contribute important observations that go unnoticed by more narrowly focused studies. As such, the assemblage approach adopted here facilitates an intensive and in depth investigation into many components of one settlement assemblage, thereby bringing together diverse strands of research and demonstrating their interrelations and emergent outcomes. This promises to contribute to better-informed policy decisions and implementation practices.

The remainder of this introductory chapter thus begins by providing some context on Mumbai, the geographical focus of this study, and examining its slum related policies, emerging threats to slum dwellers, and local responses from civil society. I then situate this research among other academic studies on slums and discuss how the thesis contributes to this growing body of knowledge. Finally, the hypothesis, research questions, and

methodological considerations of the thesis are outlined, followed by a synopsis of subsequent chapters.

1.2 Mumbai and slums

Certainly, with 56 percent of its residents living in slums, Mumbai is in need of alternative perspectives and policies for addressing the many problems associated with slums (Census of India, 2001). Mumbai is situated on a peninsula that was fused from seven original islands. It is the capital of the State of Maharashtra and is the most populous city in India. With its 12.4 million people, it ranks as the fifth most populous city in the world (Census of India, 2011). It is also the financial and commercial capital of India, home to the Reserve Bank of India, the Bombay Stock Exchange, the National Stock Exchange, and the National Mint. Furthermore, it is the corporate headquarters of major domestic and international banks, insurance companies, as well as Indian conglomerates such as Tata Group and Reliance Industries Limited. Mumbai is also the transport hub of India, accommodating over half the country's passenger traffic and 70 percent of its maritime trade (Pacione, 2005). Thus, the city is fully integrated into the global economy. Unfortunately, however, it is saddled by an extremely uneven distribution of wealth.

To leverage the city's position in the global economy Mumbai is currently undergoing major restructuring that is shaped by two related economic and political currents. First, city administrators have embraced neoliberal management policies that are transferring control of civic management to market-based mechanisms, which increase the vulnerability of slum dwellers (Bhide, 2009). Concurrently, and stemming from this neoliberal position, the city's elite seeks for Mumbai to mimic the transformation of Shanghai and become a "World Class City", which is resulting in massive infrastructural works that have increased the displacement of slum and pavement dwellers. Thus, these two trajectories have resulted in new threats to, and increasing pressure on, existing slum areas.

To put these currents in context, cities are currently at the centre of India's national policies and discussions concerned with wealth creation and social transformation. Cities are considered the locus of economic generation and growth, and in India empirical evidence bears this out. In fact, 50 to 55 percent of the country's Gross Domestic Production is produced by urban economies (Chopra *et al.*, 2005). Research on "Global Cities" (Sassen,

1991) or “World Cities” (Friedman, 1996; Friedman and Wolfe, 1982) demonstrate the role of megacities in translating a nation’s economic interests to the rest of the world and connecting national economies to the global economy. The city as an “economic engine” is dependent on its ability to attract global capital, and in the case of many developing countries, this has meant large infrastructural restructuring projects (Mahadevia, 2005). The necessity to pay for these projects however, has ushered in a “new urban politics” informed by neoliberal policies of economic liberalization and policy deregulation (DeFilippis, 2004; Wilson, 2004). There is thus a shift in the urban mode of operation from a managerial to an entrepreneurial State (Brenner and Theodore, 2002; Swyngedouw, 2000; Harvey, 1989). This shift generally entails a focus on producing the right conditions for capital accumulation and an attendant disinterest in the fate of the poor and vulnerable.

New built environments forged by the forces of globalization, economic liberalization, and policy deregulation, are uneven, “fragmented” (Harvey, 1996), and “contradictory” (Banerjee-Guha, 2006) and result in social differentiation and contestation (Balbo, 1993). Power and ideology together create socio-spatial formations with patterns of domination and repression emerging in the form of “spaces of difference” (Berner and Korff, 1995). For instance, these include class division (Cuthbert, 1991), which often results in gender and ethnic friction, greater unemployment, and homelessness (Banerjee-Guha, 2006). Recent policies and programmes put in place by the state government of Maharashtra and Mumbai’s municipal government have been more concerned with creating a World Class City than with attaining distributive justice (Mahadevia, 2005).

1.2.1 Slum policy in Mumbai

The effects of globalization, neoliberal policies, and the desire to transform Mumbai into a “World Class City” have increased the threats to, and placed greater pressure on, slum dwellers. Mumbai has historically struggled to find an adequate response to its shortage of housing; a problem that was already apparent in 1872 (Sundaram, 1989). In the 1930s modern slums emerged as the city faced an “acute housing crisis” (Bhide, 2009: 368) due to an influx of rural migrants seeking employment opportunities and ineffective or non-existent policies to address the housing needs of these migrants. The disequilibrium between housing demand and supply resulted in five percent of the city’s population living

in slums by 1947 (David, 1996), and spurred a series of policies and programs that were instituted by all levels of government to combat these increasingly large housing shortfalls. The subsequent three decades, however, only intensified the housing disequilibrium. Rural migrants continued to make their way to the city to improve their livelihoods, and together with restricted land on the peninsula, questionable policy decisions,¹ and limited activity in the housing sector, contributed to massive housing shortfalls peaking in the 1970s and 1980s at 45,000 units per annum (Bhide, 2009). The mechanisms used to address the proliferation of slums in Mumbai may be divided into three chronological phases, discussed below: *negation*, *tolerance*, and *acceptance* (NIUA, 2009; Bhide, 2009). There are, however, signs that a new phase of increasing intolerance is emerging.

1.2.2 Negation

Varying levels of government legislation legalizing the State's right to demolish slums marks the first 'negation' phase up to the 1970s. During this phase, slums were viewed as unfit housing and centres for illegal activities, such as alcohol production, smuggling, prostitution, and gambling (Weinstein, 2008; Sharma, 2003). As such, an amendment to the Bombay Municipal Corporation Act in 1954 permitted the city to legally demolish slums. Thereafter, demolitions were pursued as antidote to the city's housing problems (Risbud, 2003). Later, with the 1956 national Slum Clearance Plan, Mumbai was included amongst six cities vested with national authority to demolish slums and redevelop them. However, with limited resources available for the program, redevelopment fell behind the amount of demolitions that took place and the program could not keep up with the pace of slum proliferation (Bhide, 2009). This revelation marks the next phase of slum-related policies as authorities supposedly became reconciled towards the existence of slums.

1.2.3 Tolerance

The second phase of slum policy in Mumbai is characterized by a shift from demolition and redevelopment to in-situ environmental improvement and infrastructure provision. In 1972 the Central Scheme of Environmental Improvement of Urban Slums (CSEIUS) was enacted by the national government with the intention of improving slum conditions with minimal

¹ For example the 1947 Mumbai Rent Control Act froze rent at 1940s prices, which is credited for limiting investments in private rental housing and adversely affecting property tax revenues (Risbud, 2003).

financial inputs. It was initially tested in India's major cities, and extended to other cities in the 1980s. The Maharashtra government adopted CSEIUS in 1974 and created the Maharashtra Housing and Area Development Authority (MHADA) in 1977 to effect works. This included provisions to supply community taps and latrines, construct pathways and drains, and establish streetlights (Risbud, 2003). However, decidedly anti-slum legislation was concurrently enacted such as The Maharashtra Vacant Lands (Prohibition of Unauthorised Structures and Summary Eviction) Act of 1975. This act identified squatted land as vacant and thus subject to clearance, and effectively immobilized judicial proceedings underway to fight evictions (Risbud, 2003).

1.2.4 Acceptance

The phase of slum acceptance in Mumbai commenced in the 1980s and emerged due to international awareness of the proliferation of slums worldwide and unsatisfactory housing conditions. The policies and programmes that were put in place acknowledged that slum edifices constitute housing stock, rather than previous understandings that sought to demolish and build anew. As such, programmes in this phase are characterized by providing land tenure, and forms of perceived land tenure, as well as physical security to slum communities. Schemes such as the Mumbai Urban Development Programme (MUDP)(1985), and the Urban Basic Services Program (UBSP) (1985) were financed by multilateral organizations such as the International Development Agency of the World Bank and UNICEF (respectively) and by multiple levels of government.

Up-gradation programmes, such as the MUDP, that were adopted by several Indian cities set out to optimize existing housing stock and infrastructure by providing services at an affordable price as well as providing incentives for owners to improve their houses over time (NIUA, 2009). The UBSP and other projects like the Slum Upgradation Programme (1983), and the Slum Sanitation Program (1997) made community participation integral to their programmes and focused on women's development. The UBSP also emphasized the integration and convergence of services and programmes along with the creation of facilities. These principles of community participation, women's development, and convergence continue to be on the development agenda as promoted by the National Slum

Development Programme introduced in 1996-1997, and the Draft National Slum Policy (2002).

1.2.5 Emerging threats to slum dwellers

Currently, slums and slum dwellers are coming under increasing pressure from many forces in the city. The guiding mantra espoused by the government, business interests, the upper and middle classes, the media, and the judiciary is that if there is to be economic development, slums must go. This sentiment is summed up by former Chief Minister of Maharashtra Vilasrao Deshmukh (Bharucha, 2009) when he said: “The proliferation of slums throughout the city has created obstacles for development...” Issuing forth from the cover of neoliberal conviction, similar statements and sentiments have increased government pressure on slum dwellers, which have multiplied from direct assault by way of eviction and demolition to silent and insidious forms of displacement.

In terms of recent displacement, 1986 witnessed the State-led movement of all pavement dwellers to the outskirts of the city (Bhide, 2009). From 1999 to 2001 85,000 slum dwellers were ejected from Sanjay Gandhi National Park. This eviction was effected with a force and rigour heretofore unseen with the use of Special Reserve Police Force and helicopters (Bhide, 2009). A new wave of demolitions in Mumbai was initiated in December 2004. This was a brutal strike against slum dwellers that was well organized by multiple agencies and programmes to reduce the re-encroachment having been put in place preceding the demolitions. The government was unapologetic in its actions. The contemporaneous Chief Minister of Maharashtra Vilasrao Deshmukh (Bharucha, 2009) said:

“There is no pressure on me to halt the ongoing demolition drive and I am not going to stop the BMC. Instead, we need to go further and investigate the people behind the growth of slums— for instance, the slumlords and officials who protect them. In the first phase, encroachers coming in the way of public utility projects will be removed. In the second phase, those who have taken over footpaths will be cleared.”

From late 2004 to 2005, in what the newspapers dubbed “Operation Shanghai”, 94,000 homes were demolished at over 44 sites in the city (Mahadevia, 2005). Estimates of lands cleared range from 216 acres according to *Mid Day* (A Mumbai daily newspaper) (Mid Day, June 7, 2005, as referenced in Mahadevia, 2005: 360) to 306 acres as claimed by the BMC (Indian Express, January 4, 2005, as referenced in Mahadevia, 2005: 361). In total,

seven percent of Mumbai's slum dwellers were displaced equalling an astounding 450,000 people. The targets of the demolitions were not only slum dwellers that had erected hutments after 1995, which are not officially sanctioned by the State, but all slum hutments. Surveys conducted by Youth for Voluntary Action and Unity (YUVA) and the Committee for Right to Housing (CRH) found that six percent (or 2,405 houses of 41,900 surveyed) of demolished houses had been erected before the 1995 cut-off date (IPTEHR, 2005)².

Beyond increased evictions and demolitions—which are visible forms of displacement that can upset the delicate balance between politicians and slum dwellers—are more insidious and less visible forms of displacement (Bhide, 2009). Slum dwellers are political assets for politicians as they form the majority of the electorate in all of Mumbai's constituencies and are traditionally active voters. As such, politicians go to great lengths to secure these 'vote banks' through various slum branches operating in every political party, and through promises guaranteeing security of tenure in exchange for votes. However, the pressure to turn Mumbai into a World Class City, exerted on politicians by their colleagues, prominent businesses, real estate developers, eminent citizens, and citizen groups has started to erode the political patronage slum dwellers once relied upon. Due to such pressures, and with a will to retain the base of their political power in the form of vote banks, politicians are more supportive of silent forms of displacement than of direct forms of eviction and demolition (Bhide, 2009).

Silent threats of displacement are related to the government's changing role from urban manager to entrepreneur, and a concomitant shift of government as a force for human rights and protection of the poor, to a facilitator of capital accumulation. Thus, housing is seen in terms of real estate and measured in floor space, built-up area, size, and financial yield. The key players in this sector are financial institutions, developers, and landowners. Slum-dwellers find little place in this shifting terrain, and the notion of housing as a right has gone by the wayside. The current housing debate in Mumbai centres not on land, housing, and service rights, but on rehabilitation and relocation. Displacement has thus become an accepted outcome of policies geared towards economic development.

² Various cut-off dates have been adopted by the State of Maharashtra over time to limit slum dweller's access to services. The current date in force is 1995 and this indicates that residents living in hutments built after 1995 do not qualify for a host of municipal services.

One of the prime mechanisms for displacement is slum rehabilitation, under the aegis of the Slum Rehabilitation Scheme (SRS). The SRS brings together State, private, and resident actors to redevelop slums and was initiated in 1995. In its role of entrepreneur, the State has embarked upon massive infrastructure improvements that entail the displacement of hundreds of thousands of slum dwellers that live in the path of development. Bhide (2009) estimates that 200,000 additional people will be displaced due to the SRS in pending projects. The SRS is also the mechanism used to redevelop officially sanctioned slums that existed prior to 1995 through participatory methods. However, because of the potential revenue to be generated from slum rehabilitation, developers, along with politicians and sometimes elements from gangs and mafia organizations, have used various types of force to circumvent community participation and push projects through. This is discussed further in Chapter VIII of this thesis.

Finally, in terms of silent forms of displacement, the existence of slums does not show up on the official Development Plans produced for the city of Mumbai. That is, none of the 2335 slum communities housing over 50 percent of Mumbai's residents are represented by maps that are produced to chart the future growth and direction of the city. In fact, slums occupy land that the Development Plan has earmarked for specific uses in the future. This refusal to acknowledge slums on Development Plans is a form of future-proofing planning by providing flexibility (Roy, 2005). The unacknowledged territory otherwise used to house over eight million people are understood as a convenient pool of land to be used for public projects and commercial development (Das, 2003).

1.2.6 Responses to threats from civil society

Threats of displacement to Mumbai's slum dwellers have been met by initiatives organized by multiple civil society organizations that mobilize communities in various ways. The earliest responses to threats of displacement took the form of housing rights struggles in the 1970s led by political parties and unions such as the Hind Mazdoor Kisan Panchayat (Indian Farmer and Workers Forum) that worked to mobilize communities of pavement dwellers (Bhide, 2009). These efforts, however, often petered out soon after their inception. The field of civil society community mobilization in the 1970s was then largely relegated to small volunteer groups devoted to locality development (Bhide, 2009).

In the 1980s two related events in the city catalysed the formation of enduring civil society organizations that sought to politically engage with the development process. In 1981 large-scale demolitions and the deportation of slum-dwellers from the city back to their places of origin, labelled “Operation Eviction” by the Chief Minister of Maharashtra, invoked widespread antipathy towards the grossly unjust treatment of human beings (Singh, 1987). “Operation Eviction” also spurred Olga Tellis, a journalist, and several slum and pavement dwellers to challenge the Bombay Municipal Corporation (BMC) under Article 21 of the Indian Constitution, which guarantees the right to life (Ramathan, 2005). The plaintiffs essentially argued that the right to life entails the right to livelihood, which necessitates a home. In its 1985 judgment, the Supreme Court ruled in favour of the plaintiffs, stating that the BMC had indeed violated the right to life. Nonetheless, it ultimately sided with the city by giving it the authority to evict slum dwellers one month after the monsoon subsided and by directing the government to attempt relocation if convenient.

The judgment was understood by many as tantamount to sanctioning evictions and demolitions by the highest court in the country and the backlash that ensued brought several civil society groups into prominence. The Nivara Hakk Suraksha Samiti (NHSS), a network of individuals that “fight to protect the rights of the poor to shelter” (Interview with a founding member for the NHSS as quoted in Ramathan, 2005: 131) engaged in tactics of confrontation with the government. In subsequent years, the NHSS adopted co-optation and complementarity as further tactics, but their focus on the State as the source of injustice and exploitation has endured (Ramathan, 2005).³ Another civil society organization that rose to prominence after the Supreme Court ruling is the Youth For Unity and Voluntary Action (YUVA), which emerged between 1978 and 1984. YUVA is similar to the NHSS in initially adopting confrontational tactics towards the State in rights-based approaches to development and later introducing more complementarity tactics. YUVA differs from the NHSS through greater contacts with the slum community and especially working with youth towards self-empowerment (Ramathan, 2005).

While the NHSS and YUVA continue to be strong advocates for rights-based development in Mumbai, probably the largest civil society organization based in Mumbai working in this

³ For a further discussion on civil society – State relations see Najam (2000).

regard (in terms of geographic diversity and membership numbers) is The Alliance. The Alliance is composed of the National Federation of Slum Dwellers (NFSD), a women's group Mahila Milan (Women Together), and an NGO called the Society for the Preservation of Area Resource Centres (SPARC). The 1985 Supreme Court ruling caused a great deal of anxiety in Mumbai's civil society sector, including the founders of SPARC who had started their NGO in 1984. However, their anxiety was due partly to the mass protests being organized by the majority of other NGOs in the city (Ramanath, 2005). The founders were not convinced of the efficacy of direct confrontation to actually address problems faced by slum dwellers and find solutions. Their desire for alternative tactics from confrontation would come to serve the NGO well in a changing developmental context, which became oriented towards stakeholder inclusion and participation.

SPARC's response to the demolitions and evictions was to work with women pavement dwellers in various ways, including creating collective savings and credit groups, to reduce their vulnerability. These actions soon translated into the formation of Mahila Milan in 1986 (Ramanath, 2005). Between 1986 and 1988 SPARC and Mahila Milan formed a mutually beneficial alliance with the NSDF that increased the number of women in the latter organization (which now stands at roughly 50 percent), expanded the reach of the former organizations across urban India, and created a robust pool of knowledge and expertise in development practice (Ramathan, 2005; Patel and Mitlin, 2001). The Alliance initially created educational and organizational strategies to promote community learning and empowerment, but has subsequently engaged in resettlement, housing, and infrastructural projects as well as developing exchanges with low-income communities in South Africa, Thailand, Cambodia and Laos (Patel and Mitlin, 2001). The Alliance, and more specifically SPARC, is differentiated from the NHSS and YUVA in its primary use of tactics of cooperation and compromise in achieving mutually beneficial solutions that provide slum dwellers with solutions for their primary needs of land, housing, and basic services (SPARC, 1998). These tactics have firmly established the Alliance in Mumbai's developmental landscape through a vast network of political affiliations at various levels of government (Ramathan, 2005).

In sum, Mumbai's slums are subject to diverse political and developmental forces. Participatory processes that are geared towards democratic participation and community mobilization (and which are often negotiated through civil society organizations), orient recent policies that aspire to change the livelihood conditions of slum dwellers and thereby facilitate the reduction of poverty. Concurrently, evictions, demolitions, silent forms of displacement and threats are being marshalled to push slum dwellers out of the city. These various forces are embedded in demographic and economic flows that proliferate settlements in and on the periphery of the city producing a conurbation, which is increasingly difficult to represent, understand, and address.

1.3 Academic research on slums

The proliferation of slums is due primarily to rapid urbanization and the urbanization of poverty (UN Habitat, 2003). In 1900, 14 percent of the world's population lived in cities. Currently, that number is estimated to be over 50 percent. The number of people living in cities is expected to increase by 1.5 billion, mainly in developing countries through natural reproduction, the integration of formerly rural areas into geographically expanding cities, and through rural to urban migration (Mehta, 2010). Concurrently, the number of urban poor is expanding, with 1.3 billion people living on less than one dollar a day (UNDP, 1999). Beyond economic indicators, poverty is also an expression of social, political, and cultural exclusion (Gareau and Sclar, 2004) from "opportunities, decent employment, security, capacity, and empowerment" (Mercado *et al.*, 2007: 7).

A slum is defined by UN Habitat (2003: 12) as an area that combines, to various extents, the following physical and legal characteristics: inadequate access to safe water, inadequate access to sanitation and other infrastructure, poor structural quality of housing, overcrowding, and insecure residential status. While slum populations may display a wide-range spectrum of economic capacity, slums do have the highest concentrations of poor people in urban centres (Un Habitat, 2003). Poverty is linked to environmental degradation in land and water (UN Habitat/DFID, 2002), resulting from the proliferation of slums in and on the boundary of cities (Tewari *et al.*, 1986). Expanding urban populations push built environments into green areas and croplands and eat away at urban nature preserves and coastal areas, thus upsetting the delicate balance humans have with nature for the recycling

of waste products (Davis, 2006) and threatening food security (Fazal, 2000). Lack of sanitation facilities and garbage disposal in slums (Chaplin, 1999; Solinger, 1999) increases the spread of disease like rabies and malaria through increased rodent and mosquito populations (Davis, 2006), and contaminates water sources and food supply (Warah, 2002) leading to increased incidences of diarrhoea, enteritis, colitis, typhoid and paratyphoid: together the leading causes of death in the world (Thapar and Sanderson, 2004). Slum populations thus suffer from increased health issues and mortality as compared to other segments of the urban population (de Sousa, 2000).

While much slum research focuses on disease, dystopia, and delinquency, alternative perspectives do exist. Stokes (1962) compared different modalities of slums as “slums of hope” and “slums of despair”, a comparison that is taken up by others such as Turner (1967; 1977) Ward (1976), Lloyd (1976), the UN’s *Global Report on Human Settlements* (2003), and recently by Roy (2011). Stokes refers to slums of hope as those where inhabitants are intent on self-betterment (mainly through employment) and positively estimate their success in this effort, which may lead to movement up a class hierarchy. Slums of despair refer to a lack of such intention and/or a negative assessment for their personal betterment for various reasons including insufficient language skills, education levels and other social and economic resources (Stokes, 1962). Such people may be denied in some way an escalation in class structure and remain caught in a cycle of poverty. In picking up on slums of hope from a post-colonial perspective, Ananya Roy (2011) elaborates upon *subaltern urbanism*, which focuses on slums as places of residence, livelihoods, and politics. For Roy (2011; 224), subaltern urbanism “seeks to confer recognition on spaces of poverty and forms of popular agency that often remain invisible and neglected in the archives and annals of urban theory.” As an example of subaltern urbanism the New York Times published an article entitled *Taking the ‘Slum’ out of Slumdog* (Echanove and Srivastava, 2009: 21), which argues that squatter settlements need to be reassessed as complex and dynamic areas with many positive attributes. The writers laud Dharavi, the largest slum in Mumbai, with a host of important references to urban management and planning. With “a million eyes on the street” (from Jane Jacobs’ seminal work *The Death and Life of Great American Cities*), Dharavi is safer than most cities. It is a “million dollar economic miracle” with annual aggregate revenues in the settlement

amounting to hundreds of millions of dollars. Its robust economy recycles the waste of the city and supplies food to its inhabitants. “Mixed use habitats” create goods for export all over the world. Seemingly surprised to find these positive qualities, journalist Simon Crerar (2010) writes of his tour through Dharavi:

Instead of a neighbourhood characterized by misery, I find a bustling and enterprising place, packed with small-scale industries defying their circumstances to flourish amidst the squalor.

Academics and professionals working in the built environment are also starting to acknowledge the positive attributes of squatter settlements. Several academics have noted the entrepreneurial quality embodied by these places (Nijman, 2010; Benjamin, 2008), while De Soto (2000) has infamously cast residents of squatter settlements as “heroic entrepreneurs.” Bayat (2007: 579) characterizes the “informal life” of squatters as flexible, pragmatic, and as a struggle for self-development. Architects like Teddy Cruz and Rem Koolhaas (despite widely different approaches to slums) have oriented their practices to the built environment of squatter settlements and emergent spaces. Cruz designs structures in Mexico to accommodate the inventiveness and precariousness of squatter residences and has designed public spaces in settlements to adapt to the informal activities that invariably take place there. Koolhaas, leading the Harvard “Project on the City” in Lagos, Nigeria, found an uncommon degree of invention, resourcefulness, and self-organization there. These discoveries spurred Koolhaas to say, “Lagos is not catching up with us. Rather, we may be catching up with Lagos” (as quoted in van der Haak’s film *Lagos / Koolhaus*, 2003).

Thoroughly, the admiration attendant to squatter settlements is related to the self-organized inventiveness stemming from their autonomy from the State apparatus, and this has increasing relevance beyond the proliferation of slums. Squatter settlements seemingly come together without any “master plan, urban design, zoning ordinance, construction law or expert knowledge” (Echanove and Srivastava, 2009: 21). Indeed, their self-organized and distributed complexity is believed to contribute to creativity, resourcefulness, and resilience. Squatter settlements are not produced by some hierarchical structure; rather they emerge through heterarchical self-organization; akin to a self-generated city. Attributes like self-reliance and autonomy from the State may be further in demand in cities of the Global South as governments increasingly adopt neo-liberal policies that shift the urban mode of

operation from a managerial to an entrepreneurial state (Brenner and Theodore, 2002; Swyngedouw, 2000). This shift entails fiscal conservatism and facilitates the enrolment of private enterprise in, amongst other things, essential service distribution. In turn, this appears to beckon increasing distance and autonomy between communities and individuals from the State. From this perspective, understanding how slums self-organize and achieve functionality while remaining autonomous or semi-autonomous from the State is a pressing concern.

This thesis intends to contribute to the debate between slums as places of disease and dystopia or as places of creative self-organization by advancing incipient efforts (McFarlane, 2011a, 2011b, 2011c; Farias, 2010; Farias and Bender 2010) to bring assemblage theory to bear on critical Urban Studies as explained in the following chapter. The approach is particularly suited to advance the debate because of the importance of the relationship in assemblage theory between extensive reality and that which is possible. The ontological framework of assemblage theory stipulates that the possible, or the virtual world of potentiality, is a real but not extensive dimension of reality along with that which is actualized in metric space. Potential is understood as a play of various actors and processes in an historically unfolding arena, where power is not absolute but dispersed and derived from the interrelationship of components comprising the assemblage. The contingency of power relations is thus always subject to disassembly and realignment and this has a particularly important dimension in the consideration of urban inequalities of which slums are particularly subject. As McFarlane (2011a: 209), paraphrasing Li (2007) says,

assemblage thinking is concerned with how different spatio-temporal processes are historically drawn together at a particular juncture and often made stable through the work of particular powerful actors, but can then be able to disperse or realign through contestation, shifting power relations or new contexts.

Beyond engaging in a renewed debate between “slums of hope” and “slums of despair”, and beyond addressing challenges related to overgeneralization and fragmentation, the thesis engages with a broad range of research on slums and aspires to overcome several dualities that may limit a more accurate representation and understanding of slums.

Research on slums can be broadly divided into two categories: those that examine and

engage with the large structures of society that are thought to cause slums through recurrent patterned arrangements, and those that are more concerned with the cultural forms and dynamics of individual or sets of slums. The former category is the oldest, having been initiated with research in Latin America in the 1970s with Gilbert (1970), Ward (1976), Portes (1979) and others working in Asia and Africa. This branch of research tapered out in the early 1990s as the large structures became more interesting to study rather than the physical slums themselves. Recently, however, these types of studies have become more prevalent with the rise of political economy (Harvey 1978), and in relation to globalization (Mahadevia, 2005), neoliberalism (Weinstein, 2008), housing policy (Burra, 2005), rights (Zérah, 2007), the evolving role of NGOs (Ramanath, 2005), and others. The second category of research on slums largely derives from postmodern sensibilities attuned to forms of identity and the politics inherent in slums, but certainly has older antecedents such as Pearlman (1979). Contemporary studies address gender (Sen, 2006; 2007; Saigal, 2008), caste (Ayyar and Khandare, 2007), ethnicity (Gruber et al. 2005), community (Chatterji, 2005), and violence (Gupte, 2008), among other topics. Within these subsections of research on slums the thesis addresses several gaps such as the assemblage of local organizational components of participatory water provision services in Mumbai, the role muscle gangs play in a slum assemblage, and the spatial morphology of slums.

While the above certainly does not represent an exhaustive survey of slum research, and while there is a broad spectrum of overlap between the two approaches to the study of slums, it is illustrative of a general tendency for research to focus on either micro or macro concerns or ontological divisions between structure and agency. Here, assemblage theory mitigates against these dualities. The slum assemblage under study is used as an analytic entry point to a set of sociospatial processes such as the production of land, the construction of hutments, the delivery of essential services and the performance of societal regulation. These processes are understood to take place through functional networks that are enacted in practice. These networks are not only made up of people, but also tools (like architecture and infrastructure), natural elements (like marshes and tidal movements), and expressive elements (like policy and legislation). These networks are not conceived of as flat, isolated, or stagnant. Rather, networks form a cluster that are joined at multiple nodes much like the shape of a rhizome: from which the name of this type of network derives: rhizomatic. A

nodal element in one network may thus enable that network, and constrain or enable the functions of other networks as well.

Understanding a slum as a dynamic multidimensional network out of which emerge desired outcomes, rather than perceiving it a resultant formation of agenic groupings of society on the one hand or the effect of large overarching structures on the other, in fact bridges these two opposing perspectives. The network consists of actors that perform enabling or constraining actions affecting other actors, the sum of which constitutes the network. This perspective connects both overarching structures, such as government legislation allowing limited water access to certain squatter settlements in Mumbai, to small micro-movements of power, such as the hand that opens the valve of the local distribution network. In this way, the perspective I adopt in this dissertation attempts to bridge dualities of micro and macro, structure and agency, and human and non-human by identifying associations between multiple heterogeneous actors and networks. In so doing, I provide a more representative and holistic account of micro level movements and flows in association with macro level structures in a dynamic and complex system.

1.4 Hypothesis, research questions and methodological considerations

Despite inequalities and injustices actualized through semi autonomous processes in the settlement, I hypothesize that Ganesh Murthy represents a slum of hope where residents self-organize in creative ways to assemble basic necessities, such as homes and essential services, and create a unified community conducive to life-affirming relationships. To examine this hypothesis, I follow three main lines of inquiry. These are: first, to identify the functional components of the settlement-assemblage and trace their emergence and evolution in time; then, to map the constitutive associations inherent in the ordering of these components in and beyond the settlement; and third, to determine the components constraining and enabling effects on other components in the assemblage. As subsequent chapters demonstrate, taken as a whole my findings both corroborate and challenge my hypothesis.

In the context of existing scholarship concerning slums, the adoption of assemblage theory to addresses these lines of inquiry represents a novel approach. In relation to critical Urban Studies the thesis adds to nascent scholarship of urban assemblages being conducted by

McFarlane (2011a, 2011b, 2011c, 2009), Farias (2010), and Farias and Bender (2010). Assemblage theory is relevant to the intellectual, representational, and political complexities inherent in the proliferation of slums in various ways. Assemblage theory emphasizes thick empirical description on the relationship between history and potential (McFarlane (2011c). A slum assemblage is structured by multiple logics that are bound in social hierarchies that assemble sociomaterials and hold them stable until new assemblies rupture and reassemble them along new trajectories. Slums are a multiplicity of becomings; becoming settlement, becoming livelihoods, becoming formal real estate, becoming constituencies. Assemblage theory examines the emergence of multiple becomings and recognizes the distributed agency inherent in the assembling of slums.

To investigate the aforementioned lines of inquiry the methodological strategy addresses three perspectives from which data will be mined. These are: an historical perspective through which the settlement and its functional components emerged and evolved; an ethnographic political perspective in which local relations of power unfold; and a developmental perspective which stems from outside the settlement, yet plays an important role in the settlement's existence. Therefore, to extract data relevant to the three perspectives I employ both quantitative and qualitative methods. Archival analysis of public records is employed to establish historical data and reveal information that people might be reluctant to discuss. A socioeconomic survey of a representative sample of the settlement identifies networked components of the assemblage and potential interview candidates. The survey also sketches the broad lines of the settlement's socio economic composition and the nature of the built environment. Participant observation is employed to garner information that people may be reluctant to share and to create a network of informants in the settlement. Semi-structured interviews are performed to derive in-depth information from residents of Ganesh Murthy about functional components of the settlement assemblage and allow for comparisons across interviews. Informal conversational interviews are undertaken with residents to add detail to information gleaned from semi-structured interviews (particularly about illegal matters), and with non-residents including urban planners, politicians, real estate developers, and others to acquire a wide range of perspectives on various issues. Finally, various mapping techniques are employed to record and convey information about the built environment. The wide variety of

methodologies are chosen to triangulate the veracity of information and to compound their relative strengths while minimizing their respective weaknesses.

1.5 Chapter contents

The dissertation is divided into nine chapters including the introduction and conclusion. Following the introduction are the conceptual framework and methodology chapters. The former chapter lays out the intellectual perspective through which data is assembled and analysed. Basic ideas of space and society are considered before examining the tripartite Deleuzoguattarian ontology consisting of the virtual, intensive and actual realms of reality. The perspective advanced by Delueze and Guattari is based on ideals about emergence and organization gleaned from complexity theories, but applied to social science scenarios with political underpinnings. The chapter also treats at length the notion of assemblage and other useful concepts for understanding Ganesh Murthy Nagar. The methodology chapter describes the various data-collecting techniques I employ in the field as described above, including methodological considerations specific to network-oriented social studies. This is a reflective chapter that records the various successes and failures I encountered in gathering data, and addresses ethical considerations, and challenges encountered with language and translation.

Following the methodology chapter is a context chapter based on primary and secondary sources. The context chapter historically establishes the potential for land as a leading virtual attractor that shapes the Mumbai's form and the political economy of urban planning. Out of the desire for land, and the enabling and constraining associations that came thereof, several important patterns of behaviour are apparent, including the reclamation of land from the sea, the close connections between government and private real estate developers, and the consolidation of power over development in the state government. Out of this dynamic system emerged the Back Bay Reclamation Scheme, which reclaimed land in South Mumbai on and off for 150 years, such that its ultimately unfinished form attracted the first settlers to the nascent Ganesh Murthy.

Following the contextual chapter are four chapters based on original data collection. Chapter V focuses on the social and spatial makeup of the settlement by charting its emergence and growth from a temporary camp for construction workers in the 1970s to its

present day manifestation as home to over 10,000 people. The chapter examines various intensive generative processes contributing to informal land reclamation and housing construction. These processes are examined for their resilient, adaptive and redundant qualities that have contributed to a fluid sense of space adaptable to changes in the dynamic system.

Chapter VI investigates the historical emergence and consolidation of the settlement's four main water municipal distribution systems. Government policies intent on engaging community participation are understood to have triggered the first formally organized social consistencies in the settlement. Together with political associations and working with the state's porous bureaucracy, Ganesh Murthy's water networks changed the State-design water distribution structure in kind and captured the potential of water. The emergent socio-space within which the distributors operate is characterized as nomadic, moving in between and beyond residents of the settlement and the State apparatus, where both social strata are engaged but also kept at a distance. While the nomadic practices of the networks have been successful in procuring more water they also demonstrate unjust, disruptive and sometimes violent behaviour in leveraging their power, which ultimately fragments and weakens the settlement's society as a whole.

Chapter VII builds upon the previous chapter by investigating other municipal services in the settlement as well as various social consistencies that interact with service provision. Sewer creation and administration, alley paving, waste management services, and toilet block management have all come under the power of CBOs that were initiated to administer water distribution. Alongside these infrastructure-based organizations are various social consistencies, including muscle gangs that enable and constrain various functional components of the settlement. Over the 40-year history of the settlement power over services have become consolidated in the hands of a few CBO conglomerates that ultimately leave little opportunity for new social consistencies to form and challenge their unjust and inequitable practices.

Chapter VIII investigates the effects of Mumbai's Slum Rehabilitation Scheme on Ganesh Murthy Nagar. Since 1995, when the SRS was created, at least ten real estate developers have operated in the settlement. The chapter focuses on one such developer and the

processes it engaged with to enrol multiple government actors and fend off competing developers intent on redeveloping the site. Amidst the scramble of developers to capture the settlement, residents are caught in the violent, unjust, and fearful crossfire triggered by legislation ostensibly designed to improve their lives.

The conclusion consolidates the narrative of Ganesh Murthy, which emerged from failed plans to reclaim land from the sea and evolved through the remarkable efforts of slum dwellers in semi-autonomous processes of self-organization. To this end, I first reflect on the outcome of the research, which both corroborates and challenges my original hypothesis. Finally, my key findings are summarized and I explore their implications for policies affecting slums.

Chapter II

Conceptual Framework: The Settlement as an Assemblage of Component Parts

2.1 Introduction

This thesis examines the emergence, organization, and socio-spatial morphology of a squatter settlement called Ganesh Murthy Nagar in Mumbai, India. Specifically, I analyse the ordering of self-organized groups, the systems they control within the settlement, and their associations with political and developmental processes outside the settlement. In so doing, I employ a conceptual framework based on the work of Gilles Deleuze and Felix Guattari, that considers the squatter settlement as an ever-shifting assemblage of component parts. The employment of this conceptual framework signals the necessity of acknowledging the open and relational character of space, the heterogeneous character of society, and the recognition of the role of desire and power in micro level movements and flows in association with macro level structures.

This chapter first locates the thesis in the academic discipline of Urban Studies (2.2) with emphasis on the critical nature of the investigation and demonstrates how assemblage thinking may contribute to current debates about cities and the possibility of producing more socially just, equitable, and sustainable relations. The second section (2.3) delves into the particulars of Deleuzoguattarian assemblages by describing the ontological precepts of the system. The final section explains various elements of assemblage theory (2.4) that are utilized by the thesis including is political disposition (2.4.1), the State apparatus and the nomadic war machine (2.4.2), the roles of components as content and expression (2.4.3), the material processes these roles play in terms of territorialisation and deterritorialization (2.4.4), and finally the expressive processes components engage with in terms of coding and decoding (2.4.5.).

2.2 Critical Urban Studies

Broadly speaking, this dissertation is concerned with the interface between space and society. In academia, space is traditionally treated under the purview of geographical scholarship, while notions of society have been explored to the fullest in the discipline of Sociology. This study, however, investigates space and society within both a narrower context of the city and a broader landscape that includes political associations, policy frameworks, economic necessities, technical infrastructural networks, and the roles various actors play in enabling a slum as a functional residential enclave. With so many

disciplinary strands coming together, the study is truly interdisciplinary. As such, while the thesis could theoretically be performed under the auspices of any number of academic disciplines, it is Urban Studies that is the most appropriate. This is because Urban Studies demonstrates an overarching trajectory towards space and society and is a catchall for a diverse array of approaches to study cities and thus accommodates many disciplinary threads.

Within Urban Studies the thesis pursues a trajectory attendant to critical urban thought. Rather than approaching the city as a resultant formation derived from laws of social organization, economic efficiency, and bureaucratic rationality, critical urban theory understands the city as a medium and site of on going historically specific relations of power between various social groups that are politically and ideologically mediated (Brenner, 2009). The city thus regarded is subject to potential transformations, and critical urban thought not only evaluates current forms of knowledge and sociospatial relations but also offers alternative formations towards a more democratic, just, and sustainable city.

Critical theory emerged from Enlightenment antecedents of critical approaches to our understanding of the universe and our position within it. The term “critical theory” was introduced by Max Horkheimer (1982 [1937]) as an alternative to positivistic notions of social science and bourgeois philosophy. The notion of self-perpetuating, but not inevitable, forms of knowledge was pursued by other members of the Frankfurt School including Theodor Adorno, Walter Benjamin, Herbert Marcuse, and later Jürgen Habermas. However, it was Karl Marx’s sustained critique of political economy in the 19th century that initiated critical inquiry in the social sciences (Brenner, 2009; Postone, 1993). Brenner (2009) identifies three important contributions Marx made to critical theory by first; exposing forms of power and unequal relations that are concomitant with social relations under capitalism, second; that these sociopolitical formations are on going and emergent, and third; that critique offered theoretical and practice based modes to explore and create alternatives to capitalism. These contributions are prominent in the urban Marxist accounts that started in the 1970s in the work of several leading critical urban theorists such as David Harvey, Manuel Castells, and Henri Lefebvre.

The Deleuzian strain of assemblage thinking I employ in the thesis, as McFarlane (2011a), Tampio (2009), and Bonata and Protevi (2004) have argued, is politically oriented and thus broadly applicable to the goals of critical urban theory. This is so not only because of Deleuze's left-leaning political views, affiliations, and aspirations, but because of the character of the Deleuzian assemblage. At its most basic, this assemblage refers to a constellation of heterogeneous components and their reciprocal relations that are gathered into a functioning system. The roles that components play are based both on their inherent properties and their potential capacities through relations with other components. No central authority a priori dominates an assemblage, but reciprocal relations between components with various properties and their emergent capacities can lead to hierarchical structures and profoundly uneven relations. The creation, evolution, and dissolution of relations between various parts in an assemblage are inherently political processes as they pertain to the enabling and constraining of action. Thus, assemblage thinking is broadly applicable to the project of critical urban studies and the following section details particulars of Deleuzian assemblage theory and how it may contribute to current debates in critical urban theory.

2.2.1 Assemblage in South Asia and globally

My use of assemblage theory stems from the work of Gilles Deleuze (1994 [1968], 1992) and his work with Guattari (1980 [1988]). Deleuzoguattarian assemblages emerged in a European context in response to structuralist currents of thought, which broadly posit that human cultures may be understood in relation to overarching systems or "structures" that determine individual cultural elements but are distinct from observable reality. In contrast, assemblage theory hypothesizes that the relations between individual actors (including non-human actors) constitute material-semiotic networks from which reality emerges through the performance of individual roles in the network. While some aspects of assemblage theory have gained currency in the social sciences, such as a move towards material heterogeneity and practice (Delanda, 2009 [2006]), the theory's acceptance in Urban Studies continues to be keenly contested. An assessment of assemblage theory and its applicability to critical urban studies follows in the next section, but first I would like to address the appropriateness of adopting a European-based theoretical perspective in the contexts of a South Asian field study and in the changing functionality of global cities.

Increasingly, calls are being voiced in Urban Studies to base theory in more locally appropriate contexts (Varley, 2010; McFarlane, 2008; Roy, 2005; Dear, 2002). Indeed, as urban sociologist Douglas Massey (2001, as referenced in Roy, 2005: 147) points out, the growth of cities in developing nations is re-orienting Urban Studies from the Chicago and Los Angeles schools to Rio de Janeiro, Mumbai, and Hong Kong. The most pressing urban concerns are emerging in developing countries, and it is only reasonable to assume that paying attention to the transformations occurring in these cities can yield important and novel insights into how they function. The problem is, as Robinson (2002) demonstrates, western “global cities” (understood as command centres for global capitalism) are often held out as exemplars for Third World “megacities” (which are understood in terms of crisis).

Rather than analysing Mumbai as a Third World city in need of Western solutions to various problems, I follow the scholars above in my desire to learn from a slum settlement in Mumbai to understand how self organization can produce land, housing, infrastructure and community. Assemblage theory, as examined in detail below, is predicated on the idea of self-organization and is thus highly germane to the overall aim of the thesis. Moreover, the robust empirical commitment to observe micro-forms of power and movement inherent to assemblage theory is marshalled to narrowly focus on the ground-level reality of the study site. This micro-level observational methodology may not only produce novel insights, but can also guard against the projection of outside values to a degree (the following chapter discusses this at greater length). The empirical commitment inherent to assemblage theory calls for an open inquiry into potentially complex processes that may defy pre-defined social groupings and their relationships. As Farias (2011: 367) says, “inquiring into the urban involves recognizing that we, urban students, often confront radically uncertain situations in which we don’t know what we are looking for until we find it.” The empirical commitment into exploratory research is a major component in the employment of assemblage theory in this thesis. Finally, in the absence of robust indigenous theories that endeavour to explain self-organizational processes that engage both social and spatial elements, assemblage theory provides a full-bodied conceptual framework for addressing the concerns of the thesis.

Alternative theories that were considered for the framework, such as political economy and urban informality (especially in its postcolonial formulations: e.g. Varley, 2010; Roy and AlSayyad, 2004), have been deployed successfully in, respectively, identifying uneven sociospatial relations, and addressing processes that occur outside the strictures of the State, both of which are important to this study. Concurrently, however, these theories exhibit certain limitations towards the stated aims of the thesis. Political economy is generally oriented towards overarching structures that affect the actions of individuals, and this focus, while being valuable in other contexts, may not address the micro forms of power that are at the heart of this study. Urban informality, as an organizing logic governing urban processes (Roy and AlSayyad, 2004), may consider micro-forms of power but may also reduce complex processes and ignore the heterogeneity of phenomena (Sindzingre, 2006). Further, while urban informality has moved beyond dualistic notions of the informal and formal (Roy and AlSayyad, 2004), studies have generally generated limited theoretical insight into how formal and informal phenomena may interact and affect each other.⁴ Assemblage theory, by contrast, does theorize how the mixing of these two types of processes (in terms of State and nomadic tendencies) can affect one another. These theoretical insights, once applied to urban processes, may contribute to expanding the theoretical reach of urban informality. Contrarily, the use of nomadic and State tendencies (to be explained at length below) in the thesis to understand processes in Mumbai may appear forced at times in an urban context where informality is the rule. In the final analysis, all systems of thought have their limitations, and despite the origin of assemblage theory among Western thinkers, its use to observe and analyse the micro movements of heterogeneous actors may reveal hitherto overlooked aspects of reality that can inform indigenous theoretical models as well as the understanding of slum settlements already generated by other conceptual perspectives.

Beyond South Asia, the study takes place in the context of contemporary efforts to address the complexity and fluid character of cities within global networks. Assemblage theories have been recently marshalled in attempts to circumvent an “urban impasse” (Thrift, 1993)

⁴ I am speaking here on a purely theoretical level. Studies such as Roy’s (2009) work on urban planning in India have yielded important insights into how informal processes have been integrated into the planning apparatus.

that challenge more traditional ways of understanding urban change and struggle due to the increasing complexity, interconnectedness, and changing parameters of what constitutes the urban. Lefebvre's (2003 [1970]) claim that urbanism is no longer limited to spatial constructs delimited by large-scale urban regions, but as a process occurs on a planetary scale, appears prescient forty years after his formulation. To approach the multi-scalar and slippery concept of the contemporary city what is called for is an historically oriented formulation of critical social theory informed by changing possibilities for critiques of post-Fordist and post-Keynesian capitalism resulting from,

geoeconomic restructuring, market-driven regulatory change (including both privatization and liberalization), the worldwide flexibilization/informalization of labour, mass migration, environmental degradation, global warming, the creative destruction of large-scale territorial landscapes and the intensification of polarization, inequality, marginalization, dispossession and social conflict at all spatial scales (Brenner *et al.*, 2011: 226. See also Brenner, 2009; Harvey 2005; Albriton *et al.*, 2001; Postone, 1999, 1993).

Thus, the process of urbanization includes, but also extends beyond, growing metropolises and their suburban residential enclaves to include sociospatial transformation of smaller and less dense human settlements that are increasingly connected to city centres around the world through infrastructure networks, settlement patterns, investment patterns, and land-use patterns. The choice of assemblage theory in this context is an attempt to conduct a rigorous empirical study on the micro-level performances of individual actors, and doing so in a fashion that may help to position these micro-movements in the context of evolving global socio, cultural, political, spatial and economic links.

2.2.2 Assemblage as a new foundation for Urban Studies?

As the above discussion indicates, the use of assemblage theory is not necessarily straightforward. Moreover, there is no one dogmatic conception of the theory, and its precepts and applicability to critical urban studies continues to be hotly contested. A recent debate in the journal *City* (2011, volume 15, issues 2-6) focusing on the applicability of assemblage thinking to critical urban studies provides the most current academic articles published on the subject. The critical issue at stake is the potential value of assemblage theory ontology to critical urban studies, which, as noted above, is informed by Marxist economic determinism and political economy.

The ontology informing assemblage theory posits reality as flat, with every phenomena being only a thing in itself and performing some role along a functional network together with other performing actors. As such, assemblage theory rejects the political economy notions that power is a resource deployed by a ruling class, and knowledge is an ideological construct that needs to be unmasked (Farias, 2011). Rather, assemblage theory is radically relational, positing that power and knowledge emerge from relational links between actors in a performative chain.

Brenner, Madden, and Wachsmuth (2011), who argue against the applicability of assemblage ontologies to critical urban studies in City, do assert the value of assemblage theory's empirical focus and inquiry into heterogeneous actors. Here (Brenner *et al.*, 2011: 231), assemblage functions within an overall political economy framework such as a "political economy of urban assemblages" and "assemblage as a methodological extension of urban political economy." However, they stop short of endorsing assemblage theory ontology for not placing enough attention on context, which may lead to "naïve objectivism." Specifically, they (2011: 234) argue, "it is essential to consider the political-economic structures and institutions in which they [whatever materials are at issue] are embedded." Farias (2011: 366), in his response to Brenner *et al.* (2011), counters that conceptual frameworks like political economy promote a naïve objectivism because they do not inquire into the ground-level nature of urban reality but instead claim privileged access to "real facts, structures and contradictions of urban life."

Farias mounts a strong defence of assemblage theory ontology along these oppositional lines but there nonetheless remain questions about the ability of assemblage theory to account for the "context of contexts" as advanced by Brenner *et al.* (2011). Addressing the wider context of a phenomenon is theoretically possible with assemblage theory, but because this means investigating the interactions of each actor involved in the various processes that contribute to the phenomenon there are cases where this is practically impossible. To wit, as I investigated the local networks that enable the squatter settlement's infrastructure, there emerged historical and contemporary ties to municipal, state, national and international actors, and investigating all of these links rigorously proved to be logistically impossible. A further challenge would be trying to represent these links and the

breadth of networks in their entirety. Thus, one challenge I faced in employing assemblage theory became a question of where to draw the investigative line. If reality is indeed ontologically flat, with actors connected together in sprawling functional chains of action, judging what is and what is not important to the performative chain is not necessarily a straightforward process. In response to these challenges I moved away from the polemical view advanced by Farias and adopted a position akin to McFarlane's (2011a: 204), wherein "assemblage... [is not] an outright contrast to the complex and varied history of debates on critical urbanism, including urban political economy, capital accumulation, inequality, and so on."

For example, McFarlane (2011a) invokes a cosmopolitan "imaginary" that emerges between the play of extensive reality and virtual possibility, which is sympathetic to the goals of critical urbanism in general and broadly similar to Herbert Marcuse's (1968) dialectical approach and Lefebvre's (1991) notion of "spaces of representation," or "thirdspace" as Soja (1996) calls it, where complex ideas and symbolisations occur from the synthesis of "spatial practices" and "representations of space." There are also other overlapping concerns between dialectical and assemblage thinking, which point to potential synergies. For example, David Harvey (2009) draws explicit connections between assemblage and Marx's "method of moments," where "moment" represents an intertwining of components to produce spatial arrangements. For Harvey (2009: 244), dialectical thinking embraces "coevolving ecological moments within what Lefebvre would call an 'ensemble' or Deleuze an 'assemblage' of interactive processes" (as quoted in McFarlane, 2011a: 211).

Picking up, thus, on the mixing of heterogeneous ontologies, I have attempted to use insights from political economy and other conceptual frameworks to better explain certain processes, which could not be rigorously investigated due to logistical challenges. As McFarlane (2011c: 11) states, cities as assemblages are historically patterned through such forces as "legacies of colonialism and political economic investment and disinvestment, the exploitative work of the state in relations with predatory capital seeking land, or the work of imperial institutions like the World Bank or the IMF." Acknowledging the verity of this statement, for the purposes of this thesis where processes in urban governance, political

patronage, and multilateral aid agreements, for example, play important if not paramount roles in the phenomenon under investigation, I relied on concepts from various conceptual perspectives to explain processes without engaging in the rigorous empirical investigation that assemblage methodology demands. This “black boxing” of certain processes demands a measure of ontological promiscuity, but the point here is not to pit modes of understanding and interpreting reality against one another, but to explore important phenomena as much as possible within whatever confines and limitations that are present.

Assemblage thinking displays an openness towards accommodating the multi-scalar and slippery notions of urban processes and may thus contribute to alternative intellectual, representational, and political formulations to address the contemporary urban impasse. Its inherently political character makes it a viable platform to contribute to on going debates in the field of critical urban studies with a focus on identifying inequalities and injustices along a trajectory to produce a more democratic, just, and sustainable city. Towards this end I employ assemblage thinking not in an effort to displace political economy but to marshal a set of descriptive, analytical, methodological, and ontological orientations to formulate alternative understandings and solutions and thus add to insights already generated by traditional critical urban studies. The idea is not to proliferate existing distinctions between the micro and the macro, particular sites and wider contexts, and structure and agency, but to collapse these distinctions as much as logistically possible and empirically demonstrate how associations across time and space combine to form emergent relations that enable and constrain action, and to use this understanding as a basis for political thought and action (McFarlane, 2011c; Latour, 2005; Law, 2004).

2.2.3 Assemblage urbanism

Assemblage theory brings a set of descriptive, analytical, methodological, and ontological orientations that can contribute to furthering the goals of critical urban studies and engage with political economy in formulating novel intellectual, representational, and political responses to the contemporary urban impasse. Assemblage theory is increasingly used in the social sciences as a relational framework to refer to a broad array of issues including; processes of gathering, holding together, dispersion, and reassembling; evolving and emergent social dynamics; and distributed agency through social and material elements.

There is no one dogmatic conception of assemblage thinking and it is employed in various ways in critical urban theory. First, assemblage thinking is used as a descriptive lens of how things are assembled and transformed (Fariás and Bender, 2009; McFarlane, 2008b; Swyngedouw, 2006; 2004; Gandy, 2005;). Thick empirical description may discover unexpected novelties in urban processes and in this way identify new possibilities for more just formations, rather than relying on assumptions of structurally causal relationships. Thus, for McFarlane (2011c) fine-grained description of the historical processes that lead to inequality and the potential for these processes to be otherwise may also contribute to ideas for how inequality may be contested and altered. In the context of slum research in Mumbai, fine-grained empirical description has the potential to expand our knowledge into the ground-level reality of slum dwellers that very often seems to take a back seat to the overarching processes that are thought to cause the ground-level reality. Recently, calls to this affect have come from various researchers studying women's lived experience in slums (Sen, 2006; 2007; Saigal, 2008), water infrastructure (Zerah, 2008), and toilet blocks in slums (McFarlane, 2008) for example. The same can be said for a number of issues that this thesis contributes to including: the experience of Mumbai's slum dwellers in terms of housing policy (O'Hare *et al.* 1998; Patel *et al.* 2003; Mukhija, 2001; 2003), community organization (Bhide, 2009; Khandare, 2008), and vote bank politics (Benjamin, 2008; Edelman and Mitra, 2007).

Second, assemblage thinking is used as an idea or analytic of relations between objects that make up our world. This conception can decentre the city as an object (Fariás, 2009) and place emphasis instead on the interaction of multiple consistencies and flows such as between social groupings and technical networks for example (Graham and Marvin, 2001). In this thesis the notion of "slum" is decentred and deconstructed into the identification of functional component parts and their interactions. Assemblage here, thus goes beyond investigation into one component of a slum (for example: gangs (Weinstein, 2008), NGOs (Ramanath, 2005, Desai and Preston, 2000), infrastructure (Zerah, 2008)) to understand how various components may come to affect one another.

Third, assemblage thinking is employed as a methodological orientation to objects as a way of thinking through the social, political, and economic processes involved in

composition with a focus on “practice, materiality and emergence” (McFarlane, 2011b, see also 2011a). Finally, the ontological assumptions employed by assemblage thinking reconfigure traditional assumptions about space and society.

The city can no longer be understood as a spatially delimited region as it was by Marxist approaches, which treat space as discretely bounded regional entities divided into local, regional, national, and global categories (Smith, 2003a). As Massey (2005) argues, such interpretations of space have traditionally had difficulty in accounting for the significance of space by understanding it in terms of closures and partitions. Instead, I follow several contemporary theorists (e.g. Smith, 2003b; Amin and Thrift, 2002; Sassen, 2000) in understanding the city as an open system composed of movements and flows of matter and energy through interconnected networks. However, these networks are not conceived as being two-dimensional and stagnant, but rather as *rhizomatic* inter-weavings in topological space. The term rhizomatic stems from its biological referent, a rhizome, as a type of rootstalk from which roots and shoots issue forth from nodes. Deleuze and Guattari’s use of the term describes a non-hierarchical system with multiple inputs and outputs derived from a plethora of ambiguous connections that defy representations of linear causality. Rhizomatic systems may be contrasted with arboreal systems that rely on dualist categories and binary choices. A rhizome has no point of origin, but is always in *medias res*, and issues forth nomadically like a body of water that exploits fissures or gaps to spread out and occupy available space.

The notion of topological space is derived from mathematical models that facilitate definitions of connectedness, convergence, and continuity. Michel Serres, in conversation with Bruno Latour (1995: 60) gives an explanation of what topological space could be:

If you take a handkerchief and spread it out in order to iron it, you can see in it certain fixed distances and proximities. If you sketch a circle in one area, you can mark out nearby points and measure far-off distances. Then take the same handkerchief and crumple it by putting it in your pocket. The two distant points are now suddenly close, even superimposed. If, further, you tear it in certain places, two points that were close can become very distant. This science of nearness and rifts is called topology, while the science of stable and well-defined distances is called metrical geometry.

To investigate extensive topological space requires understanding the emergence and evolution of territories from the ground level perspective of practices that engage in spatial formation, rather than solely from macro-level spatial mechanics (Amin, 2007). This is a

relational approach to space that emphasizes the agency of local spatial practices (Massey, 2005).

The city thus regarded is an open and non-linear system that is subject to the circulation of movements along a spectrum of local to global connections like economic flows, cultural influences, communications and transportation networks, the flux of humans, animals and plant life, and populated by virtual political spheres in the form of international organizations (Amin, 2007)⁵. As such, processes and tendencies associated with globalization circulate through many of the city's networks, shaping space, policy, demographics, economic circuits, and social practices. These multiple flows push and pull the city from states of equilibrium to states *far from equilibrium*, and back again. This movement is characteristic of non-linear systems, "in which there are strong mutual interactions (or feedback) between components" (Delanda, 1997: 14). The set of practices that analyse non-linear systems, whether non-organic, organic, or social, are known variously as complexity theory, and it is complexity theory on which Deleuze based his theory of assemblage starting with *Repetition and Difference* in 1968.

In terms of ontological assumptions about society, traditional understandings posits a separation or irreconcilable difference between humans and other components making up our extensive reality. However, I follow the call of Deleuze and Guattari, and others such as Latour (2005), Law (2004), Delanda (2002), and Haraway (1991a) to challenge this notion that the social is the exclusive domain of humans. Instead, this thesis understands the social as a set of associations that connects humans, natural actors and forces, objects, and expressive elements in their construction of space and society. For example, our use of tools is a defining feature of the human species and as such cannot be considered as separate from the social (Latour, 1993; Deleuze, 1988). Humans and their tools are not only situated in, but affect and are affected by the natural environment, which includes natural forces and animals, (Margulis, 1988) in a "symbiosphere" (Amin and Thrift, 2002 [2009]: 78). Finally, expressive elements like discourse, knowledge, legislation and institutions play an ordering and generative role in human societies by constraining and enabling

⁵ I follow Bonata and Protevi, 2004; Allen, 1997; and Delanda, 1997 in understanding the city as a non-linear system.

relations of power (Foucault, 1979, 1978). As such, the city must be understood as composed of heterogeneous sociomaterials that are interconnected in an open and integrated system. Understanding the city as a sociomaterial system that is open to global and other flows of material and energy has the potential to better represent contemporary urban processes and can thus contribute to critical urban debates about thinking and acting in political ways towards more just and sustainable cities.

2.3 Deleuzoguattarian ontology

The ontology of Deleuze and Guattari is process-oriented and, in conjunction with the overall aim of their philosophical project, is directed towards individuation; that is, understanding entities as singular individuals (Deleuze, 1993; 1956). Deleuze approaches the problematic of individuation differently from systems of universal knowledge (e.g. Aristotle's essences) where individuals are not knowable as such, but become intelligible only through a set of abstract common predicates. Representational thought similarly apprehends the individual through a series of rational classifications moving from the most general categorizations to the more specific. The problem with these systems of universal knowledge and representation is that beings are reduced to concepts – that which is intelligible through rational categorization – while the individual, as such, remains unintelligible (Deleuze, 1968).

To properly apprehend an individuated entity Deleuze reverses the traditional metaphysical relationship between identity and difference where difference is a product of identity. In actuality, no two things are ever truly the same and thus identity is an effect of difference. As Deleuze (1956, 32) says:

If philosophy has a positive and direct relation to things, it is only insofar as philosophy claims to grasp the thing itself, according to what it is, in its difference from everything it is not, in other words, in its internal difference.

However, in establishing difference as a generative concept, Deleuze's ontology must avoid locating that which precedes individuation as another form of identity, or the classical understanding of difference, which is itself based on identity.

To account for the generation of individuals without recourse to identity Deleuze posits a tripartite ontological system consisting of the virtual, the intensive, and the actual. As such,

individuated or stabilized entities/systems in the actual realm stem from a multiplicity of *immanent* potentialities in the virtual realm, which are individuated through intensive processes. Being, thus understood, maintains univocity (i.e. that the virtual, intensive, and actual are all real), and is not only productive of reality, but creative in the sense that the actual is novel: the individuated result of a unique set of conditions. The following sections examine the tripartite ontology.

2.3.1 The Virtual

The virtual is a realm of pure potentialities and thus a real, but not extensive, multiplicity of differences. In a sense, it works as a mechanism to allow Deleuze to claim that difference precedes identity. The virtual does not stem from computer-generated “virtual reality,” but from Proust’s conception of constancy in the present and the past: that which is “real without being actual, ideal without being abstract” (Proust as quoted in Deleuze, 1968: 28). In terms of its application to social systems, the virtual may be thought of as the near infinite potentiality given within a concrete system.

The virtual realm is a *multiplicity*. That is, it is composed of a number of dimensions, but is not subject to an extrinsic ordering dimension (Delanda, 2002). Thus, ordering is an emergent property of the dynamical system, rather than being something imposed from outside. Multiplicities function in a non-metric space that is immanent to physical space by defining spontaneous tendencies for intensive processes to generate organization, which result in physical space. Importantly, this means that virtual multiplicities are independent of the processes that order metric space. For example, Delanda (2002) describes two different thermodynamic processes, which lead to a crystalline shape in salt and the spherical shape of a soap bubble. Despite the processes being different, what they share in common is a movement towards energy minimalization: and it is at this level of abstraction that the virtual realm operates. While this level of reality may be apprehended in a laboratory or through mathematical modelling, in a social setting the complexity of the system overwhelms any current investigative mechanism (Delanda, 2006).

Therefore, although we cannot formally investigate the virtual realm because of the inherent complexity of a social system, it can be apprehended in social terms as local

tendencies that create spaces of potentiality, and in this way influence the behaviour of a system (Srniczek, 2007). As such, social, political, economic, and other contexts must be taken into account when analysing how Ganesh Murthy emerged as a functional system to focus the behaviour of the urban milieu. These contextual factors are vast, and include elements such as the influx of migrants, availability of land, materials, jobs, policy frameworks, and other social, economic and political processes as well. The point is to identify tendencies in the system that allow not for infinite possibility but for more narrowly defined probability.

2.3.2 The Intensive

The intensive realm takes its cue from virtual probabilities by translating from the virtual to the actual, but it is also always determined by extensive reality. The individuation of entities is accomplished through intensive morphogenetic processes that generate convergences and divergences in the system. That is, a system, such as Ganesh Murthy, both acquires detail through the congealing of component parts, and moves in one direction rather than another through discontinuous transitions as it unfolds in time (Delanda, 2002).

Intensive processes may be generative and produce *consistencies* through repetitive processes that are motivated by desire in the presence of *attractors*. These consistencies are “networks of bodies that preserve the heterogeneity of the members even while enabling systematic emergent behaviour” (Bonata and Protevi, 2004: 15). An attractor must be thought of along two lines. First, an attractor exists in the virtual realm (where it is technically called a *singularity*) as a potential; such as the potential for land, the potential for a home, the potential for water. In the intensive realm, an attractor, as it gains consistency through repeated acts motivated by the presence of the *singularity*, may be thought of as an emergent pattern of behaviour. Examples of consistencies in the social register include non-formalized aggregates like gangs, bands, and movements. The first settlers of Ganesh Murthy are considered to have formed a consistency brought about by the intensive processes of moving to the settlement in conjunction with constructing shelter. Consistencies do not impose order on socio-materials, rather they are self-ordering and may thus generate novel situations and structures. Intensive processes are identified as linked rates of change between processes. For example, the rate of immigrants coming to the

nascent settlement is linked to the production of land, which is linked to the production of hutments. The rate of change in the population may also be linked to the procuring of services, which may be linked to other intensive processes.

As consistency emerges, or as Deleuze (1994: 190) phrases it, during the “condensation of singularities,” the system concurrently experiences discontinuous transitions from one increasingly stable state to another. At critical thresholds the system changes in kind – a *becoming* (Bonata and Protevi, 2004: 15) – and through this process individuation emerges. However, the intensive state is far from equilibrium, with various forces pushing and pulling elements of the system towards different sets of attractors. As such, it is extremely sensitive to its environment and a slight change can send the system off in another, unexpected direction, which is called a *bifurcation* or *line of flight*. Following a line of flight, new *lines of ordering* usually re-configures consistencies. However, an *absolute line of flight* can also occur, such as a complete demolition of the settlement, which would send the multiplicity back to the virtual realm of potentials, and thus the creation of a whole new set of attractors and bifurcations (Bonata and Protevi, 2004).

2.3.3 The Actual

The actual is the realm of reality that has reached some state of equilibrium, and thus has extensive properties in metric space. It follows from processes of individuation through the realms of the virtual and singularity-attractors, and the intensive realm of consistencies and bifurcations. It is also the realm of stabilized identities that act in the intensive realm and shape potentials in the virtual realm. Deleuze and Guattari (1980) refer to the actual as the “system of the *strata*.”

Strata are dominating systems where one body is put to work by another in a fixed hierarchy. Thus, strata include individual humans, land, and hutments, where components are organized in a hierarchical system. Strata also refer to more explicitly political systems of power and desire, such as hierarchical systems for delivering infrastructural services in a slum. The implication is that a certain order has been instilled into the component parts of the object – the roof of the hutment supported by the walls, or the pumps supplying water to the pipes of the water network. Although strata are considered to be at equilibrium, it is important to note that an individual or social system is always subject to change given that

they never exist in isolation, but are always connected and open to other actors, networks, and other attractors. Stabilized strata are tangible manifestations of the self-organization inherent in the slum assemblage as it functions to establish equilibrium between various forces. Keeping this in mind, it is important to stress the historical becoming of various strata from consistencies, and the unfolding of alliances and divisions as sociospatial structures are made to cohere. The following section specifies how this may function by examining various facets of the concept of assemblage.

2.4 Assemblage

2.4.1 Politics

An assemblage refers to a constellation of heterogeneous parts and their reciprocal relations that are gathered into a functioning system. The strata of individuals, hutments, and infrastructures, nascent social consistencies, and intensive processes, all constitute components of the slum assemblage. Relations between components are called *relations of exteriority* (DeLanda, 2009) and this denotes a degree of autonomy between components due to their inherent properties, which allows them to be theoretically plugged into and out of various assemblages. However, components are also defined by their potential capacities, which are only realized in association with other components. Various components enable or constrain the potential capacity of those they are associated with. It is these relations of exteriority that allow for emergent relations to form, which “enables focused systematic behaviour through constraining the action of component parts” (Bonata and Protevi, 2004; 32). An assemblage may thus be thought of as a type of machine composed of heterogeneous materials that engage in processes of assembly.

The creation and dissolution of relations between components is an inherently political process, as it pertains to the enabling and constraining of action. Analyzing an assemblage as a political body proceeds along two axes (Bonata and Protevi, 2004). The first is an ethical axis whereby the assemblage is either life affirming, or life destroying. The second axis is structural with strata occupying one pole and consistencies occupying the other. Bonata and Protevi (2004) point out that it is important not to identify the structural ordering of an assemblage with an a priori moral judgment. Stratification is “beneficial in many regards” (Deleuze and Guattari, 1980: 40), and consistencies are not necessarily

ethically praiseworthy. Stratification is necessary if only to provide some stability from which new emergent forms of creativity can arise. Ultimately, these judgments must be made empirically.

2.4.2 The State apparatus and the nomadic war machine

The slum assemblage operates outside the *State apparatus* initially in terms of permissions, plans, and rights. The State operates through functions of interiority, as “sovereignty only reigns over what it is capable of interiorizing, of locally appropriating” (Deleuze and Guattari, 1987: 445). The essential function of the State is thus to capture or appropriate that which is outside it. “The State, in effect, is inseparable from a process of capture of all kinds of flows; of populations, commodities or commerce, money or capital” (Deleuze and Guattari, 1987: 479). To effect capture the State overcodes elements outside it, and stratifies or segments these elements to better control them.

Existing outside the State is the nomadic war machine. Deleuze and Guattari's notion of nomadism derives from cross-cultural references to nomadic peoples from multidisciplinary perspectives such as mythology, anthropology, literature, and history of sciences. The term refers to that which is unfixed, ambulatory, peripatetic, wandering and in a relatively constant state of motion. Nomadism may also be associated with that which is Other (Bogue, 2010). Nomads have an affinity with the line of flight, which manifests in the collapse of segmentation and the flourishing of creativity, because “it is along lines of technological flight that they invent new weapons to oppose those of the state” (Patton, 1984: 66). Nomadism is thus associated with the *war-machine*, a term which generally denotes that which is outside the State, or Other to it. “In every respect, the war-machine is of another species, another nature, another origin than the State apparatus” (Deleuze and Guattari, 1987: 436). Through creative lines of flight the nomadic war machine wages violence against the State to maintain an existence outside of it. The State itself, also articulates a structural violence against nomadism through juridical, regulatory, capture, and penal institutions. Deleuze and Guattari, through the writings of Carl von Clausewitz, assert that absolute war as a pure idea is without a political dimension, intending only the destruction of the enemy. As such it is outside of the State, which seeks to capture and interiorize it. Rather than following strict taxonomic definitions of nomadism, however,

Deleuze and Guattari utilize the term along with “State apparatus” to articulate contrasting tendencies and practices of mobility and stasis that manifest in different forms and which have different inherent logics.

The terms nomadism and State apparatus are real tendencies, but only manifest in mixtures. Nomadic relationships with the State involve "complex relations of dependence, resistance, and accommodation with contiguous states" (Bogue, 2010: 174). Nomadic society may not be organized around hierarchical class distinctions, although the centralization of power in a nomadic society increases in proportion to their interactions with the State. Inversely, State societies that interact with nomadic tribes are found to exhibit nomadic tendencies and trajectories. As Bogue (2010: 175) says, “the peripatetic populations that roam state societies and escape their regulation are functional components of those societies, not extrinsic exceptions to their control.”

Foremost of nomadic traits is its relationship to space due to its ambulatory existence. However, beyond mere motion, which is shared by migrants and itinerants, what is paramount is the relationship to the space being occupied, which is focused on the journey across space itself, rather than the destination. Nomadic space is deterritorialized, not because nomads do not have a territory (which they do), but because they distribute being across an open and indefinite space. The model for this notion of nomadic space is derived from pastoral nomads whose flocks occupy a territory to the extent of their capacity as they fluidly spread out over terrain, rather than occupying a territory that is limited by discreet borders. The relationship to space is open-ended without enclosures, fluidly composed of movement and rest. This is *smooth space*, as opposed to State-associated *striated space* which is measured, oriented, and divided, and has paths from one enclosure to another. Smooth space is rhizomatic: directionless but characterized by a multiplicity of local directions. "Striated space closes a surface, divides it up at determinate intervals, establishes breaks, whereas a smooth space involves distribution across a surface, by frequency or along paths (Deleuze and Guattari, 1987: 600). Nomads have an active relationship to smooth space, not only inhabiting it, but creating it through the war machine: "The nomad makes the desert no less than he [sic] is made by it" and the war-machine is "the constitutive element of smooth space, of the occupation of such a space,

displacement on it and the corresponding composition of groups of men [sic]: this is its sole, true positive objective (i.e. nomos). To increase the desert..." (Deleuze and Guattari, 1987: 473 and 519).

Historically, the State apparatus in Mumbai addressed nomadic slum assemblages along absolute lines of flight toward eradication. However, in the early 1970s, the State adopted measures meant to reterritorialize slums: to overcode their existing identities outside of the State and stabilize order through processes of stratification. These measures included codifying certain slums as “notified” and operationalizing limited rights of existence. Later, measures were created to provide formal infrastructure to slums, and later still policies were adopted to redevelop slums into formally managed and constructed communities. While the State apparatus plays a large role in attempts to order the nomadic slum assemblage, it is important to note that other components of the slum may engage in ordering processes. In order to elaborate, consolidate, and concretize ideas of ordering, the following sections will describe the roles component parts of an assemblage may play, as well as elaborating on the idea of territorialization and coding.

2.4.3 Content and expression

The variable roles a component part may play in an assemblage range between the poles of content and expression, which refer to degrees of materiality. Taking the slum assemblage as an example, content would refer to the geographical location of the slum, natural resources like the sea or the mangrove forest, elements of the built environment like hutments and infrastructure, and the human bodies that inhabit the space. Expressive roles encompass written and spoken communication like a notice posted advising of an impending demolition, or the way someone from Uttar Pradesh speaks Hindi. However, expressive roles go beyond linguistic signs to include expressions communicated by bodily actions, the manner in which something is uttered, and modes of behaviour. Examples of these might be the mocking of or cheering for a politician, or certain regional gesticulations.

The roles a component play are variable and may be material and/or expressive depending on what capacities of the component are being exercised. For example, a water network functioning in a slum not only supplies water, a material role, but acts expressively,

communicating the identity of the politician that funded the network for example, and the power of the local administrator who operates the network. It is important to note that expressive roles not only carry meaning, but act in an assemblage as well, thus putting them on an ontological par with material roles.

2.4.4 Territorialization and deterritorialization

Material roles of component parts may engage in processes that territorialize or deterritorialize, and this dimension is considered the “driving mechanism within assemblages” (Legg, 2009: 238). These concepts respectively refer to processes that increase or decrease the material identity, stability, and homogeneity of a system. Thus, territorialization and deterritorialization may apply to consistencies, assemblages, and strata. Any one of these that is recognized as having a discreet identity, must have some degree of territorialization. Further, lines of ordering and striated space are related to territorialization, while lines of flight and smooth space are associated with deterritorialization.

As Delanda (2006) suggests, territorialization has literal and metaphorical dimensions. Territorialization must be literally understood as the creation or sharpening of spatial boundaries of actual territories. The creation of national, state, or municipal borders is an example of literal territorialization, while the dissolution or smudging of borders deterritorializes identity. Territorialization may also refer to non-spatial processes that increase the internal homogeneity of an assemblage. Sorting and segregation processes territorialize by respectively classifying individuals and creating group identities or memberships, and increasing ethnic or racial homogeneity. As Delanda (2006: 13) demonstrates, communication devices, such as the postal service, mobile phones, or the internet play a deterritorializing role by blurring the boundaries of regional space by negating the need for co-presence. However, it must also be noted that these same devices may territorialize a network space, stabilizing relations across interpersonal networks.

2.4.5 Coding and decoding

Whereas territorialization and deterritorialization are operationalized by the material roles of component parts, coding and decoding pertain to the expressive dimension of

components and similarly stabilize or destabilize a system. Coding and decoding are realized through two special expressive media, genes and language, however, only the latter is germane to this thesis. Further, the thesis will draw mainly upon written communication because the materiality of the expression facilitates analysis. Coding is encountered often in processes of stabilization and destabilization of various systems operating in the settlement. First, the settlement itself is coded and overcoded in various instances by governmental agencies in attempts to reterritorialize the assemblage as part of State apparatus. Second, various consistencies within the settlement also become codified in law to facilitate certain pragmatic functions, such as infrastructure provision. Consistencies and strata in the settlement may attempt to overcode competing operational strata to deterritorialize these systems and reterritorialize them under their own identity.

2.5 Conclusion

Analysing Ganesh Murthy Nagar as a slum assemblage requires an understanding of the city as an open non-linear system, where movements and flows of energy and material contribute to the virtual potentialities from which the settlement becomes individuated and actualized through intensive processes. Rural to urban migration, acknowledgment of cities as economic drivers, and uneven economic distribution are all examples of well-researched macro-level flows that continue to effect the development of slums. However, this thesis, in adopting an assemblage approach, seeks to understand how and why particular sets of sociomaterial actors emerge and combine to produce inequitable and unjust sociospatial relations and further, how these relations may be reconfigured. This requires not only an investigation of macro-level flows and structures, but also ground-level empirical and ethnographic analysis of the micro movements and flows of desire and power that translate and actualize macro-level forces in the settlement. The next chapter details the methodological strategies and tools the thesis employs to this end.

Chapter III

Methodologies

3.1 Introduction

Based on an empirical case study, this thesis aims to understand how inequalities and injustice emerge and continue to evolve in Ganesh Murthy Nagar by examining the emergence, organization, and socio-spatial morphology of the settlement. The objectives of the investigative portion of the thesis are threefold: to identify the functional components of the settlement-assemblage and trace their emergence and evolution in time; to map the constitutive associations inherent in the ordering of these components in and beyond the settlement; and to determine the component's constraining and enabling effects on other components in the assemblage. These three investigative objectives contribute to the politically oriented analytical objective of the thesis, which is to understand how unjust and inequitable relations in the settlement emerged and evolved through autonomous and semi-autonomous processes, and how these relations may be reordered. As such, the methods for collecting data must address three domains in which relevant data exists: there is an historical domain through which the settlement and its functional components emerged and evolved; an ethnographic and micro political domain in which local relations of power unfold; and a macro political and developmental perspective with connections to forces originating outside the settlement. The methods described in this chapter are thus chosen to collect data from these three domains and to triangulate information to establish its veracity.

Before elaborating upon the specific methodologies employed in the investigation, a justification for the choice of study site is put forward along with a description of its location (3.2). This is followed by a discussion of methodological particularities germane to the conceptual framework adopted by the thesis (3.3), which feeds into the duration of the field research and the identification of a key informant (3.4). The remainder of the chapter examines specific methodologies employed to prove the accuracy of the hypothesis, namely that Ganesh Murthy is a slum of hope where self-organization yielded basic necessities and produced life-affirming relationships between residents (3.5). The methodologies include: archival research (3.5.1), a socioeconomic survey (3.5.2), semi-structured interviews (3.5.3), informal conversational interviews (3.5.4), mapping techniques (3.5.5) participant observation (3.5.6), and a discussion on triangulation of methods (3.5.7). Following the

elaboration of each methodology, which includes its sample design and questions pursued, is an assessment of ethical considerations and a discussion of the importance of recognizing my positionality in the field (3.6). The chapter concludes with a brief examination of the inherent pitfalls of relying on a translator while doing cross-cultural research and mechanisms adopted to mitigate against these difficulties (3.7).

3.2 Criteria and location of study site.

Ganesh Murthy Nagar was chosen as the field site for this research for three main reasons. Its population of roughly 11,000 people is amenable to be studied by one individual. By contrast, many larger slums in the city, like Dharavi with 1.5 million people, pose logistical difficulties for study. Secondly, the settlement is roughly 40 years old, which allows for the possibility of interviewing original settlers of the community to establish oral histories and the tracing of substantial historical trajectories. Finally, because of the age of the settlement, its relative stability due in part to its location on state land⁶, and the continuing growth of the settlement, the historical evolution of the settlement is apparent in the built environment, giving access to fundamental emergent processes such as land reclamation, incremental building techniques, and infrastructure development.

Ganesh Murthy Nagar is located according to several spatial overlays. It is politically situated at Civic Survey Number 658 of municipal Ward ‘A’ of Mumbai (Figure 3.1). Historically, it is situated in Block VI of the Back Bay Reclamation Scheme (Figure 3.2). Geographically, it is located at the south western tip of Mumbai’s peninsula and is surrounded by a military base known as Navy Nagar to the South, and a proposed helipad, a luxury condominium construction site, a Brihanmumbai Electrical Supply and Transportation company (BEST) bus station, and two other squatter settlements to the North. To the East of the settlement lies a road named Prakesh Pethe Marg, while a marsh bordering the Arabian Sea lies to the settlement’s West (Figure 3.3). The roughly 5.4 hectares of land on which the settlement lies, is owned by the state government (TARU-WEDC, 2006), and is colloquially divided into four sections, Parts I, II, III, and III Backside.

⁶ Historically and presently slums located on state land are more apt to be protected from demolition as compared to slums located on land owned by the municipal or national governments. This is further explained in Chapter V.

Figure 3.1 Map of Mumbai showing wards and position of Ganesh Murthy Nagar
Source: Google Maps and author

Figure 3.2 1967 Development Plan
Source: Brihanmumbai Municipal Corporation

Figure 3.3 Map of Ganesh Murthy and surrounding area
Source: Google Maps and author

3.3 Methodological considerations

Analysing the settlement as an assemblage posits the existence of functional components that constrain and enable other components from which the settlement and social and material organization emerges. As demonstrated in Chapter II, these components may be understood as networks of actors that perform associations. Yet, tracing these networks and their associations with other networks may pose difficulties. Some networks are stratified systems that are relatively easy to identify, but investigating the associations between constituent actors may be difficult due to a process of *punctualization*, where actors and the performance of their associations become hidden from view. Other networks of the assemblage may be mere consistencies, and thus less territorialized, less apparent, and less readily identifiable. Still other networks may once have existed but have subsequently become subsumed in other networks or have followed an absolute line of flight, and thus once again difficult to identify and investigate.

To aid in the identification and investigation of various component parts throughout the settlement's historical trajectory I draw upon methodologies developed by practitioners of actor network theory (ANT). Actor network theory evolved from science studies and follows a material-semiotic method, making its methodological application germane to this study. According to Bruno Latour (2005, 31-34), one of the founders of ANT, various functional systems may leave traces of their existence and Latour lists four such traces. Networks, whether in the form of strata or consistencies, or those no longer having a form, may have spokespersons that speak on behalf of the group. This may be the 'recruiting officer,' but it may also simply be a talkative person. The spokesperson may define the present grouping and describe its past and present form, as well as its potential trajectories into the future. Second, for every network there are, at least in theory, *anti-networks*, where the boundaries of one network are defined in relation to others that negate the possibility of the first system's co-existence. This leads to a third trace that refers to the forming and stabilization of definitional boundaries. The network's spokespeople are actively engaged in continuing to define the group, whether through invoking anti-systems, law, tradition, or other means. Finally, academics, researchers, journalists and other people who nominally stand outside the network record traces of network formation and their developing characteristics, which may in itself, contribute to the existence of the network.

Following the identification of networks and aiding in their investigation is Latour's (2005, 12) maxim "to follow the actors themselves." This phrase has both structural and interpretive meanings. Actors are connected in the network through their associations and following the actor implies that one actor will lead to another. It is imperative to follow the chain of actors to create an accurate representation of the network: "just follow the trails myopically," muses Latour (2005, 176). The interpretive meaning of "following the actor" refers to allowing the actor to define their reality without, as much as possible, superimposing meaning onto their worldview (Latour, 2005, 23). Actors may be fully aware of their performance in the network, and the functioning of the system as a whole. Further, they have their own ideas of what constitutes the system's network, or anti-network. This is essential information. As Latour (2005, 32) says, "actors are always engaged in the business of mapping the 'social context' in which they are placed, thus offering the analyst a full-blooded theory of what sort of sociology they should be treated

with.” This realization implies that it is methodologically important to keep preconceived hypotheses and categorizations flexible, and ultimately changeable, to reflect the various realities encountered in the field. The actor must be permitted to interpret reality for themselves rather than having it dictated.

Finally, investigating the historical emergence of networks and their patterns of development demands a broad range of methodological tools. Not only does the network need to be analyzed historically but this needs to be done in reference to other local systems and relevant contextual factors. This requires to the greatest extent possible a broad historical knowledge and especially a focused understanding of the history of the immediate region.

3.4 Duration of study and key informant

Fieldwork for this thesis was carried out in two parts. Commencing in February 2008 I spent three months in Mumbai choosing a suitable field site for the study, collecting initial data, and forming a hypothesis to guide the study. After having visited many slums in Mumbai throughout February I identified Ganesh Murthy Nagar as a potential site and began building relationships there. After an initial and brief foray into the settlement to explore the nature of the built environment I returned to the site the following day and engaged several people in conversation, before befriending a twenty-something male who agreed to guide me through the settlement. As I was leaving Ganesh Murthy, I was stopped by another young man who had witnessed my conversations and warned me that my guide was a petty criminal and not to be trusted. At the time, I could only start to imagine the complexity of networked connections that had brought this young man to speak out against my guide, but this charismatic youth who spoke fluent English somehow reassured me that he could better introduce me to the settlement with fewer strings attached. Recalling Latour’s maxim, I made the decision to follow the actor and agreed to the youth’s overture to meet the next day and like that, a two-year working relationship with my key informant commenced. During the remaining two months of this first stage of fieldwork I built other relationships with residents of the settlement, and through one of these relationships acquired a map of the settlement, which I later learned had been produced by a developer intent on redeveloping the site. This was a key asset in the investigation around which the

socioeconomic survey and mapping exercises were planned. During this phase of research I also collected archival data consisting mainly of newspaper articles of slums in Mumbai in general and of Ganesh Murthy in particular to better understand the context in which slums operated in the city.

The relationships I had built during the first phase of research contributed greatly to the success of collecting local data during the second phase, which took place between September 2009 and February 2010. I had maintained contact with my key informant throughout my absence in Mumbai and upon my return he was prepared to help me conduct the socioeconomic survey, participate in various mapping exercises, and establish more relationships towards observation and interview techniques as described in the following section.

3.5 Methodology

My research draws upon a combination of methods to both triangulate, and therefore crosscheck findings (Bryman, 2008), and to generate a holistic account of the situated and multi-dimensional nature of the settlement assemblage and networked components under study (Bassett and Zuéli, 2003; Zimmerer and Bassett, 2003). The methods I employ are archival analysis, socioeconomic survey techniques, semi-structured interviews, open-ended interviews, participant observation, and mapping techniques.

3.5.1 Archival analysis

3.5.1.1 Definition

Archival analysis is a form of observation where the researcher examines documents or archives of a society. The information can take many forms such as broad and shallow information in the case of lists, or richly detailed and profound information in the form of diaries or novels. Archival research can present a window onto an historically distant reality, and is thus a valuable method for historiographically-oriented studies. Further, archival analysis can reveal information that people would prefer not to talk about.

3.5.1.2 Sampling design and lines of investigation

Archival research was carried out in both the first and second phases of the study. During the first phase of the study I combed through forty years of Mumbai newspaper articles at a

clipping service in Colaba, near Ganesh Murthy, and at the Times of India to identify articles that had been written about slums in the city. The search broadly focused on functional aspects of slums and their connections with actors outside the settlement such as mafia organizations, politicians, and municipal employees. I also collected all articles that pertained to land development and local slums in Ward A. These searches yielded important information about issues, politicians and slumlords associated with Ganesh Murthy Nagar, which helped focus later ethnographic research. Newspaper articles also provided information pertaining to the Back Bay Reclamation Scheme (BBRS), an important land development project, and the local developmental context surrounding Ganesh Murthy Nagar. Information on these topics led to additional archival research conducted during phase II of the research project at Mumbai University, the Chhatrapati Shivaji Maharaj Vastu Sangrahalaya (formerly known as the Prince of Wales Museum of Western India), the Maharashtra State Archives located at Elphinstone College, the Asiatic Society of Mumbai, and a non governmental organization (NGO) called Partners for Urban Knowledge, Action and Resources (PUKAR). A file documenting a pertinent court case pertaining to the BBRS was provided by a former Municipal Councillor in Ward A.

During the second phase of research, after having identified significant components of the assemblage to investigate further, archival analysis was conducted in the Ward A municipal offices at the Water Department, and at the Slum Rehabilitation Authority located in Bandra. The Water Department archives provided valuable, although incomplete, insight into the processes of procuring water for the settlement, as well as important historical documentation about Ganesh Murthy's formation. The Water Department archive is organized according to specific Community Based Organizations (CBO) operating in slums, so particular information about each water network operating in the settlement was available. The Water Department also holds records of each network's water usage, which is theoretically counted four times a year. The Slum Rehabilitation Authority provided access to two of three files created to document the potential redevelopment of Ganesh Murthy, as submitted by particular private developers. A third file, which had been submitted to the authority, was not located. Fortunately, the developer associated with the file in question (Plymouth Constructions Pvt. Ltd.), was able to supply a large file documenting their efforts to redevelop the site.

Information about the development of toilet blocks at Ganesh Murthy Nagar was acquired through archival research at the Society for the Preservation of Area Resource Centres (SPARC) and at several municipal offices. The latter also provided historical Development Plans for the city including maps. Additional maps were acquired at the Town and Country Planning Division of the Mumbai Metropolitan Regional Development Authority (MMRDA). Historical information concerning the settlement in the 1970s was acquired at the Collector's office (the department charged with managing state lands) in Ward A. Information related to social and demographic census data was acquired at the Tata Institute of Social Sciences. The Urban Development Department, in their offices at Mantrale, provided documentation of specific changes to the Development Plan relevant to Ganesh Murthy Nagar. The Metropolitan Rail Transportation Project (MRTP), located in Bandra, provided archival material related to plans to build a railcar shed where the settlement sits. Finally, a file documenting recent activities pertaining to the development of luxury condominiums and the BEST bus station located adjacent to the settlement were obtained from an NGO called Ghar Bacha Ghar Banao Andolan.

3.5.2 Socio-economic survey

3.5.2.1 Definitions⁷

Survey research entails collecting data from multiple cases synchronically to produce a collection of quantifiable data with several variables that can be examined to detect patterns between them. Data may be collected either through structured interviews, which involve an interviewer asking interviewees the same questions in the same order aided by an interview schedule, or through self completion questionnaires. The *sample*, or segment of the population to be investigated, may be selected randomly (*a probability sample*) or not (*a non-probability sample*). A randomly chosen sample has a better chance of being representative of the entire population because each segment of the population has a chance to be chosen. A *representative sample* may thus be considered a microcosm of the population, notwithstanding the possibilities of *sampling bias* (a distortion in representation when segments of the population stand little, if no chance of being selected for inclusion in

⁷ The following definitions are derived from Bryman, 2008.

the sample) and *sampling error* (errors deriving from a difference in the sample and the population).

3.5.2.2 Sampling design

Surveys were conducted throughout the entire territory of Ganesh Murthy Nagar. Probability samples were generated entailing the random selection of one household followed by an interval of a discrete number of households (Bryman, 2008). Every tenth household was interviewed, thus creating a 10% sample of the population of households.

3.5.1.3 Questions

The survey was composed of a small set of visual observations and a set twenty open-ended and closed-ended questions. Open-ended questions facilitated quick responses and open-ended questions allowed for answers that more exactly represent the opinion of the interviewee (David and Sutton, 2004). The aim of the survey was fourfold. The primary goal of the survey was to identify networks that contribute to important components of the settlement assemblage. Questions pertaining to difficulties experienced in and by the settlement's community provided one line of inquiry, while questions pertaining to group participation and communal activity provided another. The former questions revealed that the two major concerns of the population centred on water distribution (with 57 percent of respondents identifying it as the most serious problem) and toilet facilities (with 31 percent of the population identifying it as the most serious problem). The third highest concern the population shared, with 25 percent of the population, revolved around problems related to social friction involving fear, violence, and lack of unity and trust. These areas of concern informed the identification of water, toilets, and muscle gangs as important components of the settlement, which were subsequently followed up upon by other data collecting methods as described below. Questions pertaining to group participation and communal activity revealed the existence of many groups existing in the settlement and contributed to the second goal of the study, which was to identify possible interviewees with connections to relevant functional components in the settlement. All respondents were asked to agree to a follow-up interview. The third goal of the survey was to sketch the broad lines of the settlement's socio-economic composition and identify variables that may contribute to network associations. The survey's questions were thus designed to identify the broad

social and economic living conditions of the inhabitants including regional origins, former places of residence, familial relations in the settlement, and employment information. The final goal of the survey was to create a broad profile of the settlement's built environment. With a map of the settlement on hand I noted the state of the hutment wherein the respondent lived (whether *pucca*, semi-*pucca*, or *kutchha*)⁸ and I noted the number of stories for every hutment in the settlement. I also noted the presence or absence of electrical meters to measure the distribution of informal electricity (which was less than 1 percent of hutments). The socioeconomic survey questionnaire is appended as Appendix A.

3.5.3 Semi-structured interviews

3.5.3.1 Definition

The interview is intended to acquire information that is not easily observed, such as people's understandings, beliefs, feelings, perceptions, and experiences about the reality they inhabit described in their own words (Valentine, 2005; Kitchin and Tate, 2000). Thus, it provides a highly suitable complimentary mode of acquiring information alongside observational techniques. Further, interviews may yield rich and multi-layered contextual information through face-to-face contact (Valentine, 2005; Burgess, 1984). Finally, interviews allow for in-depth examination of a wide-range of subjects that ultimately facilitates the explanation and examination of complex realities as understood by the interviewee (Bryman, 2008; Silverman, 1993).

A semi-structured interview has more flexibility than a structured interview, and less flexibility than an informal conversational interview. That is, the interviewer is aided by an interview guide outlining the questions to be asked, but may ask the questions in whatever order seems best at the time, and may also add questions based on the interviewee's responses (Bryman, 2008; Kitchin and Tate, 2000). Further, a semi-structured interview provides leeway to the interviewee to respond (Bryman, 2008). In general, however, questions are asked with the same wording from one interview to another. Thus, the strength of the semi-structured interview is that it allows for the particularities inherent in

⁸ *Pucca* (from Hindi meaning sophisticated, good quality) refers to more permanent housing, utilizing cement and brick and mortar construction. *Kutchha* (from Hindi meaning crude, imperfect) refers to more temporary housing consisting of a mosaic of materials including wood, plastic and metal objects. Semi-*pucca* refers to housing consisting of a mix of *pucca* and *kutchha* elements.

individual responses, but because the questions are more or less the same, it allows for comparability across interviews (Patton, 2000).

3.5.3.2 Sampling design

Semi-structured interviews were conducted with residents of Ganesh Murthy Nagar initially through *purposive sampling*. Purposive sampling differs from random modes of sampling, which strive to be representative of an entire population, and *convenience sampling*, which is a sample that is simply available by chance (Bryman, 2008). Purposive sampling endeavours to sample strategic choices so that answers will be relevant to the research. Strategic samples were suggested by the socioeconomic survey, which identified respondent membership in a variety of local networks. Initially, relevant networks included those that were stratified, for example, any CBO, or groups defined by political party affiliations or religious denominations. However, this category of “relevant” networks was expanded to include other groupings like muscle gangs. As such, I employed *theoretical sampling*. Theoretical sampling is:

Data gathering driven by concepts derived from the evolving theory and based on the concept of ‘making comparisons’, whose purpose is to go to places, people, or events that will maximize opportunities to discover variations among concepts and to densify categories in terms of their properties and dimensions (Strauss and Corbin, 1998, 201; as quoted in Bryman, 2008, 415).

Thus, theoretical sampling allows for increasing sample populations based on evolving theoretical considerations.

In following Latour’s maxim to follow the network myopically, early purposive and theoretical samples led to *snowball sampling*. Snowball sampling proceeds from the responses of initial interviewees that identify other relevant interviewees (Bryman, 2008). This kind of snowball logic was very important in the identification of relevant actors in tracing specific networks. Additionally, snowball sampling aided in identifying actors belonging to anti-networks and multi-network memberships as well.

3.5.3.3 Questions

The goal of the semi-structured interviews was to both identify social consistencies and strata that contribute to the functioning and organization of Ganesh Murthy, and to elaborate upon these components of the assemblage as well. Because of the range of

networks under investigation and the importance of snowball sampling, the interview sheet represented more of a toolbox, from which I utilized certain lines of inquiry, rather than a list of questions that were posed to every respondent. The interview sheet was divided into nine sections including: questions comparing Ganesh Murthy Nagar to neighbouring settlements and communities, questions concerning relevant threats to the settlement, questions related to the local power geometry, security questions relating to Navy Nagar and the terrorist attacks of 2008, questions related to the settlement's proximity to the sea and legislation regulating the development of coastal areas, questions about the potential redevelopment of Ganesh Murthy Nagar, social questions pertaining to relationships with other residents and the State apparatus, questions about personal associations to groups, and finally, questions about groups themselves. The interview sheet with the specific questions is appended as Appendix B.

3.5.4 Informal conversational interviews

3.5.4.1 Definition

Informal conversational interviews (or unstructured interviews) are interviews without an explicit structure guiding the questions. The interview may be understood as a purposeful conversation (Eyles, 1988), and thus may be guided by an *aide-mémoire* or some mental checklist. Generally, the questions are developed *in-situ* during the course of the interview, and the interviewee is encouraged to discuss issues they feel are pertinent to the general research being performed. Thus, the unstructured interview may be a source of important information that the researcher has not thought to ask, and importantly, it is delivered in ways that reflect the interviewee's own "frame of reference" (Kitchin and Tate, 215).

3.5.4.2 Sampling design

Informal conversational interviews were carried out with two broad categories of people: residents and non-residents of Ganesh Murthy. Unstructured interviews with residents proceeded through convenience samples during chance meetings. Most of these chance meetings occurred after I had been informed of a specific person of interest to the investigation, and happened upon them during my workday in the settlement. Alternatively, there were cases where a connection was formed between a resident and myself where I felt there was potential to uncover information relevant to the organization of the settlement.

The majority of informal conversational interviews were performed with the second category of people in the sample: non-residents of the settlement. This category consisted of purposive and snowball samples. After having identified important components of the settlement assemblage from the survey and semi-structured interviews I pursued the trail of actors in the network outside the settlement. Informal conversational interviews were conducted with five broad categories of people. I interviewed three politicians that had direct connections to the settlement including the two current local Municipal Councillors, and a former Municipal Councillor. Additionally, telephone and email interviews were conducted with former Municipal Councillor Shri Kisan Mehta to glean historical information about the BBRS. Interviews were conducted with municipal employees who had had direct and ongoing associations with the settlement in the capacity of providing essential services. Thus, interviews were conducted with employees at the Water Department in the Ward A offices, and municipal employees in several offices that were associated with furnishing the toilet blocks at the settlement. In following the investigative line of enquiry concerning the status of the land at Ganesh Murthy, I interviewed employees at the local Collector's office, the Director and other employees of the Town and Country Planning Division at the MMRDA, the Director and other employees of the Metropolitan Rail Transportation Project, municipal employees at the Harbour Department, and the former Vice President of the Maharashtra and Housing and Area Development Authority. To pursue the line of inquiry based upon the settlement's potential redevelopment, I interviewed employees at the Slum Rehabilitation Authority, a real estate developer that had submitted a scheme to redevelop a slum adjacent to Ganesh Murthy Nagar, a developer contemporaneously collecting signatures in Ganesh Murthy Nagar to submit a scheme for its redevelopment, and the three developers that had already submitted schemes to the SRA for the redevelopment of Ganesh Murthy Nagar. Interviews were also conducted with local academics studying slums in Mumbai, a lawyer specializing in coastal legislation, journalists reporting on issues pertaining to slums, urban planners working for the municipality and the MMRDA, members of three NGOs concerned with issues directly related to the settlement, and residents of Colaba, including residents from all fourteen slums located in the borough, residents of Cuffe Parade, and residents of Navy Nagar.

3.5.4.3 Questions

The informal interviews ranged widely in subject matter, depending on the expertise and experiences of the interviewee. In interviews with residents the conversations revolved around covert forms of organization, including but not limited to the presence and functions of slumlords, muscle groups, and illegal activities. Interviews with non-residents commenced with questions pertaining to their general knowledge of Ganesh Murthy, and were followed by more penetrating questions about the network or lines of inquiry relevant to their employment. To prepare for informal conversational interviews, I drafted thematic lines of inquiry and specific questions, which I committed to memory or for which I created *aide-mémoires*. Most conversational interviews were recorded in my field notebook during the process and those that were not were immediately recorded there after the interview had terminated.

3.5.5 Mapping techniques

3.5.5.1 Definition

Mapping techniques are a valuable way to explore the spatial dimension of reality, and refer to the creational or methodological aspect of representing the world (Sanderson, 2007). Mapping may reduce the complexity of the phenomena being represented, but may also orchestrate important elements to best convey certain messages. A typology of maps includes: social maps (habitation patterns), resource maps (natural resources), mobility maps (mobility patterns), services and opportunities maps (services and opportunities in the locality), and transect maps (a cross section of an area) (Mikkelsen, 2005).

3.5.5.2 Sampling design and results

Mapping techniques were used to record and convey information about the built environment and to spatially represent important components of the settlement assemblage. A map of the settlement was obtained during phase one of the research (as described above) and this map was later scanned into a computer and reprinted in a smaller format allowing for portability (Figure 3.4). The map was essential in recording the hutments that participated in the socioeconomic survey (Figure 3.5). The original map was created in 1999 by the first real estate developer that had been interested in redeveloping the site, and while conducting the survey I updated the map everyday to achieve a more accurate

representation of the settlement. In this way a map emerged to show new construction, additions, and subtractions that had taken place in the last decade (Figure 3.6). While performing the survey I concurrently noted the number of stories of each hutments, thus producing a topographic representation of the built environment (Figure 5.6). Additionally while conducting the survey, I noted the usage of each building, dividing each structure into residential, business, infrastructural asset, and religious categories and noting the specific use of each of the latter four categories (Figure 5.16). I also sketched two transect maps of the settlement, walking and recording along the north-south axis (Figure 3.7) and the east-west axis (Figure 3.8). Finally, a map was produced to represent visible water distribution infrastructure by following the pipes on the ground and noting the location of standpipes (most pipes in Parts I and II have largely been buried) (Figure 3.9).

The maps were important tools that often played a key role while conducting the research. Immediately, it would not have been possible to navigate the labyrinthine settlement without a map. Correspondingly, the map greatly facilitated conducting the survey by permitting me to record those hutments that had been interviewed, and later facilitated the follow up semi-structured interviews by recording the location of the relevant hutments. I always carried a map of the settlement with me, not only for the purposes of navigation, but also as a tool to be used when conducting interviews to delimit certain spatial or location-based data. The map also had an unforeseen character, which conferred upon me an element of power as few people had seen a map of the settlement before. Thus, I found that it lent a certain legitimacy to my persona while conducting the survey and interviews, and was also a useful tool that I occasionally employed to trigger or advance directed conversational interviews. Due to this power invested in the map I kept it hidden for the most part and used it sparingly.

Figure 3.4 Developers map of Ganesh Murthy Ambedkar Nagar and Rajak Nagar
Source: Plymouth Construction PVT. LTD.

Mangrove forest and sea

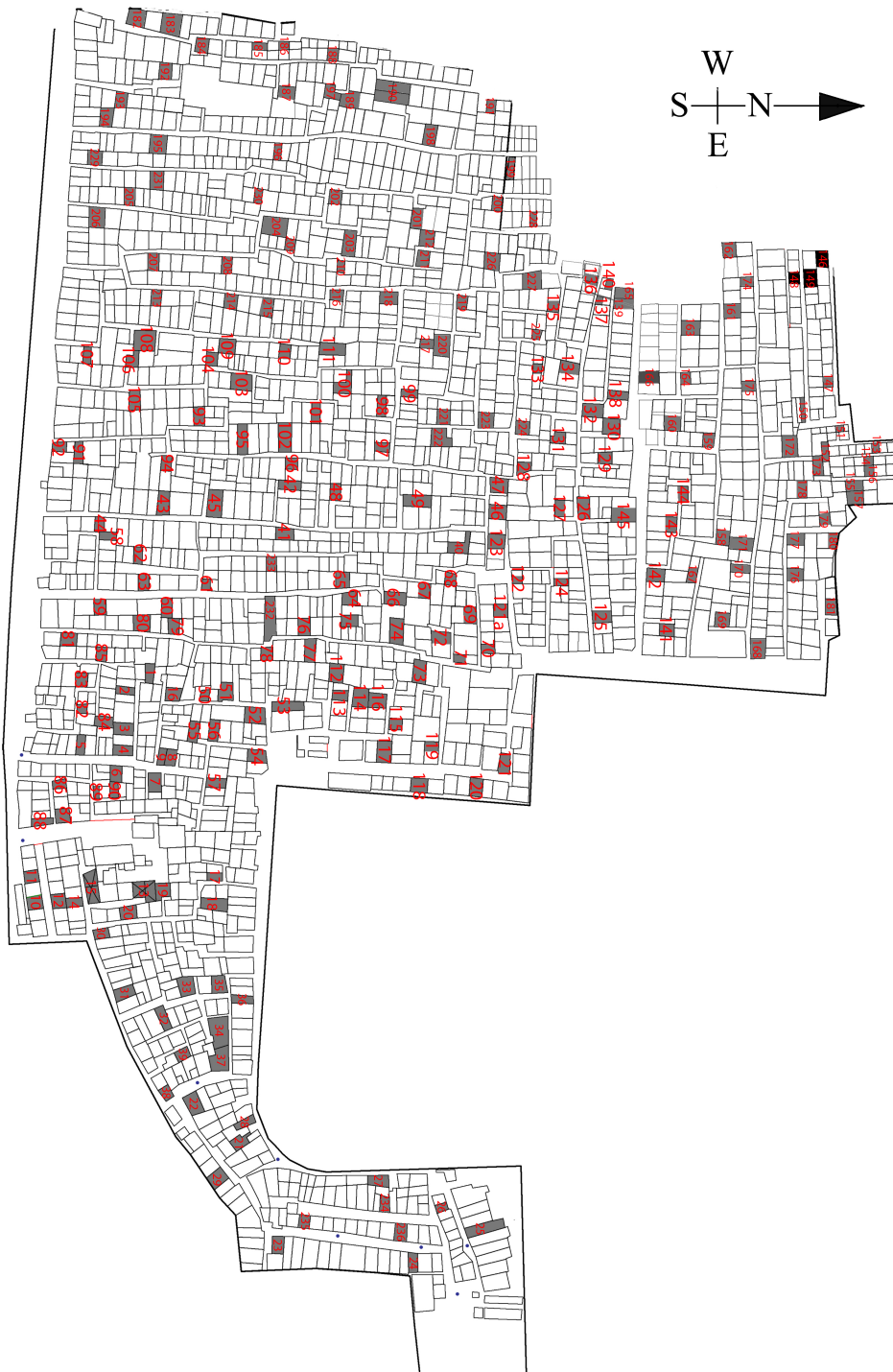


Figure 3.5 Map of Ganesh Murthy indicating hutments surveyed
Source: Author



Figure 3.6 Map indicating changes to the built environment of Ganesh Murthy since 1999
Source: Author

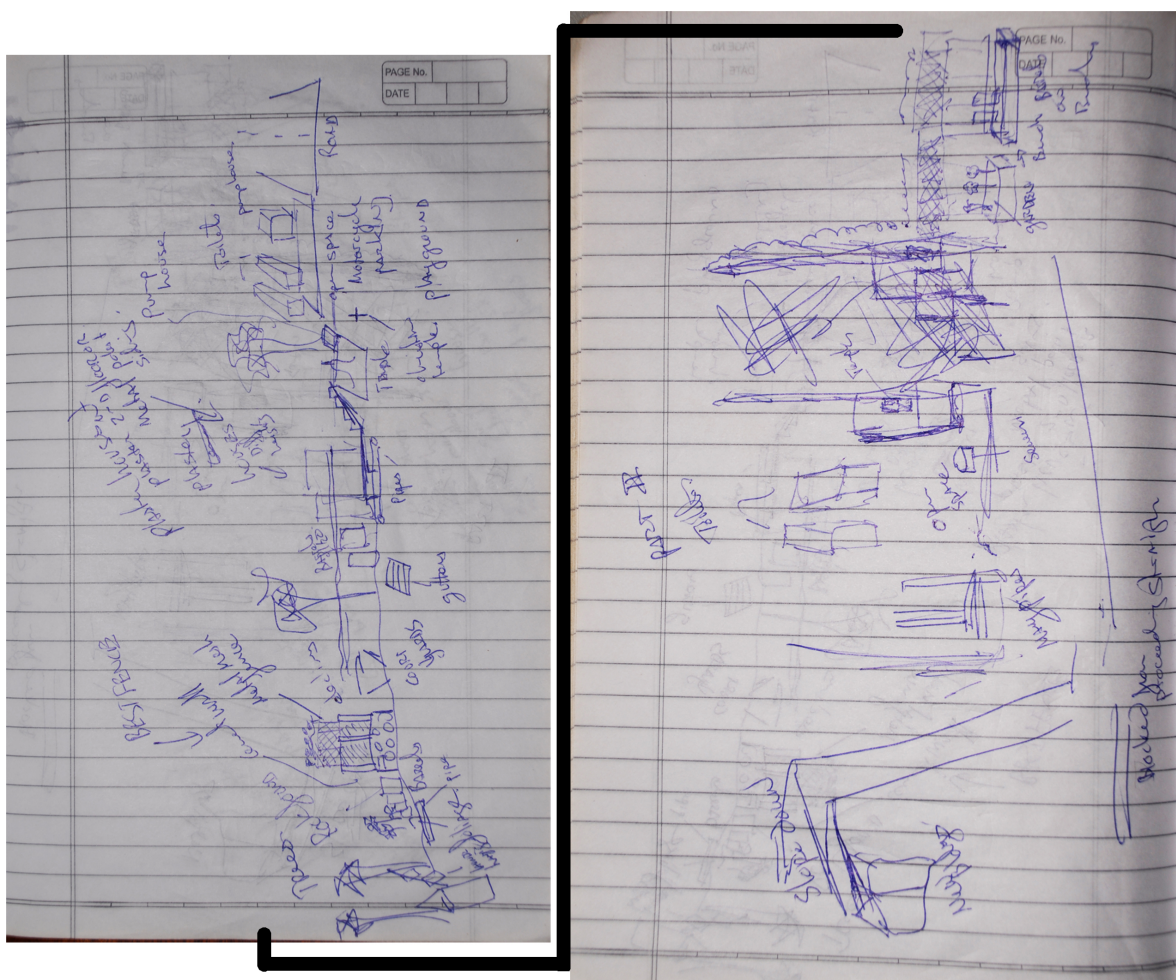


Figure 3.7 North-South map of transect walk
Source: Author

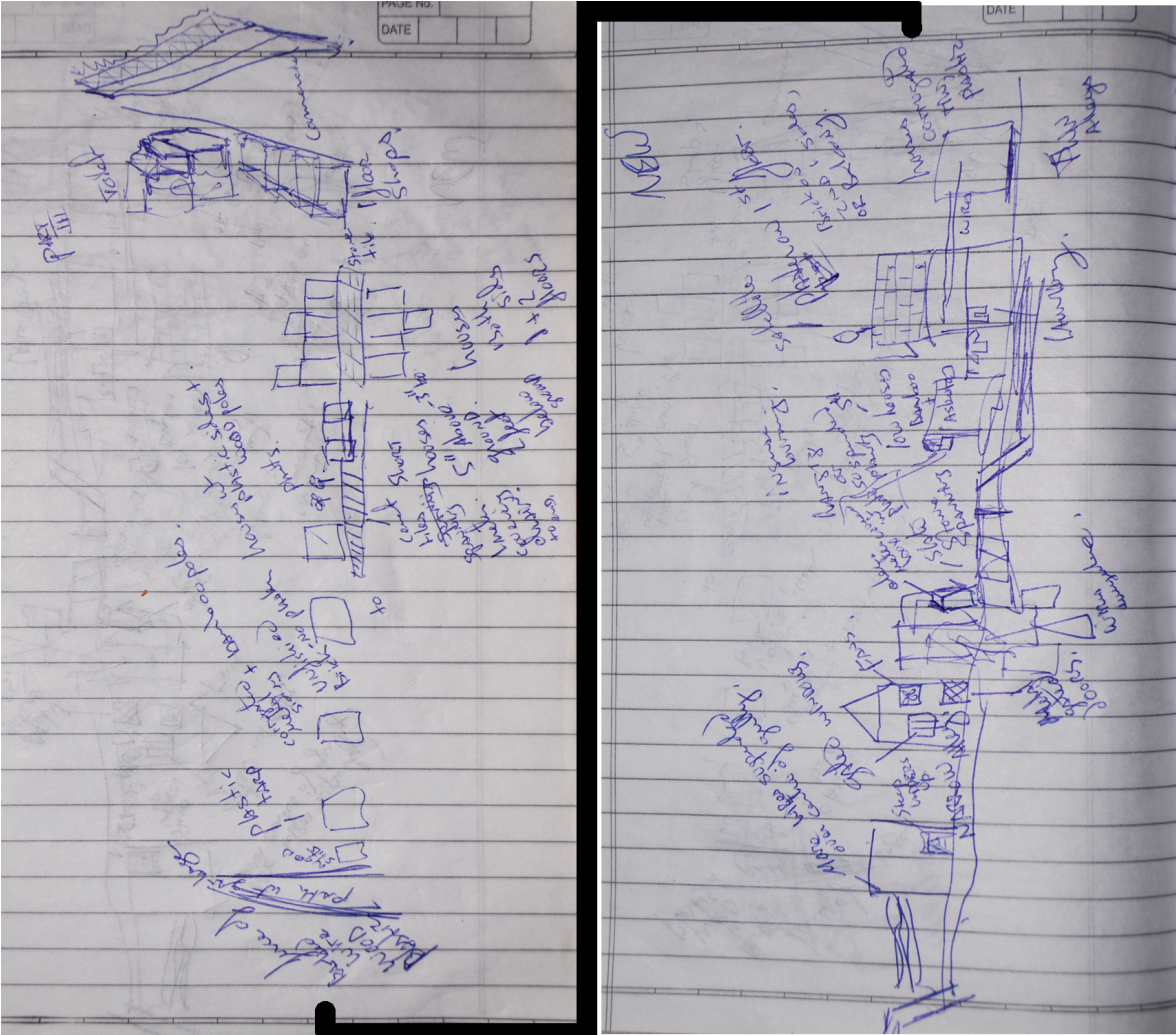


Figure 3.8 East-West transect map
Source: Author

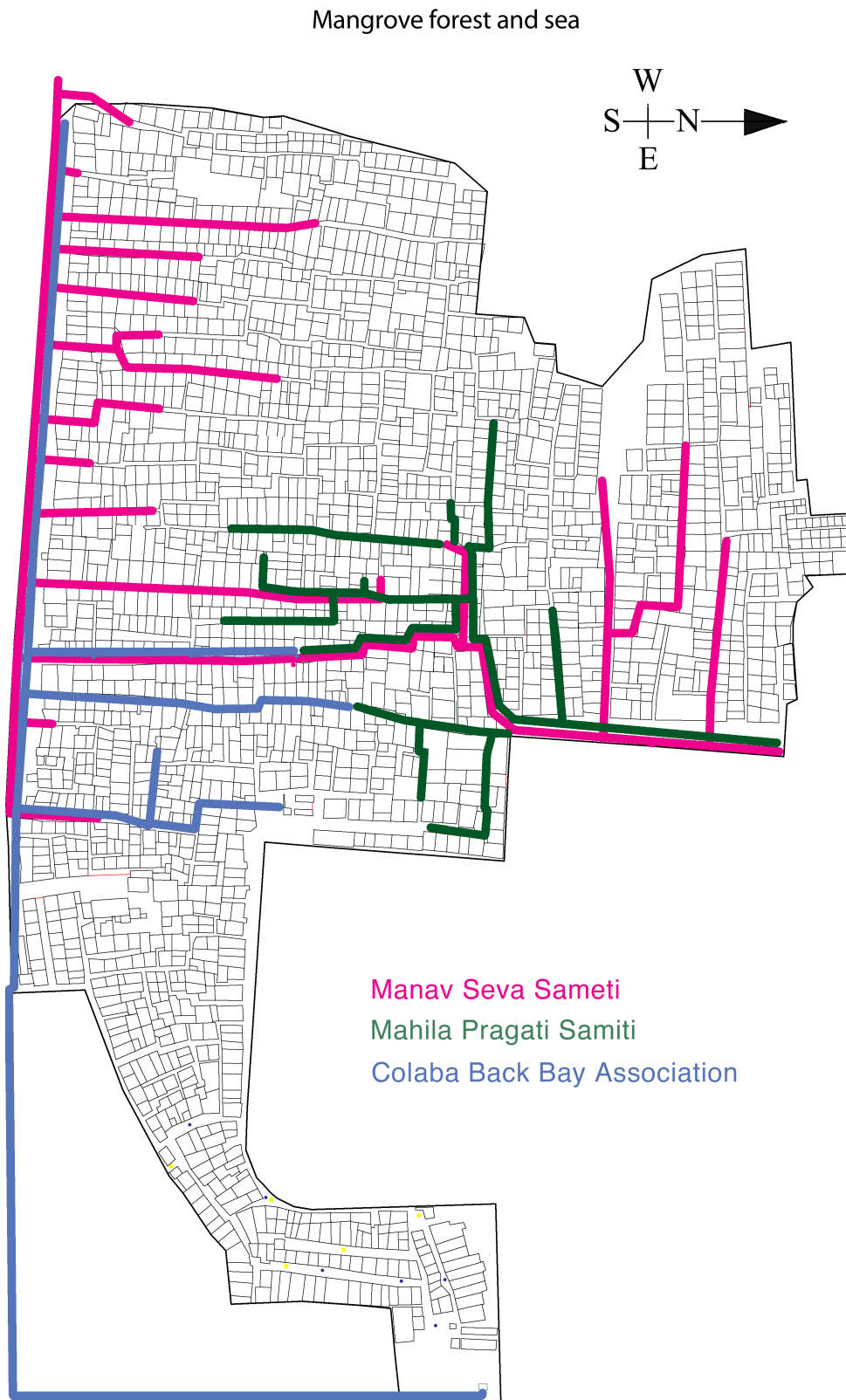


Figure 3.9 Map of visible water distribution schemes in Ganesh Murthy Nagar
Source: Author

3.5.6 Observation and participant observation

3.5.6.1 Definition

Observation is a research method entailing “the systematic noting and recording of events, behaviours, and artefacts in a social setting” (Marshall and Rossman, 1995: 79). It is a direct interpretation of events by the researcher based on the actions of individuals. It is thus differentiated from interview techniques by recording what people do, rather than what they say they do (Kitchin and Tate, 2000). Observation may be overt or covert. With overt observation, the purpose of the researcher is made clear to subjects from the beginning. Covert observation entails the hiding of the researchers’ role. This latter strategy may facilitate access and reduces the reactivity of subjects towards the researcher (Bryman, 2008).

Researchers may be more or less active in their observation techniques. Gold (1958, cited in Bryman, 2008) identifies a continuum with *complete participation*, entailing covert immersion in a society, on one end of the spectrum, and *complete observer*, entailing no interaction with the participants, on the other end of the spectrum. In the middle of the continuum there are the positions of *participant-as-observer*, similar to complete participation but with the researcher occupying an overt identity, and *observer-as-participant*, with the researcher acting mainly as an interviewer. With straight observation the researcher diachronically records events and behaviours in a holistic fashion and often with the help of detailed checklists (Kitchin and Tate, 2000). Participant observation usually takes the form of an unstructured narrative together with in-situ interpretation and analysis (Kitchin and Tate, 2000).

3.5.6.2 Observation in practice

Of the combined nine months spent in Mumbai during phases one and two of my field research, I spent roughly 90 percent of my time in Ganesh Murthy Nagar. At the field site I pursued an overt strategy of observation-as-participant by identifying myself as a researcher. I not only performed the survey, mapping techniques, and conducted interviews, but took part in various activities such as participating in religious festivals, family events, and spent time simply sitting around and chatting with residents about subjects not directly

related to the thesis. During these times my persona was malleable. I presented different dimensions of my research to specific audiences in order to display empathy and a non-threatening positionality, with the goal of gaining as much openness and trust from the residents as possible.

Through my key informant I had befriended a group of twenty year old males that were part of a powerful muscle gang in the settlement, and I spent a lot of time with them and their families: eating meals, watching Bollywood movies and item numbers⁹, and chatting. My participation in daily routines and special celebrations provided opportunities to observe and understand communal life in the settlement. Further, participation solidified my relationships with people and thereby gave me access to events and places that I would not have had as a mere observing researcher. One evening, for example, I was invited to accompany the major actors in a muscle gang to Ambedkar Nagar, where another gang showed their respect by offering us a resplendent meal during the celebration of a local deity. Observation-as participant yielded general information about the social dynamics in the settlement, and was particularly useful in the investigation of the various muscle gangs operating there. I recorded my observations during the day as much as possible, and assiduously transcribed my thoughts and experiences in a field notebook every evening.

3.5.7 Triangulation

Triangulating these various methods compounds their relative strengths while minimizing their respective weaknesses. For instance, the survey generated a lot of data, which conveys a global perspective of the settlement. However, the relatively surface-level data recorded by the survey is balanced by the semi-structured and open-ended conversational interviews, which together produce richly detailed, multi-layered, and contextual information.

Specifically, open-ended conversations elicited information that could not be easily observed, such as people's perceptions, experiences, feelings, beliefs, and the meanings they attribute to their physical and social environments, in their own words. In turn, the semi-structured interviews allowed me to make direct comparisons between interviews on the same subject. Where respondents were unwilling or uncomfortable talking about certain subjects, such as muscle gangs and challenging water distribution patterns for example,

⁹ An "item number" refers to musical sequences in Bollywood films where the characters dance.

participant observation produced parallel information about what people did and thus acted as a tool for verification. Finally, archival analysis provided a perspective on past events that was either novel information or used to verify information collected through other methods.

3.6 Ethical considerations and positioning myself in the field

Permission to carry out fieldwork in Mumbai was given by the principal of the Sir J.J. School of Architecture in Mumbai, Sri Rajiv Mishra, who acted as my local supervisor. A letter of permission was drawn up, which I carried at all times during the collection of data. I also obtained the permission of the local Municipal Councillor to collect data in the settlement. Finally, a statement explaining the nature of my research and my identity was recited to all interviewees before conducting each questionnaire.

I have avoided using the names of people interviewed except where their comments can not be construed to undermine their character or position. For the most part, names have been withheld and instead I merely refer to their position or function. In two cases I have changed actual names to pseudonyms to facilitate understanding of the ongoing narrative. The changing of identities is intended to protect people and groups against reprisals for having given sensitive information concerning illegal activities, and against any reprisals that may arise from competing social consistencies and strata. Finally, where information is anecdotal, unsubstantiated by hard fact, or triangulated by various methods, the text indicates that events are only alleged to have taken place.

The production of knowledge, as socially constructed, situated, and laden with value (Law, 2004; England, 1994; Haraway, 1991), demands the recognition that power relations are inherent to the research process. My interactions with and understandings of local people and their reality were shaped by my personal knowledge, situated perceptions, and prejudices. Similarly, locals' perceptions of me were shaped by my perceived identity. My relative positionality in the field, as an educated, white, Canadian-European with enough money to pursue research for several months, compared with many residents of Ganesh Murthy living in substandard housing, may have engendered certain asymmetrical power relations. The need to address these power relations, especially when doing research in the

Global South or with vulnerable groups, is clear (Smythe and Murray, 2000; Rose, 1997; Schulz et al., 1997). Therefore, I attempted to redress potentially asymmetrical power relationships and fostered relationships that approached equality as much as possible during my research. I learned basic Hindi, which along with Marathi, are the main languages spoken in the settlement, and I used my knowledge of Hindi whenever possible. I attempted to quickly learn the local customs and assimilated them into my habits. Essentially, I worked to not only integrate myself into the culture as much as possible, but also embraced the position of “researcher as supplicant” (England, 1994: 82; Smith, 1988). That is, I impressed upon residents the fact that their situated knowledge was valuable and that I was fortunate to learn from it.

Other positions that I inadvertently came to occupy posed more of an overt difficulty for data collection. Specifically, despite maintaining a malleable persona (as described above), it became apparent to the leader of one of the muscle gangs that I was pursuing information about his network. The leader thereafter attempted to discredit me by suggesting to others that I may be an agent of terrorism like David Headley, an American who was associated with the 2008 terrorist attacks, and who was believed to have collected information about local slums to help the terrorists. In response to a few inquiries stemming from this, I was able to produce my letter of permission from the Sir J.J. School of Architecture, and I subsequently minimized my investigation of the muscle gang. The muscle gangs in Ganesh Murthy are important components of the settlement, and despite negative feelings I had about pursuing this line of inquiry, I had made a commitment to following the actor, which I realized as far as possible without placing myself in danger. Nonetheless, some information about these gangs is incomplete, and this represents a limitation in the research.

Further, in terms of my inadvertent positionality, as I had created associations with members of a particular gang that were displayed in public celebrations in the settlement, my identity became somewhat tied to the gang. To a certain extent this worked against creating associations with members of other gangs to understand their perspective of settlement relations. I thus had to work to dispel notions that I was not an objective observer, and while I was able to mostly overcome this identity, in some cases actors

simply refused to talk to me. I relay these pitfalls of inadvertent positionality as a warning to researchers occupying malleable personas in the field.

3.7 Language and translation issues

There are challenges inherent in relying on translators in cross-cultural research. As language contributes to meaning-construction (Derrida, 1991), the reliance on translation is certain to affect understanding. The central issue revolves around translating a concept in one language to another for which there is no equivalent concept (Frenk, 1995). This is applicable for every outsider who tries to understand another culture, whether it is the researcher, or someone reading the report. Understanding thus requires an intellectual construction of mapping concepts onto Western categories of understanding (Tambiah, 1993), where there is sure to be inaccuracy.

As such, I attempted to limit the inaccuracies inherent in translation as much as possible by, as a first step, recognizing the limitations. I was reflexive in understanding the contextual complexities around identity and the positionality surrounding power in relationships. I employed translators that were as proficient as possible in both languages, and impressed upon them the importance of accurately translating word for word the interlocutors' responses. Further, I was fortunate to find a translator who shared an intellectual and social interest in the work I was pursuing. This facilitated explanations of the research to the translator, which was intended to engender a sense of the work's social significance and so that the translator could pick up on especially significant pieces of information. Finally, I discussed important interviews immediately afterwards with the translator to verify the meanings and interpretations encountered. Through these mechanisms I attempted to mitigate as much as possible the distorting effects of translation and capture the nuanced meanings communicated by the interviewee's answers.

Chapter IV

Virtual Attractors and Key Associations in the Development of Mumbai and the Back Bay

“In the end, we’ll get the land.”

Director, Metropolitan Rail Transportation Project, December 18, 2009

4.1 Introduction

The current and following chapters provide historical and contextual information about the political planning of the Back Bay, where Ganesh Murthy is located, and the more ground-level sociospatial formation of Ganesh Murthy itself, respectively. As such, the two chapters exhibit a general investigative dichotomy between top-down and bottom-up processes, which may be interpreted as having occurred in parallel but separately. This is not the case. Rather, the synthetic division of these two subjects functions heuristically on two levels. First, the chapters are structured according to Deleuzoguattarian ontological moments, with the current chapter considering virtual attractors in the city system, and the following chapter investigating intensive morphogenic processes inherent to the settlement. Second, the division of chapters allows for a more thorough investigation and clearer description of a large quantity of information. That being said, the evolution of Ganesh Murthy Nagar and other slum settlements in the area played a smaller role in the State’s development of the Back Bay as compared to the very large impact planning decisions had on the evolution of the settlement, and this dynamic is clearly reflected in the text.

In this chapter the Back Bay reclamation is used as an entry point to further investigate the contested processes of planning in the city. Urban planning is treated as an assemblage focusing on historical processes that contributed to the assembling of land, efforts to make sociomaterials cohere along this trajectory, and various manifestations of their dissolution and reassembly. In this way the chapter provides important contextual information about virtual singularities that historically orient urban planning in Mumbai, thus contributing to better understanding the emergence of Ganesh Murthy and its potential for the future.

The historical desire for land in Mumbai created associations between politicians, real estate developers, and state bureaucracies, which informed the intensive processes from which the city, in terms of its form and to an extent its politics, emerged. Historical accounts reveal that land reclamation tends to be justified in terms of the public good, but in fact is covertly oriented towards desire for capital accumulation. Coterminous with the historical reclamation of the Back Bay are alternative trajectories established by competing

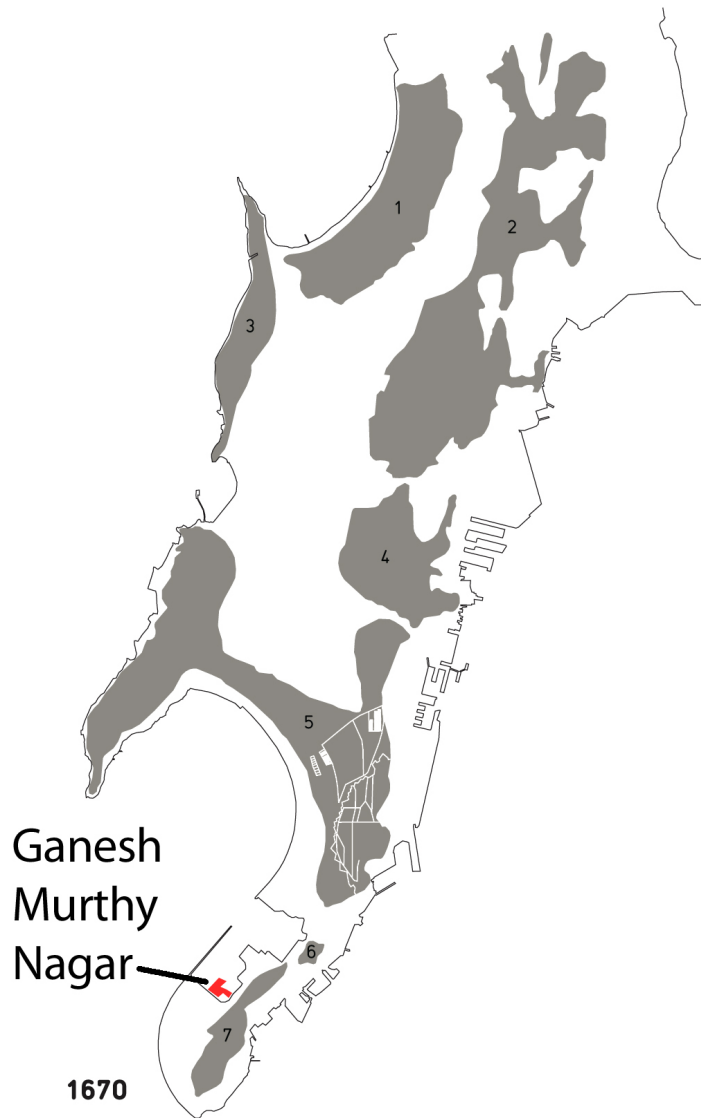
actors such as civil society organizations arguing for more environmental solutions, alternative branches of government seeking to control the land, and immigrant workers seeking to territorialize land for themselves and their families. These trajectories intersect in manifest ways to reterritorialize land, or its potential, and the alignment of specific actors conspired to send competing trajectories along absolute lines of flight. No one actor completely dominated the movement of the city-system towards its current physical form and it was only from the complex interweaving of a multitude of sociomaterials that Ganesh Murthy could have emerged.

The chapter follows the chronological trajectory of governmental desires to unleash the potential of land and commences with the historical context of Mumbai's territorialization in the colonial period of the 16th century (4.2). The main phases of the Back Bay Reclamation, which is of paramount importance to the emergence of land at Ganesh Murthy, follows with the early history of the Back Bay Reclamation Company (4.3), its iteration in modern times (4.4), the development freeze of 1978 (4.5), continued efforts at reclamation post 1978 (4.6), and the effects on development there from the enactment of the Coastal Regulation Zone (4.7). The following section examines recent developments in the Back Bay (4.8), and a substantial conclusion attempts to distil developmental trajectories based on the history of the Back Bay Reclamation (4.9).

4.2 Heptanesia, Bom Bahia, and Bombay: fusing seven islands

The land where Ganesh Murthy Nagar now sits was, until the 20th century, buried under water just off a group of seven islands in the Arabian Sea that Ptolemy referred to as Heptanesia in 150 CE (David, 1973). These islands, known in the 16th century as Mahim, Parel, Worli, Mazagaon, Mumbadevi (or Bombay Island), Old Woman's Island (or Little Colaba) and Colaba, were some of the larger islands forming a fecund archipelago that was able to support human life from an early stage (Figure 4.1). Pleistocene sediments found in the northern archipelago demonstrate that the islands had been inhabited since the Stone Age (Ghosh, 1990). The land, together with the marine ecosystem, would have supported several settlements of *kolis*, or fishermen, at the beginning of the Common Era or earlier (Greater Bombay District Gazetteer, 1960). On these lands the *kolis* stayed for millennia as

waves of indigenous and foreign dynasties washed over the islands leaving traces of their civilization on its shores.



1. Mahim 2. Parel 3. Worli 4. Mazgaon
5. Mumbadevi 6. Old Woman's Island 7. Colaba

0 1 2 3 km

Figure 4.1 Showing original islands in 1670 and outline of present-day Mumbai
Credit: Kelly Shannon (2009: 12) with additions by author

The arrival of colonial powers in the 16th century heralded a new era of governance and territorialisation in the region. In December 1535 the Gujarate Sultanate, which then ruled the islands, was forced to sign away possession in the Treaty of Bassein to the Portuguese who were interested in the deep natural harbour for commercial shipping purposes. In 1661 the Portuguese transferred possession of the islands to the British as part of Catherine of Braganza's dowry to Charles II. The crown thereafter gave control of the islands to the British East India Company in 1668, thus establishing governance of the territory to business interests that worked to reclaim land in the interest of commerce and trading. At first, transportation routes between the islands were created to facilitate the movement of goods being funnelled out of the Deccan Plateau to the centres of colonial empires via the port of Bom Bahia, as Mumbai was then called (Sinclair and D'Souza, 1991). The causeway built between Mahim and Sion in 1708, is an example of such transportation-oriented land reclamation. Soon, however, motivation to reclaim land from the sea included the desire to produce new territory for development and secure previously reclaimed land. In 1782 William Hornby, British Governor of Bombay, initiated a causeway over low lying lands between Worli and Mahalaxmi, known as the "Great Breach," to keep out the high tide from land to the east that had already been reclaimed. The "Hornby Vellard," (the area called "Breach Candy" today) was completed in 1784 and provided 400 acres of land for new development. Thus, from early on commercial interests motivated by capital accumulation governed the physical development of Mumbai.

Over time, the remainder of the original seven islands were fused and new territory created with the same logic. In the north, Sion was connected to Salsette in 1803, and in the south, Colaba was connected to Bombay Island by a causeway built via Old Woman's Island in 1838. In 1845 Mahim and Bandra were connected by causeway (TIFR, 1995). The land from which Ganesh Murthy Nagar eventually gained a foothold was created in 1905 as part of a 90,000 square yard reclamation on the west side of Colaba. The City Improvement Trust had initiated the work, which gave way to a seaside promenade created in 1906, known as Cuffe Parade, named after T.W. Cuffe – one of the members of the Trust (TIFR, 1995). However, it is unlikely that anything would have been built on the seaward side of the promenade if it were not for the Back Bay Reclamation Scheme.

4.3 Back Bay Reclamation Company

The most important government-led reclamation scheme, in its overall impact on the built environment of South Mumbai, is the Back Bay Reclamation Scheme (BBRS) (Das, 1996). Feeling increased pressure from the commercial sector, in particular businesses involved in cotton production and shipping, the government decided in 1853 to reclaim 607 hectares of land from the sea (Patel, 1975). The project was given further force by the onset of the American Civil war in 1861, which halted cotton exports there and greatly increased the UK's demand for Indian cotton. Together with the opening of the Suez Canal in 1869, which created new shipping routes, Mumbai felt the crush for new land during the cotton-led economic boom years of the 1860s.

During this time the Bombay Reclamation Company (BRC) was created, which initiated a long-enduring alliance between the government and private developers to create wealth out of reclamation in the Back Bay. The BRC was formed by Premchand Roychand, the wealthiest of all indigenous cotton traders (Tripathi, 2004), and owned partly by the government after Sir Bartle Frere, then Governor of Bombay Presidency, purchased 400 shares in the company (Upadhyay, 2010). Due to their associations with the government, the BRC was awarded the franchise to reclaim 607 hectares from the Back Bay on the west side of Mumbai from Malabar Hill to the tip of Colaba. However, shortly after having started the reclamation work, the end of the American Civil War was announced in India on May 1, 1865, which triggered a depression and a subsequent plunge in land prices. The BRC was forced to liquidate and went bankrupt. The reclamation project however, was merely scuttled for the time being and would be reconstituted later in time. The narrow strip of land that had been reclaimed was taken over by the government, which gave the land to the Bombay Baroda and Central India railways for the construction of a railway from Churchgate to Colaba (TIFR, 1995).

In time, four more proposals to reclaim land in the Back Bay had been put forward before Governor George Lloyd initiated a new phase of the BBRS in 1917 with a syndicate of

prominent citizens and “a private company”¹⁰ (TIFR, 1995; The Daily, 1984). The initial plan was to reclaim the original 607 hectares for development, but this was reduced to 463 hectares in 1920 when the BBRS was taken over by the Development Directorate, a branch of the Bombay Government’s Development Department, led by Sir George Buchanan; a civil engineer from England who had previous experience with similar projects (The Daily, 1984). The scheme was finally taken up in 1922 and called for the construction of a four-mile long sea wall along the foreshore from Chowpatty Beach to Colaba Point, which was accomplished except for a gap of 597 meters in the middle. The plan called for the division of land into eight blocks (Banerjee-Guha, 1996). Blocks I and II stretched from Chowpatty to Sachivalaya – (the current Mantralaya¹¹). Block III runs to the end of Nariman Point, while blocks IV and VI are the undeveloped areas to the north and south (respectively) of New Cuffe Parade, which is built in block V. Blocks VII and VIII comprise the current defence area known as Navy Nagar, and Ganesh Murthy would emerge later in Block VI (Figure 4.2).

¹⁰ The “private company” seems to have been either a composition of leading industrial conglomerates in Mumbai led by the Tata family, or a company solely owned by the Tata’s themselves (The Daily, 1984). Anecdotal evidence collected during an interview suggests the latter scenario (Cooper, 2010).

¹¹ Mantralaya is the name of the administrative headquarters of the State of Maharashtra.

Figure 4.2 Blocks developed as part of various phases of the Back Bay Reclamation Scheme
 Source: Google Maps and author

This iteration of the reclamation project encountered friction almost immediately with the unforeseen necessity of uprooting the railway terminus at Colaba and transferring it to Mumbai Central, where it is currently located. Problems mounted with the depression of the 1920s, which deflated real estate prices. This, together with delays and cost overruns, sparked a reassessment of the project. The Back Bay Enquiry Committee, spearheaded by K.F. Nariman and Manu Subedar, found many irregularities in the project including: financial mismanagement and corruption by the officers of the Development Directorate, the siphoning off of money to British interests, an inefficient dredging craft that was purchased before the project was even sanctioned, and the improper construction of the sea wall that had lost 900,000 cubic yards of mud (TIFR, 1995). These management errors and their exposition by the enquiry effectively shut down the BBRS in 1929, which thereafter became known as “Lloyd’s Folly.” By this time the sea wall was in place (including a large gap) and four blocks of the project had been reclaimed, comprising 177 hectares of land. Blocks I and II became Marine Drive and the area to the east, while Blocks VII and VIII, comprising 94 hectares, were sold to the military for INR 2.06 *crore* (TIFR, 1995; Sinclair

and D'Souza, 1991).¹² The sea wall, together with a large gap, allowed the tidal motions of the sea to deposit silt by the shore, which eventually became a mangrove forest, and later Ganesh Murthy Nagar.

4.4 Growing population and reclamation in modern times

In the 1950s the population of Mumbai increased by 50 percent giving rise to new calls for reclamation in the Back Bay. In the decades following India's independence in 1947 the central government sponsored the growth of industrial development. As a result, Mumbai acted as a virtual singularity attracting rural populations with the potential for jobs and better livelihoods at the city's burgeoning textile mills and other industries, the majority of which were located substantially north of present-day Ganesh Murthy Nagar. Many of the migrant workers were housed in pre-independence *chawls*, which are four or less storied structures that are divided into a number of small basic residential units. However, no new units were being built to accommodate the migrating workers by the private and public sectors, and in fact limiting the amount of residential units was a tactic adopted by urban planners to limit the city's size (Weinstein, 2008; D'Monte, 2002; Sharma, 2000). These factors led to a dramatic rise in the number of squatter settlements in the 1950s (Bhide, 2009).

To investigate possibilities for addressing the escalating population in the 1950s the government appointed a one-man committee in 1958 chaired by Shri S.G. Barve, I.C.C. Secretary of the Public Works Department. One of the five panels of the study group formed by the Barve committee, the "Land and Open Spaces and Other Community Requirements" panel, recommended reclamation as a possible solution to the increasing population density of Mumbai. The panel identified at least nine areas where this could take place and went to great length to explore these various possibilities. It only briefly mentioned the Back Bay in the final sentence of the report, writing; "similarly, it would be possible to reclaim about 575 acres in the Backbay Reclamation area and about 129 acres west of the Hornby Vellard near the race course" (Land and Open Spaces and Other Community Requirements panel of Barve Committee, as quoted in Economic and Political

¹² 1 Indian rupee (INR) equals 0.0136891 pounds (GBP). 1 crore is equal to 10,000,000 so INR 1 crore equals 136,890 GBP.

Weekly, 1976: 1101). Despite the panel's lack of enthusiasm for reclaiming the Back Bay, the final report of the Barve Committee recommended reclamation there along with 2,135 acres at Mahim-Dharavi and 2,365 acres between Wadala and Chembur, for "community requirements" including "public housing" and "relocation sites" for "slum clearance." (Barve Committee as quoted in Economic and Political Weekly, 1976: 1102). However, the committee qualified their recommendation by placing priority on developing Bandra-Kurla to the north so as not to fuel the congestion problems already in existence in South Mumbai. To this end the committee also suggested shifting all central and state government offices to the suburbs (Patel, 1995).

Of all the many recommendations put forward by the Barve committee only two were taken up: the construction of a bridge across Thana Creek, and the reclamation of the Back Bay (Economic and Political Weekly, 1976). Rather than adhering to the more persuasive arguments of the panel to reclaim land elsewhere, and following the committee's recommendations to avoid fuelling congestion problems in South Mumbai, reclamation of the Back Bay made financial sense. South Mumbai, which is home to the central business district and the location of the state and municipal headquarters, has higher real estate values than the rest of the city and thus there is more potential to accumulate capital through real estate development there. The government created and then used the Barve Committee report to re-initiate reclamation work in the Back Bay. Further, the state government would thereafter misleadingly refer to the Barve Committee report as proof of the necessity of reclaiming land in the Back Bay (Economic and Political Weekly, 1976). Work was taken up swiftly within one year after the report was submitted in 1959, which attracted labourers to the area. In the absence of inexpensive formal housing in the area, labourers squatted parts of the coastline adding to established fishing communities, nascent squatter camps already there, and initiating new squatter settlements as well, as was the case with Ganesh Murthy Nagar (Cooper, 2009).

The new reclamations went against the norms of local self-governance with the state government bypassing the Bombay Municipal Corporation, which was the legal planning authority for Mumbai as per the Bombay Town Planning Act (BTP Act), 1954. Further, the reclamation work contravened the BTP Act, which necessitated the production of

development plans preceding the commencement of all projects (Mehta, 2010). The reclamation was immediately and almost universally criticized on the grounds that establishing more commercial space would drive up the number of commuters to an intolerable level (Economic and Political Weekly, 1976).

Despite the criticism and questionable legality of the project the government proceeded with the reclamation. The force with which the state pursued the reclamation attracted the municipal government, which in 1964 produced a draft Development Plan (DP) that allied itself with the desires of the state government, and was approved in 1967. The DP included a written report about the Back Bay and the intention to reclaim 223 hectares of land of which 107 hectares would be developed with a 60:40 residential to commercial ratio, with the remainder of land pegged for open spaces, roads, a substation, other smaller uses, and on Block VI (where Ganesh Murthy is now located) a large railway car shed for a planned underground railway (Figures 4.3.1 and 4.3.2) (Economic and Political Weekly, 1976). Although legally obliged to produce a map in order to obtain the approval of the state government under the BTP Act, the DP showed no land use indicators, and no roads or other public utilities. There was a note, however, attached to the DP mentioning that detailed plans for the BBRS were being prepared by the state government as per the BTP Act, which, as Banerjee-Guha (1996) points out, had in any case been repealed by the Maharashtra Regional and Town Planning Act in 1966.

Figure 4.3.1 1967 Development Plan
Source: Brihanmumbai Municipal Corporation

Figure 4.3.2 1981 Development Plan showing railcar shed in Block VI in pink at lower left
Source Brihanmumbai Municipal Corporation

The Maharashtra Regional and Town Planning Act, which is currently in force, establishes a hierarchical planning structure consisting of nested regional development authorities responsible for producing development plans for their region according to the Development Control Regulations (DCR) set out in the same Act. In effect, it shifts power over urban planning from the municipal authorities to the state government in two ways. It directs the local planning authority through the establishment of broad planning and development areas of transportation, infrastructure, and housing, and establishes the state government as the ultimate arbiter of the local DP. Despite these new powers the state government obscured the plans for the Back Bay by failing to produce a detailed map, which negated the public's right to consult and comment upon it (Banerjee-Guha, 1996).

Meanwhile, public criticism of the reclamation had not withered and the state government responded by establishing the Gadgil Committee to report on development in the Bombay-Pune region in 1965. The committee recommended abandoning any further reclamation in

the Back Bay because of the dire effects development would have on the island city and the lives of its inhabitants.

The decision to spend very large amounts on reclamation of land in this area also appears to be unfortunate. The prices at which reclaimed land is sold may seemingly make the venture profitable. It is highly doubtful whether this would be so if the total social costs, recurring and non-recurring, of the burden imposed by the additional activity and population on the reclaimed area in terms of expenditure on roads, services, and amenities and travel to work, etc, are taken into account. (Para 5.2 - Gadgil Committee, as quoted in *Economic and Political Weekly*, 1976: 1102).

The Gadgil Committee clearly argues against further reclamation as a burden on society for its effects of increasing population density, and activities necessary to manage it, including increased transportation and other infrastructural service costs and longer and less comfortable commuting to work. With the publishing of the sanctioned DP in 1967, more parties embraced the Gadgil Committee's perspective and called for the abandonment of the BBRS. Such groups include: the Metropolitan Transportation Team of the Planning Commission, Government of India in 1967; the Metropolitan Regional Planning Board under L.G. Rajwade in 1970; the Committee on Backbay Reclamation appointed by the Maharashtra government; the International Bank for Reconstruction and Development, which studied the BBRS; the City and Industrial Development Corporation (CIDCO) – a branch of the state government – and other organizations such as the Save Bombay Committee and the Bombay Pradesh Congress Committee (Banerjee-Guha, 1996; Patel, 1975). The World Bank Mission, visiting Mumbai in 1970 also condemned the plan, saying that the only party to benefit from the BBRS was the Government of Maharashtra in its ability to generate revenue from the sales of plots (World Bank, as quoted in *Economic and Political Weekly*, 1976). No mention is made of several nascent squatter settlements taking root along the coastline.

Against these countervailing forces the state government slightly modified its plan for the BBRS. The 1970-1990 regional plan for Mumbai, which was sanctioned in 1973, embraced the widely held desire to constrain development along the north-south axis of the city. The plan limited the commercial area of the Back Bay Reclamation Area (BBRA) to 20 percent of the total and gave priority to the Bandra-Kurla reclamation to give immediate relief for the demands of commercial development. It is important to note, however, that corresponding to those actors intent on developing the Back Bay, and in contravention of

the stated objective to not perpetuate development along the north-south axis, the regional authority only purported to limit, and not stop, commercial and residential development of the Back Bay.

The immediate response to the 1970-1990 regional plan was condemnation from the public and the municipal government. The mayor of Mumbai, Sudhir Joshi, along with Municipal Councillors requested the Chief Minister of Maharashtra to disallow further development of the BBRA fearing for the strain on municipal services and traffic congestion. The state government met the request with a new argument for reclamation by stating that land was needed for the provision of housing for low and middle income groups, and especially government employees. To further enrol municipal authorities the state government argued that the sale of land would financially benefit the municipality (Patel, 1975).

Notwithstanding continued public pressure, the state continued the allotment of plots in the BBRA until 1974, at which time the last allotment of 11 commercial plots in Blocks III and V was committed in April to eight builders and three banks for prices ranging from INR 3,000 to INR 5,400 per square metre (High Court Bombay, 1992). In the same year the municipal corporation stepped up its fight against the development of the Back Bay by passing a resolution declaring the BBRA as a no development zone except for public service-oriented buildings. The resolution also designates the BBRS as a burden on society by warning of increased strain on the population, water resources, traffic, electricity, other services, and points to an inability to properly respond in the event of a fire due to the height of the proposed skyscrapers and their density (High Court Bombay, 1992). A year later, in 1975 the state conducted the first slum census to enumerate the number of slums in the city and the amount of hutments. The census counted four slums in the Back Bay, including “Ganesh Moorthy,” but there is no evidence to suggest that slums or slum dwellers played any role in the development of the Back Bay up to this point (State of Maharashtra, 1976). At this time State policy towards slums was in flux between demolition and eviction to forms of toleration.

While the actions of the municipal corporation did not deter the state government from further reclamation, the resolution may have spurred the state government to increase its consolidation of power over development activities in the city. In 1974 the Bombay

Metropolitan Regional Development Act was enacted, which created the Bombay Metropolitan Regional Development Authority (BMRDA) in 1975 as an apex body for planning and coordination of development activities in the region. The BMRDA is guided by the “Authority” of the BMRDA, a council consisting of 17 members, of which only four are representatives of the local populace: the mayor and three Municipal Councillors. The other 14 members hold important state government offices, and the chair of the council is held by the Minister for Urban Development; a position traditionally held by the Chief Minister of the State of Maharashtra, who traditionally also holds the office of the Minister of Housing, and chair of the Slum Rehabilitation Authority. Below the “Authority” in the BMRDA hierarchy is the Executive Committee comprised of six members of the Government of Maharashtra and three professional urban planners. Heading the BMRDA administrative office (consisting of 300 employees) is the Municipal Commissioner who is appointed by the Chief Minister. The BMRDA, then, is mainly composed of non-elected officials, who are not accountable to the electorate, including the administrative head of the agency, the Municipal Commissioner. There are only four representatives of the local government on this agency, which has come to define all major developments in the city. Finally, the BMRDA would become an effective tool through which the Chief Minister could exercise increasing control over the profitable business of real estate development in the city.

Desperate now to maintain some control over the development of Mumbai and disrupt the BBRS, three petitions were filed in the High Court of Bombay by Mr. Madhu Limaye, Member of Parliament, Mr. Shri Sudhir Joshi, Mayor of Mumbai, and a group of citizens. The petitions called for a pause in the allotment of land to be developed, and for a stay in any future development of the BBRA (High Court Bombay, 1992), which momentarily halted all development. In response to the petitions the builders that had been granted allotments claimed they should be allowed to continue building and agreed to demolish the buildings at their own cost if the court ruled against them. The BMC granted the builders permission to resume their construction on these terms pending the court’s verdict on the three petitions. After a lengthy legal battle, including a Supreme Court ruling, the matter was finally settled at the Division Bench on April 26, 1979, which was in keeping with the initial ruling made in 1975 by Mr Justice Gandhi of the Bombay High Court.

In the course of the court case it emerged that only five builders had been awarded the last of the 11 plots, with each taking several plots under different names. Out of 60 builders that had applied for plots, only these few were chosen after discussions took place at the ministerial level (Economic and Political Weekly, 1976). These builders' names continue to adorn some of the most expensive buildings in the world. Justice Gandhi ruled that the State had acted in a surreptitious manner in granting the lots to the builders, and that it had grossly undervalued the cost of the lease. The judge found that ultimately the government had acted in the interest of the builders, and not in the best interest of the State, and thus the transactions were held to be *mala fide* in law. However, in applying the equitable principles that the courts of Chancery in England would have applied, the justice ruled that the builders could keep their allotments if they agreed to pay 33.5 percent more for their leases (High Court Bombay, 1992: 4).

In a related, but separate dispute over a BBRS allotment involving the Free Press Journal Estate, the Minister for Housing reversed a planning authority decision and increased the floor space index (FSI) granted to the Free Press to 3.5 in 1978.¹³ The Minister noted that although his ruling would defeat the main purpose of legislation to avoid increasing traffic congestion and additional burden on civic amenities, it was necessary in the name of "justice." Commenting on this decision in 1981, Justice Suresh of the Bombay High Court felt it was obvious that "the government was willing to accommodate private companies who could satisfy the whims and fancies of individual officers of the government" (High Court Bombay, 1992: 9).

Thus, with the ruling of the High Court of Bombay it becomes apparent that an assembly of powerful politicians and private developers ordered the development of the Back Bay from 1950 to the 1970s. Developers were attracted by the potential to make money from the development of land in the most expensive and important region of the city, and they paid politicians to align their desires with their own, leading to the flouting of laws directing urban planning and development, and skirting norms of local governance. To facilitate the development of the Back Bay, politicians worked to assemble a chimera of objective

¹³ Floor space index refers to the ratio between the total floor area of a building in relation to the size of land on which the building sits. An FSI of 3.5 thus allows 3.5 times the size of the land to be built into the floor area of the entire building.

necessity through the one man Barve Committee and argued for reclamation with a logic necessitating increased land for “community requirements” like social housing and slum relocation sites. Further, state politicians assembled power over urban planning through the Maharashtra Regional and Town Planning Act and the BMRDA. This had the effect of limiting the power of the municipal government in the city assemblage, which necessitated their use of the courts to intervene in the development of the city for which they had been elected to represent citizens. The trajectory of development adopted by state politicians and private developers contradicts the interests of the city as a whole, as argued by national, state, municipal, and multilateral organizations. Clearly, for state politicians the logic of capital accumulation trumped logics of good governance and sustainable urban planning.

4.5 The freeze of 1978

In the years following the allotments awarded in 1974, pressure to develop the Back Bay did not wane. In 1974 celebrated architect Charles Correa drew up a plan to apply the modern urban planning concepts of aesthetics and functionalism to the Back Bay in what he marketed as, “an event for the city [...] unprecedented in the contemporary Indian urban scene” (Correa, as quoted in the *Economic and Political Weekly*, 1976: 1104). Correa’s design intended to fill the developmental gaps to the north of New Cuffe Parade with a promenade, dam, artificial lake, and low-rise public-oriented architecture. The state government did not waste the opportunity to camouflage further reclamation as a cultural “happening” and in October of the same year Chief Minister V.P. Naik agreed to the Correa plan in principle (Patel, 1975). The development of the BBRS was now not only necessary for “community requirements” including public housing for relocated squatters, state employees, and low and middle income groups, but also as a chance to modernize the city through functional planning design.

However, a series of Supreme Court injunctions protecting the rights of indigenous fisher colonies in the area placed a legal hurdle in the path of further reclamation. These rulings, together with growing public dissent through citizen action groups such as the Save Bombay Committee, motivated the government of Maharashtra in 1975 to appoint another committee, chaired by M.D. Kale, the Secretary of Public Works, to re-examine the BBRS for the third time. The Kale Committee forwarded their report to the government on August

9, 1975 and the report was shortly thereafter circulated to the public. Unsurprisingly, the report advanced by the state's committee advocated the reclamation of 52 hectares more than the 128 hectares already allotted. The additional area would provide 41 hectares of public amenities, 6 hectares of housing, and 5 hectares of commercial space. The public's reaction to the plan was mixed, showing appreciation for the public spaces but condemnation of the commercial development, which would increase traffic congestion (MMRDA, 1990).

With reclamation in the Back Bay still on hold due to the Supreme Court injunctions, the Save Bombay Committee (SBC) organized a seminar at K.C. College in 1978 to discuss issues of reclamation. The SBC was registered as a society and public trust in 1973, and was composed of several influential public figures such as Mayor Joshi, the city's sheriff, journalist Rusi Karanjia, and Municipal Councillor Kisan Mehta. Mr Rajni Patel, the newly appointed Regional Congress Committee President, agreed to attend the seminar and urged Chief Minister V.P. Naik, to participate as well. It was during the seminar that Patel asked Naik why the government was continuing to reclaim land in the Back Bay. The Chief Minister at first replied about the necessity of relocating the state government offices there, but under pressure asserted that the government would immediately quit their efforts. As Kisan Mehta (Email correspondence, 2010) explains it, this news spread rapidly across the country, and even though the Chief Minister recanted the statement several days later, Patel took him to task on his public statement. Concurrently, the High Court proceedings against BBRS participants were being heard, which "added to the public disgust to reclamation. The government was embarrassed" (Mehta, 2010). The surprising result, communicated on December 9, 1978, was that the government took the policy decision to stop all further reclamation: only two small areas to be used by fishermen were permitted to be developed thereafter. In retrospect, it is an amazing concurrence of events, the High Court Hearings and the public slip-up by the Chief Minister at the SBC seminar, that managed to stop the reclamation, where criticism from the World Bank, Government of India, State of Maharashtra agencies, and the BMC could not.

4.6 Post 1978

Nevertheless, despite the official development freeze illegal reclamation work continued in the Back Bay. A letter to the editor of *The Daily*, written by the President of the Colaba Cuffe Parade Citizens Group, points to land being reclaimed in the southeast corner of Block IV of the BBRA. The letter states that small-scale reclamation, which had started in Cuffe Parade in 1985, had turned into “massive dumping operations being carried out day and night on a war footing” by 1988. Further, Kumar explained that he had tried to get information from the Bombay Collector (a branch of the state government in charge of state lands) and from the municipal office, to no avail (Kumar, *The Daily*, 1988). Together with oral histories recorded from residents of Cuffe Parade (Cooper, 2010) Kumar’s letter points to land being reclaimed and breakwaters established north of Cuffe Parade. There is no evidence to prove the state government continued its efforts of reclamation despite publicly agreeing to freeze development, but a current map of the Back Bay (Figure 4.4) bears uncanny resemblance to an unpublished plan by the state government to reclaim land north of Cuffe Parade (Figure 4.5). Eventually the land referred to by Kumar was reterritorialized by the Cuffe Parade Resident’s Association as a semi-private park. The breakwaters were probably created to reclaim additional land, however, the work was arrested leaving the breakwaters to sit in place and contribute to the slow reclamation of land by the natural process of siltation.

Figure 4.4 Map of Cuffe Parade (Block V of BBRA) and surrounding area. Red indicates park and blue indicates breakwaters
 Source: Google Maps and Author

Following the impetus derived from the Correa plan, the government reframed the BBRS in terms of aesthetics. In August 1981 a small document entitled, *Back Bay Beautification Scheme*, made its way from the Executive Committee of the BMRDA to the Urban Development Department (UDD) of the state government (BMRDA, 1981) (Figure 4.5). In this first iteration of the Beautification Scheme the Executive Committee argues that the abrupt development freeze initiated in December 1978 had undesirable results for the area such as: the formation of awkward pockets of un-reclaimed areas susceptible to siltation by natural processes, an aesthetically displeasing truncated profile of the shore line, and unauthorized dumping leading to “unconsciously reclaiming some land” (MMRDA, 1981: 3). The Beautification Scheme had incorporated some of the details of the Correa plan such as a large promenade encircling an artificial body of water. It called for the reclamation of 17.26 hectares for “public and semi-public purposes” to address the stated concerns (BMRDA, 1981: 4).

Concurrently, the BMC moved to reterritorialize the potential land through a draft Development Plan submitted on May 26, 1983. The municipal DP called for the

reclamation of 45.16 hectares in the BBRA. However, several weeks later on June 15 the government of Maharashtra issued a notification stating that the BMRDA would take over from the BMC as the legal planning authority for the entirety of the BBRA, which was designated as a Special Planning Area (SPA). This move effectively cut the BMC out of the planning assemblage for the Back Bay and signalled that development work would continue as before under the state government.

Figure 4.5 Cover of *Back Bay Beautification Scheme*
Source: MMRDA (1981)

The MMRDA declared its intention to create a new Development Plan in 1985 and two years later its plan for the Back Bay, a reworked “Back Bay Beautification Scheme,” was made public. The new plan acknowledged that public pressure had caused the government to freeze development of the BBRA and that all un-allotted plots should be used only for

public purposes. The plan went on to document the problems caused by the December 1, 1978 notification (as described earlier) and billed the plan as a compromise between the Kale Committee plan and the development freeze. The published MMRDA plan calls for the reclamation of 17.27 hectares for public and private purposes, including retail outlets and a sea wall that would prevent further unauthorized reclamation. The report appropriates and reverses the logic used by the BMC in the 1970s by citing traffic and parking challenges of the area, and the paucity of electrical infrastructure, as necessitating more reclamation. The report stipulates that a minimum of 14.88 hectares reclaimed from the sea is necessary for: a sea wall, promenade, road, Indira Gandhi Memorial, garden, parking, transit camp, the Tata Electric Company, and land for smoothing the reclamation boundary (Bombay High Court, 1992).

Despite the plan's appeal to aesthetic considerations and community requirements the media's reaction to the 1987 Beautification Scheme was merciless in its condemnation of the project. Several papers reported that the MMRDA committee meeting had been called on the same day as a large BMC function, which was interpreted as an effort to exclude possibly dissenting voices of the Shiv Sena political party committee members likely to vote against the plan. The press reported that politicians were served Champaign in their limousines on the way to the meeting and enjoyed a sumptuous feast there, all calculated to win votes at the voters' expense. More substantive fears were raised regarding the vagaries of the plan, which could give way to imaginative interpretations of land use designation. Other fears surrounded the usurpation of public lands into private spaces for the wealthy, such as a proposal to build a gymkhana (sports centre) for government officers in the place of an open area. The construction of a helipad to transport VIPs and politicians was questioned: "How many people would be able to use this and how much of a nuisance it will be for anyone to see" (Bist and Shankar, 1987: 9). Underlying all these criticisms were the ever-present over-crowding and already over-burdened infrastructure. One newspaper suggests that the makers of the scheme perceived the potential hurdles in accepting and implementing the plan and therefore provided housing in the plan to municipal councillors, MLAs and judges, in a bid to buy "peace and quietude" (Onlooker, 1987: 27). Ultimately, the Beautification Scheme, which had been so elaborately designed and strategically carried

out, failed to be passed on August 20th 1987, as two councillors and an MLA demanded more time to study it.

This hurdle, of course, did not stop the drive to reclaim more land. After things had settled down, in 1989 the state government once again announced their intention of reclaiming 15 hectares in the Back Bay. In their defence of this scheme this time, Municipal Commissioner Mr. S.S. Tinaikar, and the MMRDA Commissioner Mr. S.R. Kakodkar (both appointed by the Chief Minister), changed tact from the need for aesthetic improvements to the growing threat of slum dwellers, which had otherwise been excluded in considering plans for the area. They suggested that the largest part of the new land to be reclaimed was to be used for a sea wall, which would finally put an end to all further reclamation and the proliferation of squatter settlements. Kakodkar says:

From 60-65 huts in the Fisherman's Colony in 1979, there are more than 1000 huts today. Are they all occupied by fishermen? [...] It is to stop this and provide a firm boundary that proposals made three years ago [...] were pushed at last week's meeting. (as quoted in the Times of India, October 1, 1989).

This is the first direct reference to slums and slum dwellers in the literature reviewed about the development of the Back Bay. Similarly, in documentation about slum dwellers in particular (in State archives or media archives) there is no mention of any form of resistance or acquiescence to the development of the Back Bay. This is curious as the development of the Back Bay would have massive implications for slum dwellers living there, and the development of slums along the coast would affect the redevelopment of the Back Bay; especially as state policies became reoriented towards toleration and acceptance. As demonstrated in later chapters, despite efforts to limit the growth of slums, State policies actually facilitated their growth, by providing forms of tenure security and services. Meanwhile, during periods when reclamation was deemed illegal (and going forward as the next section explains) slums along the coast of the Back Bay continued to reclaim land, which could ostensibly be reterritorialized by the State. The suggestion here, made without any form of conclusive evidence, is that slum dwellers' land reclamation efforts were and are tolerated up to a certain point because this trajectory is aligned with that of the State.

4.7 Coastal Regulation Zone

Before the state government could implement its plan to further reclaim the Back Bay, national legislation issued by the Ministry of Environment and Forests (MoEF) arrested further reclamation of the Back Bay. On February 20, 1991 the MoEF published the Coastal Regulation Zone (CRZ) as part of The Environment (Protection) Act, 1986, for “protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution” (Government of India, 2002). The CRZ legislation limits certain activities along the coast and other bodies of water affected by tidal movements up to 500 meters from the high tide line, and totally prohibits land reclamation. There are four zones identified under the legislation: CRZ I exists between the low and high tide lines where no development is permitted; CRZ II includes urban areas that have been developed up to the shore line and consists of several building restrictions including the limiting of FSI to 1.3; CRZ III relates to relatively undisturbed areas up to the shore line, and within 200 meters of the high tide line; CRZ IV relates to islands. In conjunction with this legislation the State of Maharashtra introduced its own legislation on the same day by amending the Development Control Regulations to include Regulation 59, which states that except for underground toilets and greening without construction, no construction can take place on coastal land up to 200 meters from the high tide line. As a result of these legislative enactments legal reclamation in the Back Bay was suspended and development efforts have been severely constrained by the limited FSI, which has protected squatter settlements along the coast from being developed: at least until recently. In September 2010, the FSI on CRZ II land was increased to a minimum of 2.5 and may be extended to 4 in some cases, and this change will certainly alter the trajectory of many squatter settlements that have emerged along Mumbai’s shoreline.

4.8 Recent developments in the Back Bay

Until recently, there has been little official development carried out in the Back Bay, although the present DP, which was prepared in 2000, still projects 11 hectares of reclamation. On Block VI of the BBRB, the DP map indicates that the sea runs right up to the bus depot, where in fact Ganesh Murthy is located. As a general policy, slums are not indicated on DPs, but the fact that the land is not even acknowledged as land is curious:

especially as the map does not concur with the high tide line, which is also indicated on the map (Figure 4.6). In the past year the BMC's Harbour Department has consolidated the shoreline to the north of Cuffe Parade by placing very large boulders in a wide swath along the shoreline. The Harbour Department, which is a branch of the BMC, has jurisdiction over the space between the low and high tides – between the sea and where the MMRDA's jurisdiction starts. The Harbour Department is also in charge of maintaining the sea wall, which collapsed in front of Ganesh Murthy and was repaired in 1996 (Sequeria, 1996).

Figure 4.6 Development Plan as of 2010
Source: MMRDA (2010)

Additional construction in the Back Bay is being pursued through the Slum Rehabilitation Authority with the redevelopment of Mahatma Phule Nagar by Ace Links Developers in the northeast corner. Documentation from the SRA reveals that the developers have applied for several changes to the original scheme they had submitted, and with the change in FSI in CRZ, more changes are likely as well. Concurrently, residents of the Mahatma Phule Nagar have complained of being shut out of the development, of not being informed of the rehabilitation plan, of being asked to relocate to Mankurd (much further to the north), of physical threats, and blackmail (Suryawanshi, 2010).

Another spurious development in the Back Bay is located between Ganesh Murthy and the BEST bus depot along Prakash Pethe Marg. For several years a 31-story building has been constructed ostensibly for the purposes of housing retired military commanders and important politicians by the Adarsh society. In 2009 I was privy to documents assembled by Ghar Bachao Ghar Banao Andolan, an NGO concerned with defending the rights of squatter residents and civic justice in general, which proved that widespread corruption existed in the construction of the building. In early 2010 the NGO made the documents public and a year later a wide swath of Mumbai's political elite are reeling from their involvement. While the specifics of the case are beyond the purview of this chapter, they reveal that the developer enrolled high-level government employees to illegally issue permits and false Non Objection Clauses, amend Development Plans, and transfer development rights. Those implicated include employees of the MMRDA, which issued all clearances, employees of BEST for transferring the development rights of the Bus Depot to the developer, and many others including IAS officers and, unsurprisingly, the Chief Minister of Maharashtra who was forced to resign because of his involvement. The Municipal Corporation used the scandal as leverage to regain lost power over urban development in the city by trying to abolish the MMRDA as SPA for the Back Bay. The Mayor said: "Incidents like Adarsh can be contained only if there is one agency to decide about development and planning. The powers should be vested with BMC" (As reported in Sharma, 2011).

Finally, in terms of official development in the Back Bay, plans are quietly being drawn to house a metro car shed in Block VI of the BBRA (where Ganesh Murthy is located) for a new subway line being devised by the Metropolitan Rail Transportation Project (MRTP), which is a branch of the MMRDA. Several plans are being formulated depending on the latitude given by the MoEF for adhering to CRZ norms. The most extensive plan would require the reclamation of the entirety of Block VI to include a large maintenance facility. Alternatively, a smaller shed could be built and the maintenance facility could be moved to the northern end of the line by extending the track by eight kilometres, although this would involve another portion of CRZ land. In both cases the shed could either be placed above or below ground, but considering the helipad, bus depot, and seaside location, the MRTP would prefer to reclaim the land with debris being mined from a current metro line, build

below ground, and develop commercial and real estate properties on top of it. In July 2008, the MoEF in New Delhi denied the MRTP the right to build anything in Block VI of the BBRA, but the MRTP resubmitted the plan in the spring of 2009 arguing they had no other options. The Director of the MRTP was confident they would get the permission to build: “In the end, we’ll get the land” (Interview, Director MRTP, 12/18/09).

4.9 Conclusion

This chapter contributes to several aims of the thesis by providing contextual information into the macro-level concerns of contested urban planning processes in Mumbai and into the more micro-level concerns related to the Back Bay, where Ganesh Murthy is located. This contextual information is useful in the construction of a holistic approach to the emergence of Ganesh Murthy and to understand its potential future, which continues to be negotiated alongside an understanding of land (or its potential) as a virtual attractor motivating many developmental decisions. The development of Mumbai from the 16th century onwards is coincident with a desire for land for commercial purposes and the production of new land to meet these desires. The original seven islands were joined to create transportation routes to facilitate merchants who shipped goods out of the Deccan plateau through the port at Bom Bahia. Additional land was desired and produced to create space for industry and to provide worker housing for those industries and the peripheral jobs they helped create. Later, land was reclaimed for speculative real estate projects such as financial and service sector businesses and high-end residential buildings. Throughout, an attraction to the potential of land fussed the original seven islands and progressively expanded the physical boundaries of the city.

To create this land from its mere potential various actors formed associations and worked together. Foremost in this theatre of reclamation are politicians and developers, whose close associations stem from as early as the 16th century, and continue today. Over time certain patterns of behaviour resulting from these associations become apparent, and as several historians of Mumbai’s urban development argue, city planning in the city has consistently reflected the needs and desires of its developers in serving to facilitate capital accumulation (Verma, 1981, 21; Dossal, 1991, as reported in Times of India, August 5, 1991).

The ostensible logic behind such urban development changes with the times. In the case of reclamation in the Back Bay the government first argued in the 1950s that land was needed for “community requirements” including “public housing,” and “relocation sites” for slum clearance programs. In the early 1970s more land was needed to create housing for “low and middle-income” groups. This need changed in 1974 to address modernist ideals of functionalism. In 1987 the need to reclaim more land in the Back Bay was to address issues of aesthetics and “beautification.” Two years later the justification for further reclamation was laid on the impending threat posed by squatters. While all of these reasons make some appeal to community needs, the tangible result of these appeals in the Back Bay is mainly manifested in luxury condominiums and high-rent office spaces. Clearly, for the government charged with administering the land, the potential profits offered by developers outweighed the social costs of further development. The World Bank was wrong when it said that only the government of Maharashtra benefits from further development of the BBRA (World Bank, as quoted in *Economic and Political Weekly*, 1976). As Ashoak Upadhyay (2010), referring to attempts to develop the Back Bay, put it, “land reclamation became a password to prosperity.”

Reclamation in the Back Bay was also a password for corruption and the assembling of power over urban development. Corruption was apparent in the 1920s as the Back Bay Enquiry Committee found financial mismanagement and graft by the officers of the Development Directorate, while others were found to be siphoning off money to British interests. In the 1950s the BBRS was illegally reinitiated without a development plan as necessitated by the BTP Act, which prevented the public from assessing and commenting on the project. In the 1970s the government allotted 11 plots in the Back Bay to five builders out of 60 that applied. To conceal the obvious favouritism, let alone any changing of money that may have taken place, the builders used different names to conceal their associations with politicians. Another link between a politician and developer is the granting of extra FSI to Free Press House, despite official policies discouraging such types of developments. As Justice Suresh of the Bombay High Court said of the matter “the government was willing to accommodate private companies who could satisfy the whims and fancies of individual officers of the government” (High Court Bombay, 1992: 9). This “politician-builder nexus,” as it is referred to in the Indian press, is well documented (c.f.

Weinstein, 2008; Mahadevia, 2005; Thakkar, 1996). An article written in 2005 by Chandrashekhar Prabhu when he held, amongst other titles, the presidency of the Maharashtra Housing and Area development Authority (MHADA), details aspects of this relationship from an insider's perspective. He states that the reterritorialization of land mainly through land reclamation along the coast or along rivers "is a major source of income for politicians" (Prabhu, 2005: no pagination).

The money involved in land development in Mumbai has twisted the political order such that local self-governance and democratic ideals have been quashed by the consolidation of power in the state government and in the position of the Chief Minister in particular. As a sign of things to come, in the 1950s the state government reinitiated the BBRS without input from municipal government, which was the legal planning authority of Mumbai. In the 1960s the Maharashtra Regional and Town Planning Act greatly shifted power from the municipality to the state by creating a hierarchy favourable to the state and establishing the state government as the ultimate arbiter of the local DP. In fact, while the city continues to be the legal planning authority in theory, the Development Plan it creates is verified by the UDD (state agency) and then actually created by the state's Town Planning Department. In the 1970s the creation of the BMRDA (later changed to MMRDA) as an apex authority was a masterstroke for the state's consolidation of power. Besides being the Special Planning Authority (SPA) for the BBRA, the MMRDA is also SPA for the largest developments in the city including: the Bandra-Kurla complex, the Oshiwara District Centre, and the International Finance and Business Centre, amongst others. Additionally, the MMRDA controls all transportation and major infrastructure projects in the city such as the Mumbai Metro Rail Project, the Mumbai Monorail Project, the MUTP, MUIP and a host of other projects. The problem is not that there is an apex body directing development, but that this body has assembled a tremendous amount of power to create and implement projects in the city, and is unaccountable to the local population. Of the 17 member Authority directing the agency, only four are elected municipal representatives. Many of the other elected member's constituencies are located outside of the city, which greatly limits their sense of responsibility to the local population. As an urban planner at the MMRDA says, "the MMRDA can do what they want, and they do do what they want" (Interview, 12/23/09).

The MMRDA itself is a tool of the Chief Minister of Maharashtra, who chairs the highest authoritative council, and appoints the MMRDA Commissioner. Indeed, the Chief Minister has assembled a tremendous amount of power over land development in the city. The Chief Minister appoints the Commissioner of the BMC, occupies the chair of the UDD and SRA, and is the Housing Minister. The Chief Minister's office is also implicated by Prabhu (2005), who lists the de-reservation of land plots by a succession of Chief Ministers for profit by opening them up to private development. The last Chief Minister was forced to resign over a land development deal implicating a wide set of government agencies.

The potential to personally profit from reclaiming and developing the Back Bay led to spurious associations between politicians and developers and contributed to the state's consolidation of power. However, the state's trajectory of reclamation in the Back Bay was consistently attacked by other actors that sought to establish competing trajectories. The municipal government long tried to maintain control over the area and produced plans to establish its own trajectory of reclamation perhaps in part to align the city with the desires of state officials. A plethora of organizations including state bodies, the central government, the municipal government, multilateral organizations and local NGOs condemned the state's reclamation efforts in the Back Bay. When the tactics of the municipal government and the various public admonitions had no effect in arresting the state's reclamation efforts the municipal government and other political actors took the state to court, which went to the Supreme Court of India. It took the force of two confluent trajectories to finally disrupt the state's reclamation in the 1970s: the publicity of juridical proceedings proving the criminality of government officials together with the public statement of the Chief Minister to withdraw from further reclamation. Even so, the state continued to push for reclamation, only to be temporarily arrested by the CRZ in the 1990s.

The state government has not forsaken its golden goose as, quietly, the MRTP is trying to reterritorialize Block VI for a rail shed and being open to forms of development on top of the infrastructure. Meanwhile, slowly but surely the Back Bay is being reclaimed in other ways not directly linked to the government but certainly reliant on them to some degree. Squatter settlements that emerged on the shores of the Back Bay in the mid 1960s have expanded to include tens of thousands of people occupying many new hectares of land

along the shore. There are now roughly ten squatter settlements in the Back Bay, and they and their residents are formidable engines of reclamation.

The squatter settlements could never have gained a foothold in the Back Bay if it were not for the dynamic and contested system of local reclamation that has spanned close to 200 years. If the government had been successful in its efforts, there would never have been a Ganesh Murthy Nagar or other settlements similar to it. But if the government had not been at least partially successful, again, Ganesh Murthy would not exist. As these settlements eat into mangrove forests, beloved by environmentalists and owners of wealthy condominiums in the area, it is not clear how or if the government is working to arrest their development. Indeed, the government has provided water, electricity, and other components that have facilitated the growth of these illegal and unwanted settlements. The following chapters therefore explore the emergence and development of Ganesh Murthy to uncover the various productive associations within the settlement and between these networks and politicians, government agencies, and developers that have allowed the settlement to thrive.

Chapter V

Population, Land, Hutments: Intensive Processes and an Overview of the Nomadic Assemblage

5.1 Introduction

This chapter provides an overview of Ganesh Murthy's population and built environment by charting its origins in the early 1970s and its expansion over nearly forty years. The incipient settlement, originally a marshy mangrove forest, was territorialized through three interlinked intensive processes from which emerged its built environment and a community of people with far-ranging internal and external associations. Various components of the settlement were assembled through self-organizing forces without an external authority. However, the reciprocal relations between components, which enable and constrain action, have resulted in social hierarchies and fragmentation in the community. Elements of the State apparatus are identified as important components in the development of the settlement, which is understood as nomadic for its persistent existence outside the State despite the latter's attempts at capture and containment.

The chapter commences with an overview (5.2) of the settlement in terms of its population (5.2.1) and built environment (5.2.2). The following section charts the development of Ganesh Murthy (5.3) from its origins in the early 1970s (5.3.1) through the 1980s (5.3.2), the 1990s (5.3.3), and into the new millennium (5.3.4). The next section makes the case for understanding Ganesh Murthy as an assemblage (5.4) by briefly reiterating the role of land as a virtual attractor (5.4.1), and outlining the movement of Mumbai's housing sector far from equilibrium (5.4.2), before explaining the dynamic between the three intensive processes of movement to the settlement, hutment construction, and land reclamation (5.4.3). The final section (5.5) argues that Ganesh Murthy occupies smooth space outside the striated space of the State, and details the nature between the nomadic settlement assemblage and the State apparatus.

5.2 Overview of Ganesh Murthy

5.2.1 Social strata

The population of Ganesh Murthy Nagar currently stands at approximately 11,000 people and is mainly composed of migrants that came to Mumbai in search of work and their families. To a large extent, migrants were drawn to the settlement's basin of attraction in

the late 1970s and afterwards by employment opportunities in the vicinity of the settlement and through village and familial associations: roughly 50 percent of the population have relatives living in the settlement. With a population composed mainly of migrants, the settlement exhibits a high degree of regional origin variation (Figure 5.1). Residents hail from three countries, India, Bengal, and Nepal and from 18 states within India. Despite the high proportion of people from Uttar Pradesh, Maharashtra, and Bihar, there is no pervasive regional identity in the settlement. Unlike the Dharavi¹⁴ districts of Kamaraj Nagar, where most people come from Tamil Nadu, or Indira Kureishi Nagar with its high concentration of people from Uttar Pradesh (Sharma, 2000), at Ganesh Murthy regional culture does not contribute to a common settlement identity. If anything, the vast regional diversity may exasperate pervasive feelings of social fragmentation in the settlement.

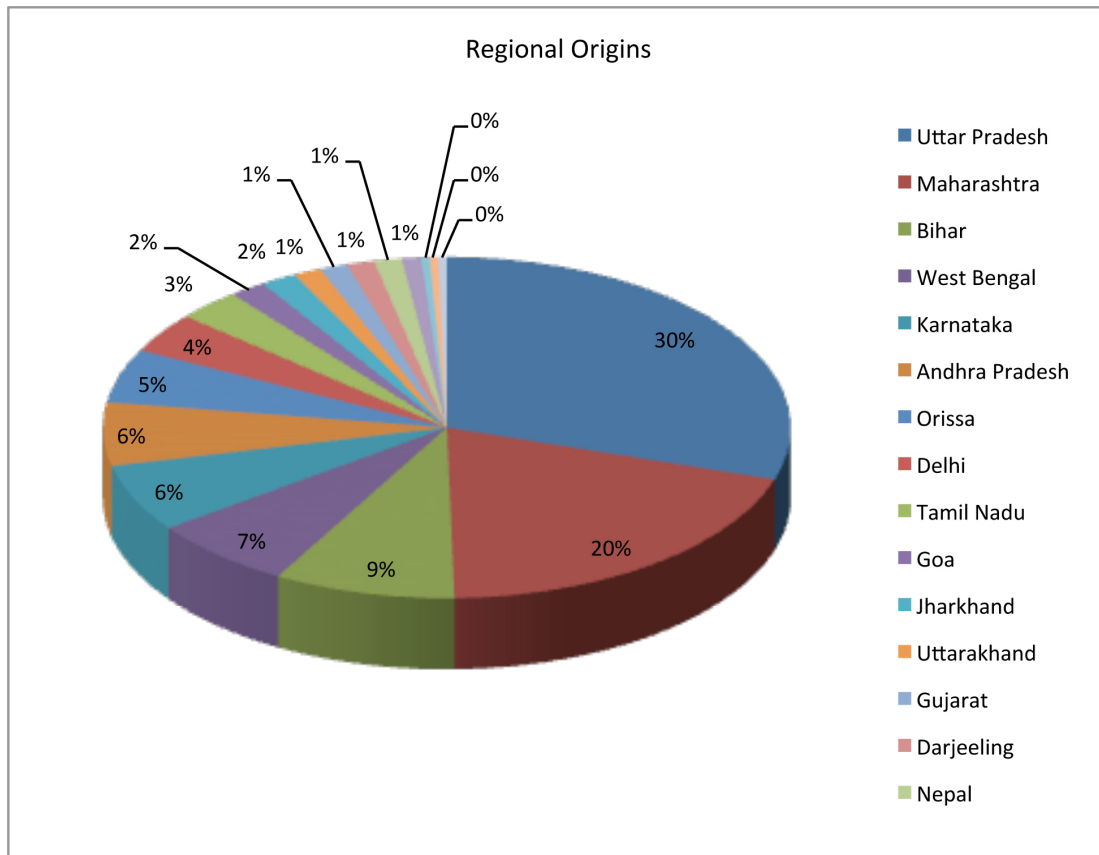


Figure 5.1 Demonstrates regional origins of residents of Ganesh Murthy

¹⁴ Dharavi is one of the largest slums in Mumbai with a population exceeding 1 million people.

Employment in Ganesh Murthy is similarly diverse but dominated by low paying jobs in the service, transportation, and commercial sectors, which each employ a quarter of the settlement's residents (Figure 5.2). Most resident's work places are located nearby the settlement. 16 percent of the population is employed as domestic labourers at the nearby wealthy condominiums of Cuffe Parade in the form of cooks, cleaners, chauffeurs, or nannies. 12 percent of residents are employed at Navy Nagar in various roles, and nine percent work in the settlement itself. An additional 48 percent of residents are employed in Colaba, Fort, and Nariman Point, while only seven percent work north of Fort (Figure 5.3). Thus, it is clear that proximity of the settlement to employment is an important livelihood condition.

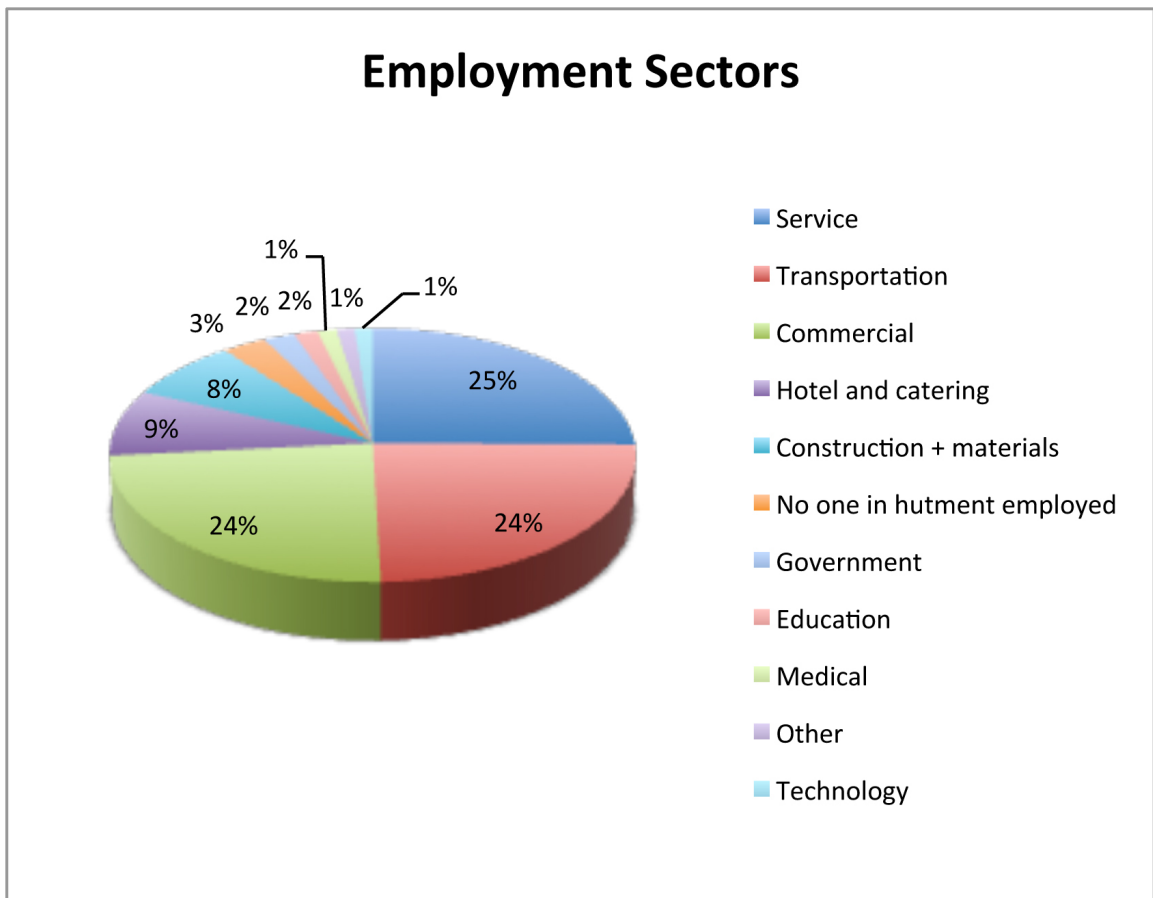


Figure 5.2 Demonstrates percentage of residents employed per employment sector

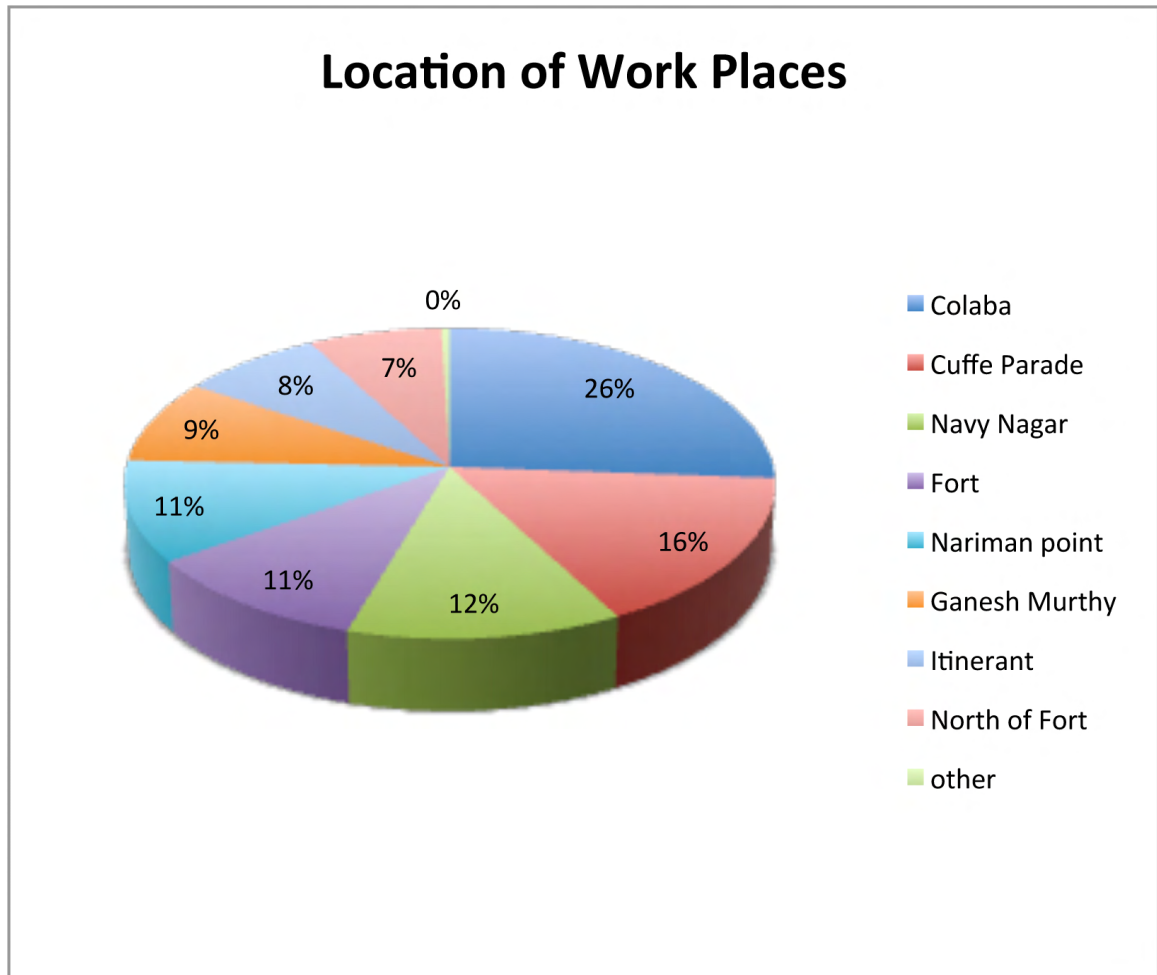


Figure 5.3 Demonstrates resident's location of work place

Ascertained through interviews with residents, average salaries in the service, transportation, commercial, and domestic help sectors are roughly INR 7000¹⁵ per month. With an average of 1.5 workers per hutment, the average monthly income per hutment is INR 10,500. Average figures, however, obscure the widely divergent economic realities that exist in the settlement. Residents may earn enough income for comfortable lifestyles through well-paid jobs as business owners, bank workers, and through other means. For example, one family living in the settlement collects rent from two commercial properties near Fort and a new condominium located in North Mumbai. Wealthy residents often have larger hutments than the norm, which may be serviced by domestic labour, and accessorized with showers, refrigerators, air conditioners, satellite antennas, and wide

¹⁵ The value of Indian Rupees (INR) to British Pounds (GBP) is calculated with the exchange rate of 1 INR to 0.0137796 GBP. The average monthly salary is thus 96.49 GBP.

screen televisions. At the other end of the spectrum many more families live in rudimentary shanties covered by blue tarpaulin roofs. These families were observed to suffer multiple health-related issues and are not able to afford basic amenities such as potable water and medical care. Thus, against a prevailing notion that only the poor reside in squatter settlements this study suggests diverse planes of existence in the economic strata.

In terms of community participation, 61 percent of the population reported being active in the settlement's community in some way but only 28 percent identified themselves as belonging to a formal community group. Of these 28 percent a quarter of respondents were members of organized religious communities, however, many more residents belong to small informal religious consistencies that organize annual celebrations of particular deities. Interviews with religious leaders in this primarily Dalit settlement revealed that there is a clear separation between religion and local administration of the settlement, with religious bodies playing little if any role in the supply of goods or services. 16 percent of those involved with formal community groups report participating in the settlement's administrative processes and 11 percent report involvement with a local CBO. 12 percent reported being involved in political activities associated with party politics.

Anecdotal information gleaned from interviews together with observation suggests that the adult population of the settlement is largely uneducated and those employed spend the majority of their time at work. This, coupled with labour intensive domestic responsibilities (due to limited services) and observed propensity to drink alcohol, has led to a general neglect of children, who spend much of their time roaming the settlement. One social worker living and working in the settlement (Interview, 11/12/09) says that this neglect is one of the greatest challenges currently facing the settlement. In the vacuum created by parental disregard, gangs have come to fill the void. "Now there is a more gang-like atmosphere. Kids are taken by gangs against their will to do things. There are no good role models."

Demographic information reveals that the social strata of Ganesh Murthy Nagar is inhabited by a diverse meshwork of informal consistencies based mainly on familial connections and some form of community participation, but also on regional, employment, caste, and other affiliations. Running throughout this web are more formal networks forged

by religious, administrative, and political associations. Based upon interviews with residents and through observation, broad connections between residents are apparent in their detailed knowledge of each other's identity and activities. Yet concurrently, the survey, interviews, and observation reveal that these connections are weak and tentative. Even though half the population have relatives in the settlement, only 18 percent of these rely on these networks in times of need. Further, only five and four percent of the population rely on friends and neighbours, respectively, in times of difficulty. 65 percent report not having anyone at all to turn to. Additionally, nearly a quarter of survey respondents identified forms of social friction as problematic for the settlement and examples of such were readily apparent during the course of my research. Not only were disagreements and fights prevalent, but during interviews many respondents displayed fear that their neighbours would overhear what they had to say. Respondents would choose not to answer certain questions, others would only have the conversation inside their hutments, and some would only agree to talk at a location outside the settlement. Thus, the broad distribution of social ties in the settlement is tempered by weak links and discontinuities in the form of distrust, social friction, and the inability to rely on social networks in times of need.

5.2.2 Built environment

Ganesh Murthy Nagar is one of fourteen squatter settlements located in the affluent borough of Colaba, located at the southern tip of the Mumbai peninsula. The wealthy residential enclave of Cuffe Parade is half a kilometre north of the settlement. The financial and business districts of Fort and Nariman point are located three kilometres north. The terminals of the two north-south railroad lines in Mumbai are also located approximately three kilometres north of the settlement. Relative to the city as a whole, there are many large open green spaces in Colaba and there is considerable access to the Arabian Sea on the east and west sides of the peninsula. For these and other reasons, Colaba and the surrounding area is a highly desirable residential and commercial area, a fact reflected by Nariman point having had the most expensive real estate values in the world in 1996 (Nijman, 2000).

Ganesh Murthy Nagar is located in the Back Bay on state-owned land, where it occupies roughly 5.4 hectares of land. A road named Prakash Pethe Marg marks the eastern periphery of the settlement and this road extends down to Navy Nagar, which occupies the entire southern tip of the peninsula, and forms the southern boundary of the settlement (Figure 5.4). To the west of the settlement, a fence marks the beginning of a mangrove forest, which idles by the Arabian Sea. The fence was erected by MMRDA, the planning authority for the Back Bay, and is guarded day and night by men occupying several surveillance platforms. To the north of the settlement there are three built elements: at the western extremity of the northern border there is Ambedkar Nagar, another squatter settlement, followed by the Bombay Electrical Supply and Transport Company (BEST) bus station in the middle, and a construction site where luxury condominiums are being constructed at the eastern extremity. In proximity to the settlement are four other notable features. A *dhobi ghat*, or slum-like textile-washing place, called Rajak Nagar, exists near the corner of Prakesh Pethe Marg and Sadhu Vaswani Road. Rajak Nagar is the oldest slum in the area, having registered the Colaba Rajak Consumers Co-operative Society in 1951 (Bombay High Court PIL Writ Petition No 45, 2007).

Figure 5.4 Map of Ganesh Murthy and surrounding area
Source: Google Maps and author

Another squatter settlement called Geeta Nagar is located to the west of Ganesh Murthy along a road bordering the northern periphery of Navy Nagar. There is also a vacant lot adjacent to the settlement, which was formerly part of Ambedkar Nagar. It was cleared of hutments in 1997, to make way for a state-initiated helipad. Finally, Ambedkar Nagar surrounds a Maharashtra Housing and Area Development Authority (MHADA) transit camp, where those displaced by government projects have been given housing accommodations. An aerial view of Ganesh Murthy Nagar and its surrounding area reveals two very different textures of built environments (Figure 5.5). Slums areas are densely occupied by hutments spreading out to their limits, while military, commercial and formal residential spaces are neatly laid out with roads connecting buildings and open areas.

Figure 5.5 Demonstrates differences in the fabric of the built environment
 Source: Google Maps

Ganesh Murthy is home to some 2100 hutments, which are mainly composed of one or two floors, but three story hutments also exist (Figure 5.6). The residential housing stock in the settlement is varied, with no two hutments being the same, but 81 percent of the total housing stock is dominated by brick and mortar *pucca* hutments. Five percent of hutments are *kutchra* structures, a mosaic of non-permanent materials such as driftwood, plastic bags, and metal plaques. 14 percent of hutments are semi-*pucca*, which are comprised of at least one permanent component, such as a cement slab floor, or brick walls together with non-permanent materials (Figure 5.7). Most hutments occupy a small footprint (roughly ten feet by 15 feet) and are organized and managed to maximize efficiency. With interior dividing walls a rarity, the same space must be used for all domestic practices. Domestic spaces accommodate various activities by employing creative tools, such as tables mounted on walls by hinges that fold down, multi-use furniture (a bed may double as a table and a

couch), or washing places for culinary equipment and clothes sculpted from concrete that double as door steps.

Mangrove forest and sea

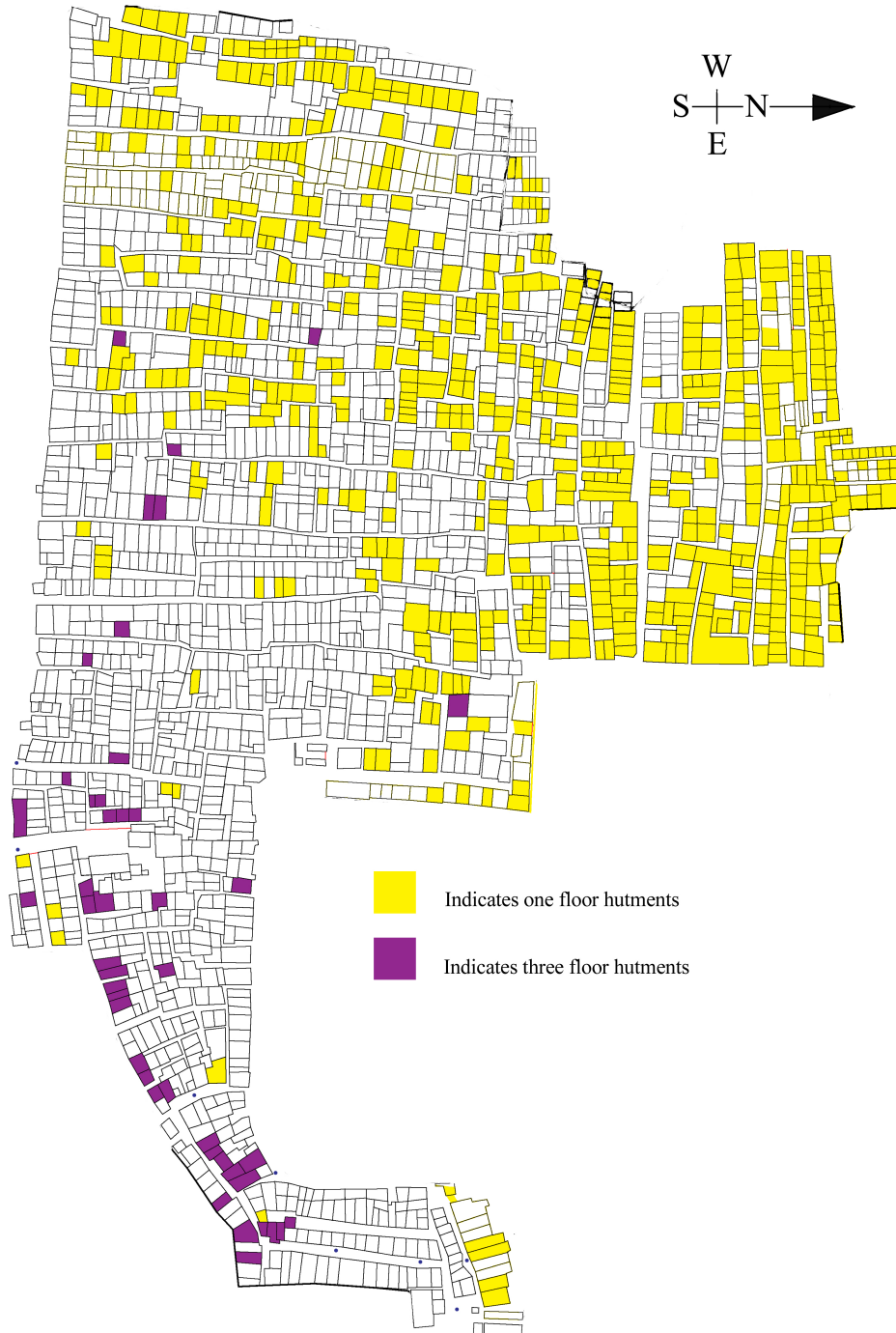


Figure 5.6 Map indicating levels of hutments in the settlement

Non-coloured hutments have two stories

Source: Author



Figure 5.7 Various hutments at Ganesh Murthy Nagar
Source: Author

Hutments are connected to one another via long, narrow alleys (Figure 5.8) and where alleys are home to multiple storied hutments, they are dark: additional floors jut out over the alley to maximize domestic living space (Figure 5.9). The composition of alleys is, like most elements in the settlement, varied; with some alleys paved by concrete blocks, some with dirt and diverse materials, while incipient alleys may still be home to stumps from the mangrove forest (Figure 5.10). The alleys themselves may contribute to the social

fragmentation witnessed in the settlement. The dark alleys do not provide a potential setting conducive to social interaction, let alone social gathering. Further, long alleys with few interconnections negate against social relations forming as a result of spatial proximity. These observations are supported by a lack of evidence demonstrating the existence of social consistencies based on the proximity of two successive alleys.

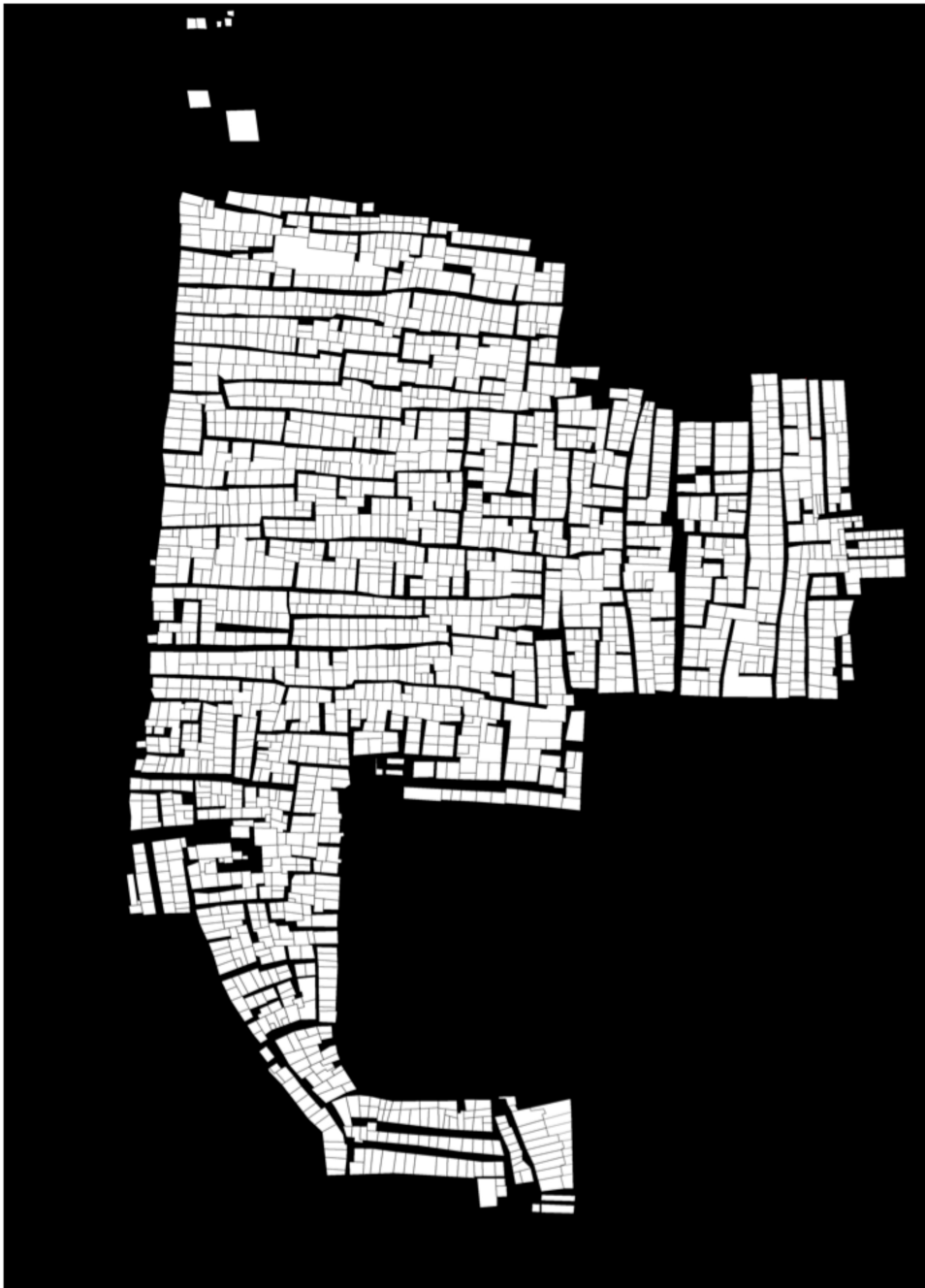


Figure 5.8 Long narrow alleys in Ganesh Murthy
Source: Author



Figure 5.9 Dark alley in the settlement with ray of light
Source: Author



Figure 5.10 New alley in the settlement
Credit: Author

Ganesh Murthy Nagar is colloquially divided into four parts, prosaically named Part I, Part II, Part III, and Part III Backside, and is accessed from three main locations (Figure 5.11). The primary access point is located on Prakesh Pethe Marg where a pathway from the road to the settlement is flanked on either side by motorcycle parking and an open area often occupied by kids playing (Figure 5.12). For a fee paid to the local administrator of Part I, the whole front area can be cleared to accommodate weddings and other communal gatherings. Additionally, there is an access point at the southwest corner of the settlement,

via a road that leads to Geeta Nagar. This entrance provides vehicular access to supply many of the businesses located along the settlement's southern commercial road (Figure 5.13). The settlement may also be accessed along a commercial alley adjacent to the bus station through Ambedkar Nagar, and through several small alleys spanning the two settlements (Figure 5.14). Ambedkar Nagar, in turn, has many access points along Sadhu Vaswani Road to its north, which also hosts a large police station and an informal food market in the evenings. Finally a wide alley between Rakesh Nagar and the helipad provides additional access into the heart of Ambedkar Nagar.

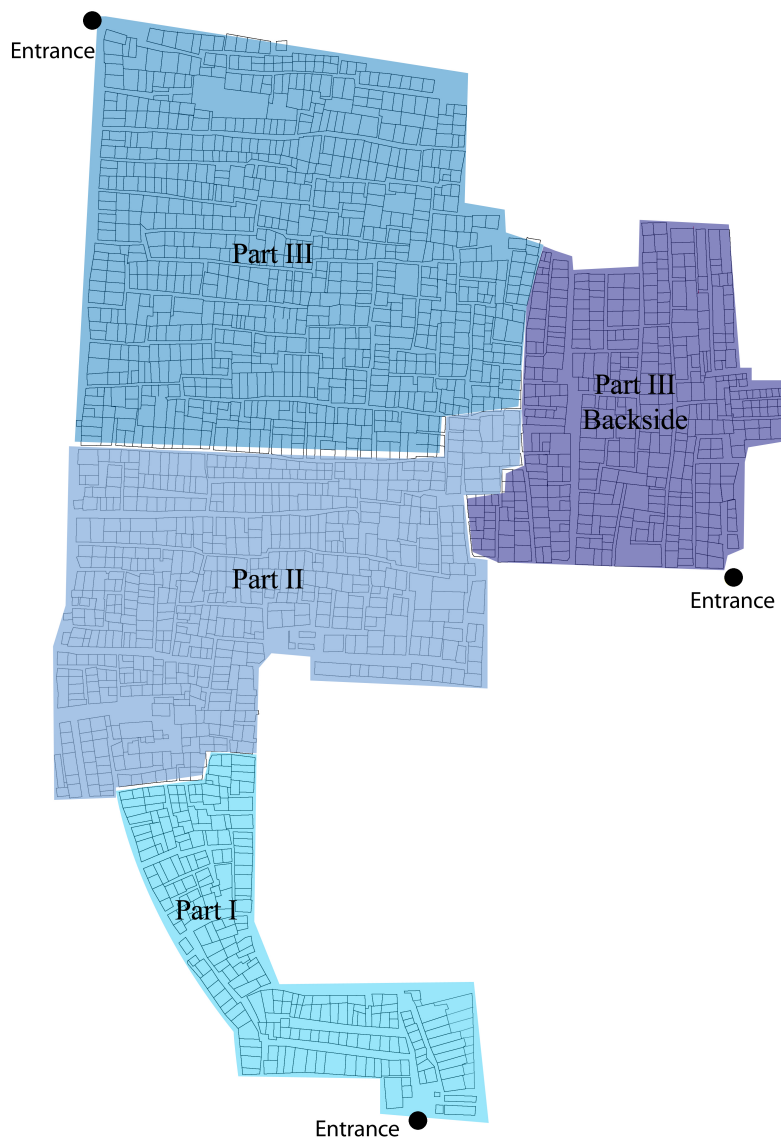


Figure 5.11 Demonstrating divisions in the settlement and three main access points
Credit: Author



Figure 5.12 Primary access point to Ganesh Murthy Nagar along Prakesh Pethe Marg
Credit: Author



Figure 5.13 South side commercial street
Credit: Author



Figure 5.14 Commercial alley joining Ganesh Murthy Nagar and Ambedkar Nagar
Credit: Author

Commercial enterprises line Ambedkar Nagar and Rajak Nagar along Prakesh Pethe Marg from Rajak Nagar to the corner of Sadhu Vaswani Road, and westwards along the limit of Ambedkar Nagar. There are 106 stores and business lining the two settlements. In Ganesh Murthy there are two major commercial arteries; which have a combined total of 73 businesses (Figure 5.15). Additionally 58 smaller commercial enterprises are distributed throughout the settlement (Figure 5.16). These are composed mainly of essential food items, but also tailors and other services including three medical clinics. Thus, in terms of commercial accessibility, the settlement is largely self-sustaining on a day-to-day basis. Further, the redundant distribution of commercial retailers provides a degree of security and consistent supply of goods.

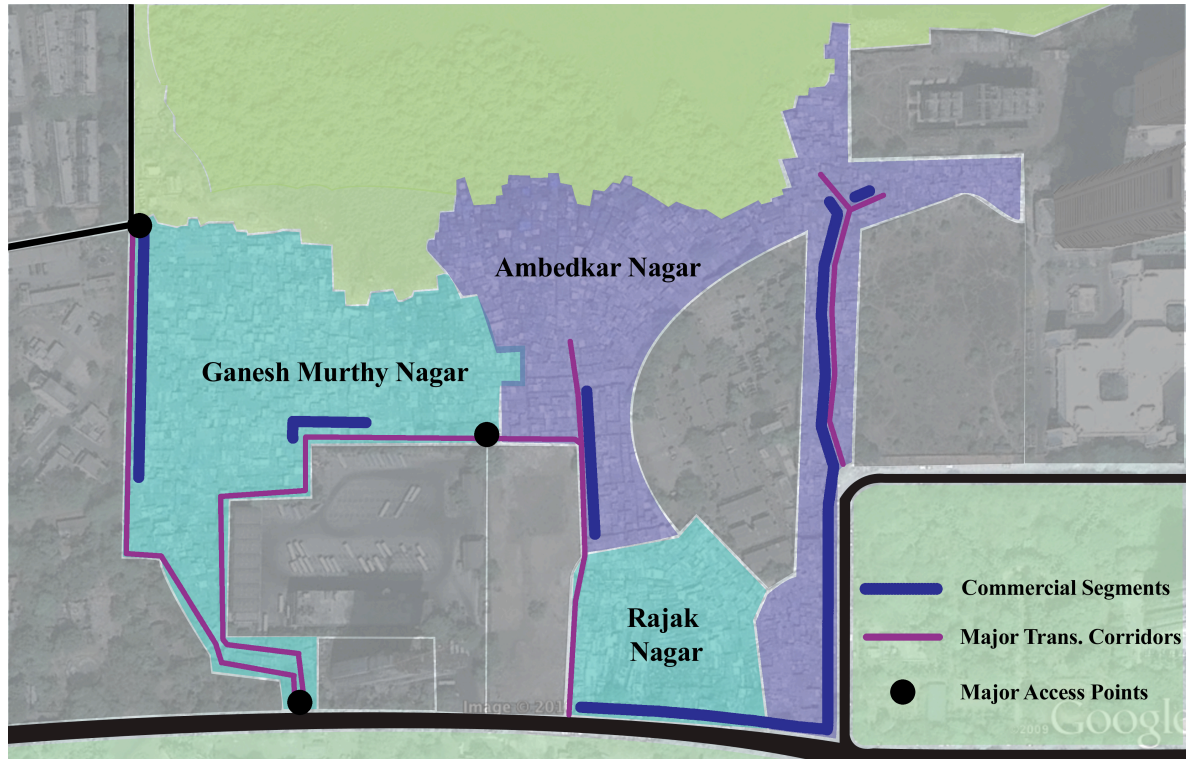


Figure 5.15 Transportation and commercial corridors in Ganesh Murthy and surrounding area
Source: Author

The settlement contains two mosques, one small chapel, and many Hindu devotionals peppered liberally on walls, hanging from plants, and detected via jasmine-infused air particles. The largest building in the settlement is owned by an inclusive Hindu organization, called Satsang, which has many devout followers in the settlement. The building was built five years ago, and the ability to assemble the land from various landowners attests to the power the religion holds in the settlement.

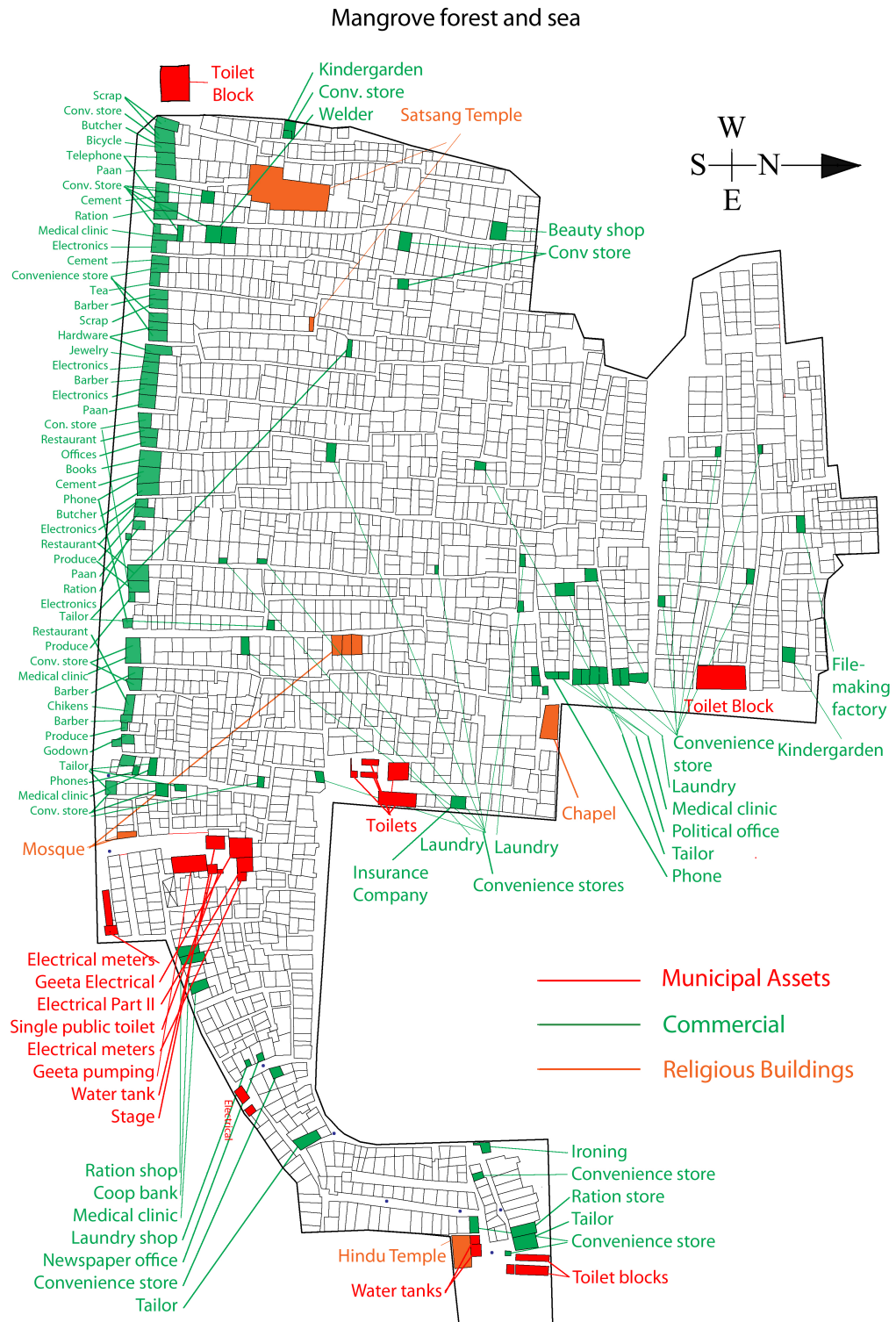


Figure 5.16 Land use map
Source: Author

There are four toilet blocks located in Ganesh Murthy. The two blocks in Parts I and II were built by MHADA and are older, very basic, and operate without running water. The two newer (c. 2003) toilet blocks at the western and northern peripheries of the settlement are more elaborate, with tiled floors and walls, and serviced by running water. The combined total of toilet seats in the settlement is 79, thus the ratio of toilet seats to people is 1:133. This ratio is almost three times the 1:50 ratio advocated by the BMC for squatter settlements. This deficiency is reflected in the survey with 31 percent of people reporting difficulties related to toilets. Other municipal infrastructural assets in the settlement are clustered in Part II, and include a water pumping station for Geeta Nagar, and several electrical meter substations in various states of decay and disrepair. There are also five municipal water schemes operating in the settlement, which have various pumping houses and storage tanks around the settlement. The presence of these water distribution networks is distributed throughout the settlement via pipes that snake above ground through 85 percent of the settlement.

Parts I and II of the settlement feature a sewer system that transports waste to a treatment facility. There are generally no toilets, urinals, or sinks in the hutments located in Parts I and II, but holes in alleys collect rainwater and other waste liquids (from washing and cooking) and connect to the sewer system. In Part III and Part III Backside sewer systems eject waste to a natural drainage plain at the western periphery of the settlement abutting the mangrove forest. This is also the settlement's main solid waste dumping ground (Figure 5.17). Much of the sewer system in Part III and Part III Backside was formally constructed, but a sizable portion of the system continues to be informally fashioned as hutments are improved upon and connected to the system, and as new hutments emerge at the fringes of the settlement. Maintenance of sewers is theoretically the responsibility of the city, but residents perform daily maintenance nonetheless. 13 percent of residents complained about drainage systems, the failure of which is particularly acute during the monsoon, which leads to flooding.



Figure 5.17 Drainage basin and dumping grounds preceding the mangrove forest
Credit: Author

In addition to the open area at the entrance to the settlement along Prakesh Pethe Marg, there are two open spaces that are located in Part II. Both spaces are near municipal assets; the pumping station and meter houses in one case, and the toilet blocks in the other case. Both spaces accommodate a covered stage, and based on the development of the settlement, are likely to have been constructed at roughly the same time as municipal interventions. The open areas are used by the settlement's youth to gather and play sports and games. Resident group meetings, while by no means pervasive, have been known to take place around the stages as well. Young children (predominantly boys) also make use of the open helipad lot to play cricket and other sports, and wider alleys provide another impromptu place to play as well. For adults, there are fewer places to socialize. The market atmosphere of the southern commercial street makes for fleeting and tentative social interactions, and some alleys that do not completely block out light do provide social settings. Beyond the settlement, a restaurant located on the bus station lot, run by a prominent resident of Ganesh Murthy, provides a quiet and secluded locale for certain male residents to talk

politics and business. Women gather publicly to wash clothes at a natural spring in between Ganesh Murthy and Geeta Nagar, and during the daily distribution of water in the alleys.

In sum, the built environment of Ganesh Murthy Nagar may be defined by a diversity exhibited throughout a variety of components like individual hutments, alleys, commercial enterprises, open spaces, sewer systems, toilet blocks, water distribution systems, and others, which together operationalize the settlement as a residential enclave. However, this static representation fails to communicate the everyday fluidity of the built environment. Individual desires and abilities to improve spatial assets translates into an ever-evolving built environment, and because regulatory enforcement is lacking in the settlement, interventions can be made swiftly without engaging with planning and regulatory processes and authorities. The settlement is in constant transformation, with renovations occurring in hutments, floors being added, alleys receiving new water pipes, paving stones, or sewer lines and extensions, and businesses springing up or shutting down. The assembling and reassembling of all these various elements and the functional roles they play in the settlement is effected by chains of actors inside and outside the settlement without an ultimate authority governing the built environment. There are thus opportunities to effect change, but also various constraints and forces that obstruct or dissolve potentials. The following section thus introduces some of the actors and forces inherent in the constant reordering of the settlement's built environment together with the social strata by narrating the unfolding of the settlement's development since its origin in the early 1970s.

5.3 Charting the growth of the settlement

5.3.1 1960-1980

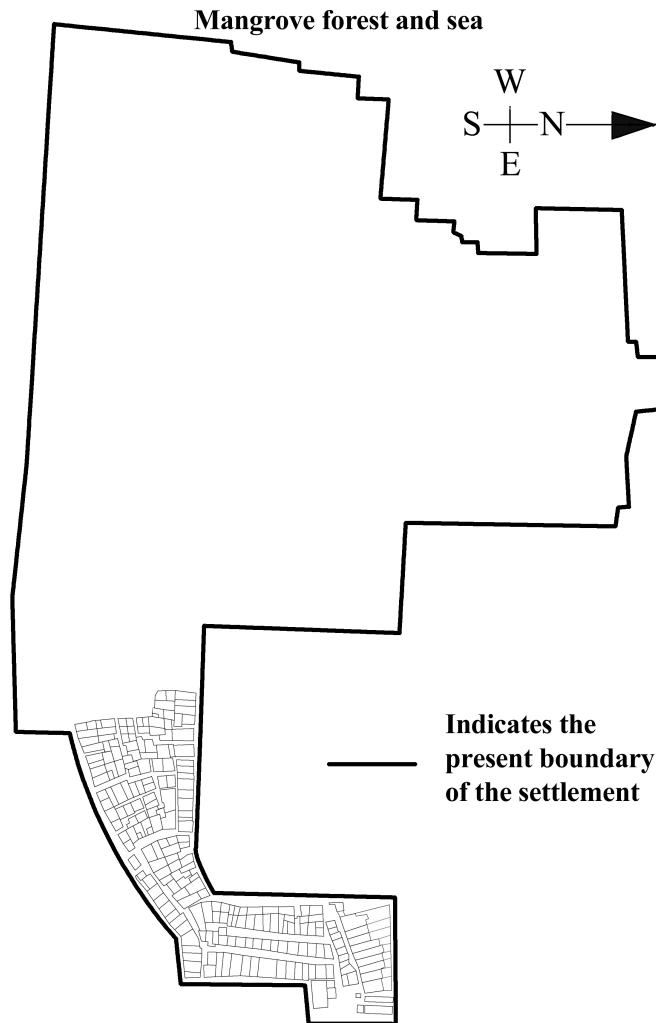


Figure 5.18 Projected built environment of settlement until 1980
Credit: Author

In the late 1960s, when construction crews started building the first luxury condominiums in Cuffe Parade, the land at Ganesh Murthy Nagar did not exist. In its place was a marsh populated by mangrove forests whose growth had been triggered by the 1920s iteration of the Back Bay Reclamation Scheme consisting of the reclamation of land at Navy Nagar and the construction of the sea wall (with a small opening) extending from the military compound to Marine Drive. Navy Nagar, the sea wall, and the sea's tidal movements contributed to a process of siltation, which after 40 years had deposited enough silt in the

southeast corner of the Back Bay to facilitate the growth of the mangrove forest. No longer water but not quite land, the marshy forest's potential as a territory for shelter attracted the attention of a handful of construction workers. Without affordable accommodation near their work in Cuffe Parade, they came to live in the marsh under saris suspended from sticks. They reclaimed small portions of land in the marsh to facilitate their living conditions and were joined by another group in search of land in 1974 (Interview, Resident of Ganesh Murthy, 10/03/09). Mr Murthy, representing 100 of his associates from the Garrison Engineers Service (GES) at Navy Nagar, had lost housing on the military base and petitioned the local Collector in charge of state lands for permission to squat the marsh. Allegedly, the Collector gave his permission for an undeclared sum of money, and the settlement called Ganesh Murthy Nagar gained consistency. One of the earliest settlers to arrive after Mr. Murthy and the GES personnel described the community very positively, saying: "People felt a sense of togetherness and unity. There were no problems amongst us at that time" (Interview, Resident of Ganesh Murthy, 13/03/09).

In 1976 a slum census was carried out in Mumbai by the state government to enumerate the number of slums and their hutments and to segregate slums into official and unofficial classes. The census found 2.8 million slum dwellers living in 1,680 settlements (Panwalker, 1996). "Ganesh Moorthy" was coded as an official slum and defined by the 110 hutments occupying the site. Other local slums in the area also gained "official" status. Rajak Nagar was defined with 24 hutments, and "Fisherman's Colony", to the north, is defined with 34 hutments. The largest settlement coded at the time was Geeta Nagar with 985 settlements (State of Maharashtra, 1976).

"Official" slums located on state land are segmented from other slums that are located on municipal or national government land, and from those slums that had resulted from illegal subdivision on privately-owned land. The coding of Ganesh Murthy as an official slum reterritorialized the incipient community by increasing its material identity and stability under state legislation. At this critical threshold the settlement changed in kind towards a becoming with greater potential for links with the State. The inclusion of Ganesh Murthy as an official slum created a perceived sense of tenure security and gave impetus to the improvement of shelters. Official slum status also created the potential to obtain basic

municipal amenities and this triggered the emergence of social consistencies oriented towards realizing these services. The establishment of the Sri Ganesh Murthy Hutment Dwellers' Welfare Association, sometime between 1976 and 1980, is an example of such a consistency. The legislation creating official slums and the enumeration of hutments would also come to striate the settlement, creating a fault line between the official Ganesh Murthy, currently known as Part I, and the unofficial settlement following a line of flight away from Part I towards the west into the mangrove forests. Although the settlement had been captured to an extent by the State, inefficiencies in surveillance, regulation, and enforcement, together with the forceful flow of new migrants into the city prevented the State from maintaining the identity of the settlement as defined by 110 hutments. Migrant settlers, motivated by the potential of land and shelter at Ganesh Murthy, and the social consistencies that resulted thereof, generated a form of persistent disequilibrium¹⁶ in the settlement, facilitating an emergent pattern of development and organization. Lastly, while legislation removed the threat of demolition without relocation and thus added to a sense of tenure security, it denied real tenure security to residents, which would have stabilized the relationship between residents and the settlement, to the land. Instead, the settlement would remain unfixed and set adrift from forms of stability resulting from tenure security.

¹⁶ "Persistent disequilibrium" denotes a state in between constancy and relentless change (see Kevin Kelly's *See Out of Control*, 1995). In the terminology of Deleuze and Guattari, it is a state in between stratification and an absolute line of flight – the domain of an assemblage.

5.3.2 1980-1990

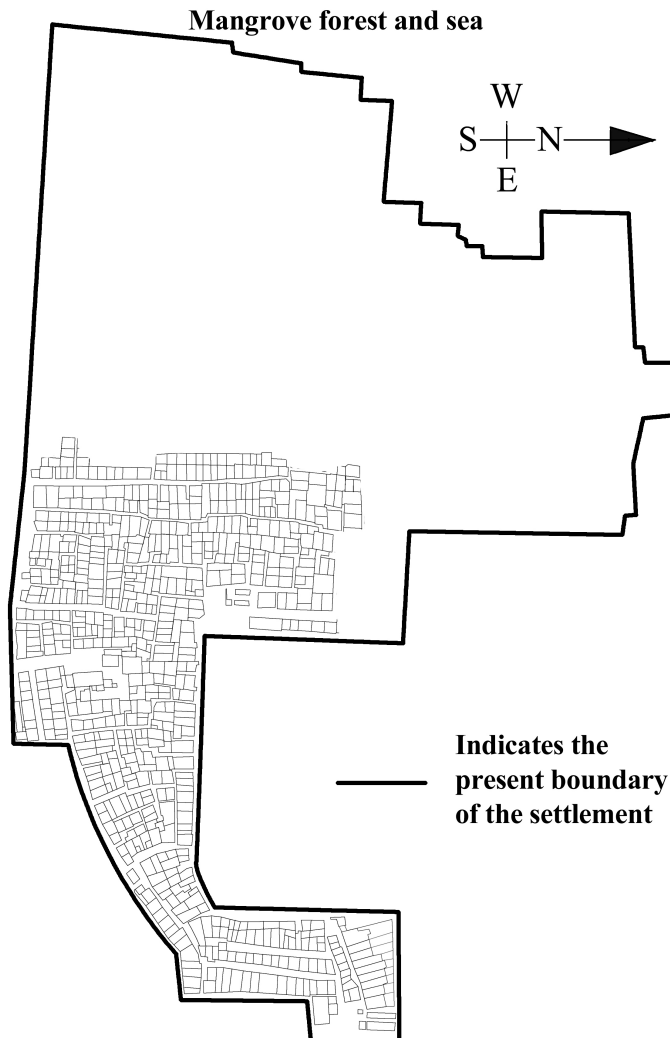


Figure 5.19 Projected built environment of settlement until 1990
Credit: Author

The housing shortfall in Mumbai, resulting from migration flows to the city from the 1970s to the mid 1980s and the failure of formal housing supply mechanisms (Bhide, 2009) did not immediately impact the population and development of Ganesh Murthy. By the end of the 1970s there were roughly 500 people living in the settlement. However, in the decade of the 1980s the settlement's area expanded threefold to accommodate some 400 hutments housing a population of 1,600 people. The need for increased essential services compelled the congealing of consistencies in the social register, which produced key socio-technical components of the settlement assemblage.

In 1981 the Maharashtra government amended the cut-off date for inclusion in the official slum register from 1976 to 1980. A slum census carried out in 1983 counted 1,930 settlements in the city occupied by an estimated 4.3 million people living in 924,572 hutments (Panwalker, 1996). The legislation and census enumeration at Ganesh Murthy triggered the organization of the Seva Sangh, a community based organization (CBO) created to procure municipal water services, in 1982. As with the 1976 efforts to reterritorialize slums, the legislation and census in the 1980s further striated the settlement, segregating the newly formed Part II community from Part I and the continually expanding settlement.

During the decade of the 1980s the settlement moved westwards into the mangrove forest, constrained to the south by Navy Nagar, and to the north by the BEST bus station, which was established in 1976. As the settlement spread out, two main transportation corridors emerged to feed the influx of migrants building new hutments over marshy land. These are located along the borders between the settlement and its two aforementioned neighbours. The bus station, which went through several renovations and additions, made a vital contribution to the development of the settlement as a source of materials for construction and sand to reclaim land from the marsh. Residents recall that children were sent to the bus station to collect sand in buckets, as the security guards were more tolerant of children that trespassed the land than they were of adults. Demonstrating the importance of material inputs from the bus station, one resident asserts that the expansion of Ganesh Murthy “would not have been possible” without them (Interview, resident of Ganesh Murthy, 10/18/09). The bus station provided materials to the settlement several times during periods of renovation and construction, and efforts to increase security there are documented by the multi-layered fence surrounding it. The fence features a base of stone that supports a newer cement wall with a newer metal fence on top of it, and is topped finally by barbed wire. Residents also used Navy Nagar as a dumping ground for garbage until a fence was erected there to halt the flow of refuse in the 1980s.

5.3.3 1990-2000

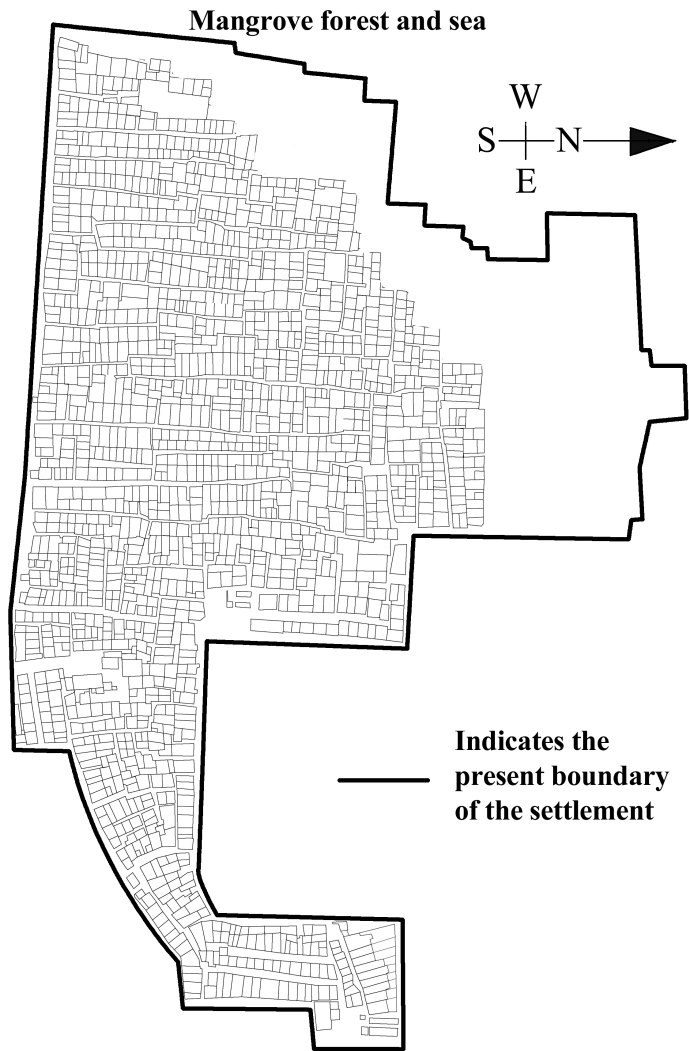


Figure 5.20 Projected built environment of settlement until 2000
Credit: Author

On February 20, 1991 two important pieces of legislation were passed that fuelled the potential for growth at Ganesh Murthy. The Ministry of Environment and Forests of the central government created the Coastal Regulation Zone (CRZ) as part of the Environment (Protection) Act, 1986, to protect the quality of India's coast from pollution and development. The CRZ legislation limits certain activities along the coast and other bodies of water affected by tidal movements up to 500 meters from the high tide line, and prohibits land reclamation. In addition, the Government of Maharashtra amended the Development Control Regulations, which regulates construction activities, to include Regulation 59. This

states that except for underground toilets and greening without construction, no construction can take place on coastal land up to 200 meters from the high tide line. This legislation may have triggered increased migration to the settlement by negating the possibility of further land reclamation and development by the State apparatus, thus creating a relatively safe location for migrants to informally settle. The Director of the Metropolitan Rail Transportation Project suggests that slum dwellers are aware of legislation that limit the development of land and act upon this information to find safe havens for their hutments (Interview, 11/18/09). The demographic data of migrants moving to Ganesh Murthy, as gleaned from the survey, supports this hypothesis. While the decade of the 1980s witnessed the population in the settlement increase by 1,100 people, the decade of the 1990s saw 5,900 more people in the settlement, propelling the population to 7,000 people that occupied some 1,400 hutments.

Bold newcomers to the settlement captured land by driving stakes into the ground and building horizontal platforms of wood suspended several feet above the marsh to live on. Makeshift walls and a plastic roof would quickly follow. Established residents of the settlement also captured land through the same processes with the intent of renting their second and third hutments to newcomers. Some of these established residents made a business out of providing rental housing, with one resident alleged to have had over one hundred units in their portfolio (Interview, resident of Ganesh Murthy, 11/15/09). Large-scale reclamation of land and hutment development also occurred with the help of actors outside the settlement. In 1999, for example, the Indian Express newspaper reported that 70 truckloads of debris were dumped into the mangrove forests at Ganesh Murthy, creating an acre of developable land. A local Municipal Councillor at the time said: “The slumlords in the area usually connive with politicians to grab the sea coast this way and then sell the reclaimed land at a premium... taking into account the high real estate prices in Colaba-Cuffe Parade, there is big money involved here” (Singh, 1999a).

The reclamation and territorialisation of land, which was ironically spurred by laws intended to achieve the opposite, was quickly reterritorialized by the State. Legislation was passed that again amended the cut-off date for inclusion in the official register of slums to 1995 where it currently stands. As before these laws divided the settlement further to create

Part III and Part III Backside, and triggered the organization of more social consistencies to procure municipal services.

The territorialisation of land from the mangroves and the development of hutments continued to follow a line of flight westward and concurrently to the north. To a large extent the topography of the land influenced the developmental trajectory of the settlement, which followed the high ground occupied by Navy Nagar and the bus station. The two main transportation corridors continued alongside these axes, which fed emerging alleys directed downwards into the marsh. A map representing the height of hutments in the settlement supports this conclusion (Figure 5.6). As slum hutments are generally built incrementally, over time and when owners have assembled the funds and materials to invest in their hutments, it is likely that the height of hutments is generally related to their age¹⁷. As such, the map shows that older elevated buildings are located in the southeast portion of the settlement and along the transportation corridors, while one-storied hutments are clustered towards the northwest of the settlement indicating it was developed later. The map also points to the expansion of the settlement along its vertical axis. Over time and with more residents incorporated into perceived tenure security, concrete slabs and brick and mortar walls replaced the original wooden platforms, makeshift walls, and tarpaulin roofs. The newer *pucca* hutments may support second floors and thus allow for rental incomes to be derived from the extra space or the accommodation of expanding families. Currently, 20 percent of Ganesh Murthy's residents live in rental housing, where they pay anywhere from INR 1000 to 4000 a month.

The 1990s was the largest decade of growth in Ganesh Murthy, with 45 percent of the current population moving, or having been born, there during the decade. However, the settlement did not follow a linear trajectory of constant expansion. A fire in 1996 destroyed a reported 300 to 400 hutments (Interview, resident of Ganesh Murthy, 10/07/09). Residents whose hutments were destroyed remained in the settlement and as the fire coincided with a large construction project at the bus depot, resulted in a major expansion into Part III. The event of the fire demonstrates the resilience of residents in overcoming setbacks, and the fluid character of the settlement space, which both expands and contracts.

¹⁷ For a discussion about informal building practices and incremental building techniques see (Wells, 2001).

5.3.4 2000 - 2010

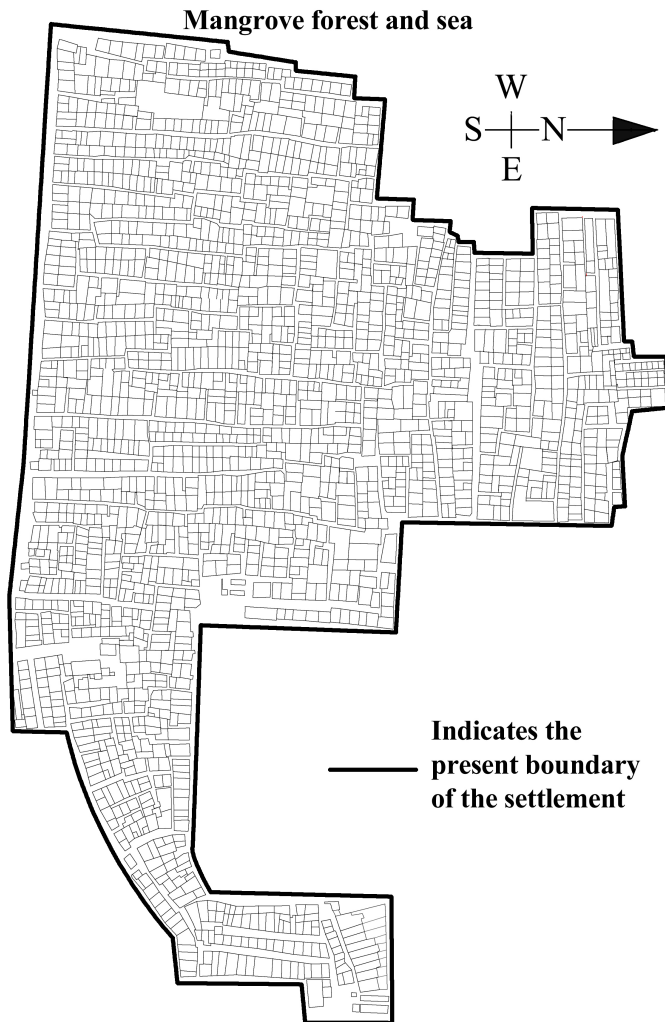


Figure 5.21 Demonstrates built environment of settlement in 2010
Credit: Author

The first decade of the new millennium was a period of incremental growth, and destruction and contraction in the settlement. During the decade the population grew by 50 percent, reaching some 11,000 people by 2010. The development of the settlement continued the pattern established in previous decades following a trajectory oriented to the west and avoiding the low marshy area for as long as possible. The settlement also continues its expansion vertically as well, and currently 50 percent of hutments have two floors. Four percent of hutments accommodate three floors. These buildings not only contravene the 14-foot vertical limit of slum hutments as defined by the Development Control Regulations, but may also constitute a threat to national defence as some have a

site-line over the military's fence. Informants intimate with the owners of these hutments note that they are wealthy and hold the power of *touch*, meaning they have connections and influence: in this case with certain regulators. These owners allegedly pay employees of the Collector and military personnel *baksheesh* (a bribe) to occupy space in this way.

Concurrent with the expansion of the settlement are more frequent contractions and rearrangements of space and society. Municipal demolitions have become an annual feature of the settlement's existence since 2004 when 60 hutments were demolished as part of a municipal-led citywide demolition drive that razed 90,000 homes from December 2004 until March 2005 (YUVA, 2005). According to the report generated by the Youth for Unity and Voluntary Action (2005) municipal demolitions target hutments that have not been notified on the official register, but often, official hutments are destroyed as well. The military also stages its own demolition of built-up components on Ganesh Murthy's major transportation and commercial corridor abutting Navy Nagar. Retailers along the corridor use the military's concrete perimeter wall to suspend canopies, sales items, and other things. The military interpret these activities as a threat to their security and enter Ganesh Murthy every three months with a complement of police officers to demolish not only anything suspended from the wall, but all tables, stands, and materials along the corridor as well.

Further, in 2003 a large fire engulfed 200 hutments at the western extremity of the settlement (Indian Express, 2003). According to several residents the fire was apparently ignited before a municipal demolition as a tactic to avoid having to produce an identity card demonstrating their inclusion in the official slum register (Interview, resident of Ganesh Murthy, 10/07/09)¹⁸. Following the fire the MMRDA (as the planning authority for the Back Bay) erected a fence along the new border to contain the settlement. As a result, residents affected by the fire largely re-established their hutments at the northern periphery of Ganesh Murthy, which had not been territorialized due to its low elevation and tendency to be flooded during the annual monsoon. Despite the fence, which is guarded, the settlement continues to blur the borders of the State apparatus. Bangladeshi immigrants

¹⁸ This is a known tactic employed by slum dwellers in Mumbai. Without an identity card authorities cannot disprove the slum dweller was included in the official register.

who say they are from Kolkata to avoid immigration authorities have built a small satellite settlement in the mangroves to the west of Ganesh Murthy, underneath the gaze of the police *chowky*.¹⁹ The settlement is also a staging point for the dumping of debris into the mangrove forest at the end of the guarded fence in neighbouring Ambedkar Nagar. An informant reports witnessing nightly deliveries of refuse to Part III by truck where it is packaged and sold for INR 50 a bag-load (Interview, resident of Ganesh Murthy, 11/12/09). Allegedly, Bangladeshi labourers follow a trail through Ganesh Murthy to get to the construction site abutting the mangrove forest (Figure 5.22). Ganesh Murthy is the staging point because the drop off point is cloistered. Other possible locations along the periphery of Ambedkar Nagar are less suitable because they are on a large road and in proximity to the Cuffe Parade police station. Finally, in terms of blurring the lines of the settlement, people from Ambedkar Nagar whose hutments abut the settlement allegedly switch their addresses to Ganesh Murthy to acquire better services.



Figure 5.22 New hutments taking shape on the periphery of Ambedkar Nagar
Credit: Author

¹⁹ A police *chowky* is a small edifice used as a police satellite station.

5.4 Understanding Ganesh Murthy Nagar as an assemblage

5.4.1 Land as a virtual attractor

The historical narrative related above demonstrates that the development of Ganesh Murthy Nagar is integrally tied to the desire for land; a virtual attractor, whose immanent force of potentiality has motivated the transformation of Mumbai from seven islands into a peninsula over the last 500 years. It was the attraction to land and the potential profits associated with it that motivated the government and private interests to reclaim and develop the Back Bay from the 1800s onwards as related in the last chapter. Competing actors, however, conspired to continually delay and fragment the development of the Back Bay, resulting in the siltation of the southeast corner of the bay. Over forty years the accumulation of silt created the conditions for a mangrove forest to emerge, which beckoned to construction workers at Cuffe Parade looking for land on which to erect their makeshift shelters. The potential for shelter offered by land hailed Mr Murthy and his GES co-workers that had lost their land and shelter, and the same potential later called to the thousands of migrants that came to the city from the rural hinterland.

5.4.2 Housing in Mumbai: Far from Equilibrium

From an early date the demand for land and shelter in Mumbai caused an imbalance between housing demand and supply in the city. Amita Bhide (2009), a scholar specializing in Mumbai's squatter settlements, places the emergence of modern slums in Mumbai in the 1930s. During the 1950s, rural to urban migrants, attracted to the city by the potential for economic benefits in the burgeoning textile industry, accounted for 50 percent of the city's population increase. In the 1970s, droughts in the Deccan Plateau propelled many more migrants to Mumbai. These singularities, and their triggering of flows of people into the city contributed to the emergence of slums. The natural reproduction of the urban population, together with limited land on the peninsula and a sluggish housing sector, sent the housing system far from equilibrium, reaching an annual shortfall of 45,000 residential units from 1970 to mid 1980 (Bhide, 2009). From 1991 to 2001 1.12 million migrants from outside of Maharashtra came to the city, representing 54.8 percent of the net population increase (Government of Maharashtra, 2006). Currently, with more migrants arriving in the

city combined with the force of natural reproduction, the flow of the city's population continues to overcome State and market forces producing formal housing. At the time of writing the population of Mumbai is estimated at 13,830,000 people (Helders, 2010), and some 8,680,000 live in slums (Singh, 2010), representing 62.8 percent of the population. The creation of slums, as functional elements in the city system, has emerged to accommodate the flow of people and bring a form of equilibrium to the city's housing sector. A number of forces in the city contributed to the emergence of each slum, many of which organized themselves without an external source directing that order. These self-organizing functional structures, in the terminology of Deleuze and Guattari, are assemblages, and the following section examines the intensive generative processes that translate between virtual desire to the actual realm as manifest in Ganesh Murthy's social and built environments.

5.4.3 Intensive generative processes

Intensive morphogenetic processes generate convergences and divergences in a system and are identified as linked rates of change between processes. The process of moving to Ganesh Murthy Nagar, which was independently repeated thousands of times throughout the 40-year existence of the settlement, is tied to the processes of building a shelter and reclaiming land. These processes translate the virtual realm of potential for land and shelter through the motive force of desire to the actual realm of observable reality: the hutments and alleys that comprise the built environment. Moving to Ganesh Murthy, through being drawn into its basin of attraction, was historically facilitated via associations with family members, friends, and village contacts. Additionally, knowledge of the site and the subsequent move there came about through a practice known as *roaming*, which is a term heard frequently in the settlement and denotes purposeful explorative movement. Once land, or at least its potential, was identified, the process of building a shelter could commence. This process originates in finding, taking, or purchasing the materials to build a platform on four poles with a roof, so as to suspend the shelter above the marsh and protect it from monsoon rains. Materials for these shelters may also have been provided to new migrants that purchased the land from a local landowner or by migrants renting the shelter: a practice that still takes place in the settlement today. Access to the hutment was a primary

consideration in capturing land or purchasing it, as the developing site was a marshy mangrove forest, which impedes movement. For this reason, the shelter was usually built right next to its neighbour down an undulating path of refuse and mud, minimizing the amount of energy needed to access the hutment. Abutting and attaching the shelter to its neighbour also increased the stability and durability of the whole. The success of this design led to its repetition, resulting in the linear progression of alleys. Aligning hutments both side-to-side and back-to-back, provides the maximum degree of stability and durability, minimizes the energy needed to access the shelter, and maximizes the utility of limited space, resulting in the predominant form of double hutment clusters in the settlement.²⁰

The process of erecting a shelter is tied to the incremental dumping of debris underneath the platform and in front of the hutment. This process of incremental land reclamation works to solidify the base of the shelter and mitigates against the threat of water inundation. Further, individual efforts of land reclamation in front of hutments elevate the walkway and facilitate access to the shelter. In turn, the process of reclaiming land from the marsh facilitates access to potential land located further down the linear chain of hutments, and thereby facilitates the construction of new shelters by migrants and other actors. As such, the rate of change in population, shelter creation, and the reclamation of land are linked. As more people arrive more shelters are erected and more land is created, resulting in a circular pattern of development, which facilitates the movement of more people to the site.

Moving to the settlement, establishing a shelter, and reclaiming land are intensive morphogenetic processes that produce more than the sum of their parts. For example, individual efforts to reclaim land in front of hutments together become transportation corridors. Further, these alleys together with hutments and residents combine to form a settlement from which social consistencies emerge to acquire water distributions systems, toilets, and other built assets. Unlike other slums, which arise through illegal land division, there was no one authority that directed the construction and evolution of the settlement.

²⁰ i.e. two rows of hutments located back to back.

The benefit of an historical and process-oriented approach to understanding the emergence of Ganesh Murthy reveals that many heterogeneous components and their reciprocal relations feed into the settlement-assemblage. State and private actors desirous of land reclamation in the Back Bay and the sea wall that was erected, together with countervailing forces such as community organizations (e.g. the Save Bombay Committee) and other elements in the State apparatus (e.g. the contemporaneous mayor, Supreme court injunctions) as described last chapter, produced precisely the conditions for the siltation of the southeast corner and the emergence of a mangrove forest. The emergent marshy forest attracted potential residents, desirous of land and shelter, to the site. Other components of the assemblage contributed to intensive processes such as the bus depot, which provided much needed materials, and elements of the State apparatus, from which essential services such as potable water were obtained.

Understanding and analysing the settlement as an assemblage reveals the distributed agency of many actors and thus the distributed responsibility for emergent forms, such as the built environment and the social relations inherent to the settlement. The settlement as assemblage also considers Ganesh Murthy as an entity in the process of becoming, rather than as a resultant formation. This has important consequences for understanding the development of power relations in the settlement as a “plurality in transformation” that contributes to the on-going evolution of the settlement into the future (McFarlane, 2009: 562). This perspective is apparent here through the settlement’s current extension into the mangrove forest and vertically beyond two floors, both of which point to an evolving local power geometry including police, MMRDA-hired guards, employees of the Collector and military officials. Finally, understanding Ganesh Murthy as an assemblage, and the analysis of the intensive processes from which the settlement emerged, demonstrate the success of the basic system as a generative engine, which is based on the distributed nature of the individual actors inherent to the system. The growth of Ganesh Murthy, and the ability of the settlement to accommodate part of the city’s burgeoning population, is dependent on the individual actions of many people and not the more hierarchical directives of a central power like a planning department, real estate developer, or financing body. The organization of individual actors follows from energy and space efficiencies, and limits imposed on actors derived from the built and natural environments. The success of the

distributed system derives from simple social and built modules that operate individually and have potential for improvement in the form of incremental construction techniques. Further, the redundancy of the system mitigates against the failure of certain components in the assemblage, such as the destruction of shelters through fire, demolition, or water inundation. Where government and market forces fail to produce equilibrium between housing demand and supply, the association of component parts in the settlement assemblage has generated a residential enclave that is home to some 11,000 people.

5.5 A nomadic settlement

The spatial pattern of development at Ganesh Murthy exhibits a fluidity and constancy of motion in its creeping and incremental movement over the mangrove forest, and also in the way the settlement experiences moments of expansion and contraction. The fluid and peripatetic distribution of the settlement over space without the direction of a central authority, suggests a nomadic pattern of spatial occupation that is open-ended and composed of rest and movement. The settlement occupies what Deleuze and Guattari call *smooth* space, which is rhizomatic and directionless, but characterized by a multiplicity of local directions. Smooth space is opposed to State-associated *striated* space, which is measured, oriented, and divided, and has roads from one enclosure to another. "Striated space closes a surface, divides it up at determinate intervals, establishes breaks, whereas a smooth space involves distribution across a surface, by frequency or along paths (Deleuze and Guattari, 1987: 600). Figure 5.5 demonstrates that Ganesh Murthy and the other local settlements display a felt-like texture of components that are not homogeneously oriented but instead follow multiple directions, and overlap and press upon one another. These are compared to the immediate surroundings composed of military compounds and commercially-developed areas, which are distinctively measured, atomized, and homogeneously oriented in space. Moreover, nomads have an active relationship to smooth space not only inhabiting it, but also creating it through the *war machine*, or technologies used to maintain existence outside the State apparatus such as the products of the intensive processes described above. "The nomad makes the desert no less than he [sic] is made by it" Deleuze and Guattari (1988: 473, 519) write, and the war-machine is "the constitutive element of smooth space, of the occupation of such a space, displacement on it and the

corresponding composition of groups of men [sic]: this is its sole, true positive objective (i.e. nomos). To increase the desert..."

The settlement, in several ways, remains outside the State apparatus. There continues to be no master plan or urban design influencing its development. It does not conform to zoning ordinances or follow laws relating to construction. Ganesh Murthy does exhibit elements of striated space, such as its division into discrete residential units for example. However, as Bogue (2010) points out, Deleuze and Guattari use the terms nomadism and State apparatus in opposition to signify real tendencies, but they only ever manifest as mixtures of both. This mixture is immediately observable in the alleys of the settlement. The alleys are predominantly oriented along north-south and east-west axes and it is clear that they inherit this orientation from the borders of the striated spaces of the military compound and bus station. The way in which they manifest, however, is anything but measured. Rather, there is an ambulatory quality to the paths that defies strict orientation and measurement. Rather, alleys have no standard width, but undulate according to the size of hutments, and may abruptly jog to the left or right due to the historical conditions of their creation. The same is true for the hutments that, while dividing space, do so in an unfixated fashion that defies discrete and homogenous metrics.

The residents of Ganesh Murthy are not nomadic: they are mostly migrant families that have come to the city to settle. It is the settlement itself that is nomadic, fluidly and constantly distributing being across a deterritorialized and indefinite space. State reterritorializations of space exist, such as the striation of the settlement into various "Parts." However, in failing to grant tenure security to residents the State concurrently deterritorializes the settlement, decreasing its stability and its material identity in relation to its specific geographic location. In fact, the planning authority of the Back Bay, the MMRDA, does not even recognize the land on which the settlement sits, as indicated in their current Development plan: deterritorialization indeed.

As this example demonstrates, manifest mixtures between the State and nomadism go beyond the formal qualities of the settlement. Nomadic relationships with the State involve "complex relations of dependence, resistance, and accommodation with contiguous states" (Bogue, 2010; 174). Nomadic society may not be organized around hierarchical class

distinctions, although the centralization of power in a nomadic society increases in proportion to their interactions with the State. Elements of the State apparatus have helped to create social hierarchies in Ganesh Murthy, such as the reterritorialization of certain hutments in the official register. These permit official segments of the population a degree of security against eviction and demolition of their hutments, where others have no such luxury. Identification in the official register also creates the potential for inclusion in any redevelopment efforts pertaining to the slum and thus orients opposing political positions along this trajectory. Official status also, importantly, permits access to municipal services such as water, while others have to pay higher prices and expend more time and energy to collect often inferior products (such as non-potable water), which can lead to an array of illnesses. Furthest down on this hierarchy are those that are denied state access to services and cannot afford to pay market prices.

Inversely, State societies that interact with nomadic tribes are found to exhibit nomadic tendencies and trajectories (Bogue, 2010) and elements of the State apparatus that interact with Ganesh Murthy have been found to step outside their juridical and regulatory boundaries. The Collector, who allegedly allowed Mr. Murthy and employees of the Garrison Engineers Service to occupy the site for a sum of money, clearly operates outside the legal norms of the state. Military personnel and agents of the Collector also demonstrate nomadic tendencies in permitting the existence of three-storey hutments that endure despite contravening the Development Control Regulations and posing a threat to security. Finally, police officers and guards employed by the MMRDA to maintain the western periphery of the settlement must have nomadic tendencies in allowing Bangladeshi immigrants to cut down a mangrove forest in an environmentally sensitive zone to establish a satellite settlement beyond the western periphery. The admixture of nomadic and State tendencies is only glimpsed at in this chapter aimed at providing an overview of the settlement's society and built environment. In fact, nomadic/State associations are a central tenant of the settlement assemblage's existence and forms a dominant investigative trajectory of the thesis.

5.6 Conclusion

This chapter provides an overview and historiography of the built and social strata of Ganesh Murthy as an assemblage, where assemblage is marshalled in several ways. Ontologically, assemblage theory reveals that slums in Mumbai emerged as self-organizing functional systems in reaction to a state far from equilibrium in housing demand and supply. In addressing this situation, Mumbai's administrators and planning authorities pursued a logic that sought to control the inflow of population from the hinterland by limiting housing supply and the potential for migrants to find homes. However, this strategy conflicted with, and was ultimately overwhelmed by, scores of people following a logic of desire to pursue improved livelihoods. Migrants were drawn by economic opportunities in the city and driven from their homes by ecological calamities. Slums emerged as the actualized reality of virtual singularities contributing to the inflow of people to the city and their possibilities for acquiring shelter.

In the case of Ganesh Murthy Nagar virtual singularities and probabilities were translated into reality through three intensive morphogenetic processes that are gleaned through empirical description, and a methodological focus on practice and materiality. Ganesh Murthy Nagar was assembled through three interrelated processes of moving to the settlement, reclaiming land from the marsh, and constructing a hutment. The rates of change of these processes are tied together such that a circular pattern of development occurs enabling more people to move to the settlement, facilitating more land reclamation, and more hutment construction. Further, incremental hutment construction feeds into the growth of the settlement through the addition of floors to accommodate expanding families and providing rental units.

Intensive morphogenetic processes are the engine of the settlement's growth, and they have produced more than the sum of their parts. These processes together reclaimed some 5.4 hectares of land from the sea, produced 2,100 hutments, and became home to 11,000 people from three countries and 18 states in India. However, Ganesh Murthy Nagar is not merely an assemblage of land, hutments, and people. The settlement also includes transportation corridors, businesses, toilets blocks, water distribution systems, temples, performance stages, electricity lines, and other built assets. Less materially tangible are various

communities or social consistencies that inhabit the settlement. These communities interact with the built environment in different ways, but the point is that they, along with built elements, emerged from the combination of intensive processes along lines of becoming to produce novel combinations of sociomaterial networks.

The chapter thus employs assemblage thinking to reconfigure Ganesh Murthy as a monolithic “slum” toward an understanding of component parts whose interrelations enable and constrain action. This re-conceptualization of a slum decentres it as an object and instead places emphasis on various components and the processes through which they interact. As such, flows of migrants and urban planning policies interact with natural processes of siltation, facilitated through a unique history of land reclamation in the Back Bay, and other components such as fires, monsoon flooding, or construction materials from the bus depot and the inability of the State apparatus to safeguard such materials.

Throughout the process of Ganesh Murthy’s evolution various components of the assemblage plug in and plug out to reassemble conditions in the settlement as a plurality in transformation. The intensive empirical orientation of processual relationships thus helps to avoid reductionist and over generalized conclusions and demonstrates that responsibility for the slum’s emergence and evolution goes beyond macro-level flows and policies to include historical planning trajectories, natural forces, and personal desires.

Here, State policies and actors are important components that have worked to both stabilize and destabilize the assemblage, which changed the settlement in kind and sent it along a different trajectory of development. Ganesh Murthy is characterized as nomadic in terms of its spatial occupation of the site and in its existence outside of the State apparatus in terms of planning, permissions, and regulatory enforcement. The State, however, has continually exercised its essential function to capture that which is outside it by reterritorializing parts of the settlement in 1976, 1980, 1985, and 1995. The legislation permitting capture and the enumeration of hutments stabilized the slum assemblage by defining it in terms of hutments, and segregating it from other nonofficial slums. However, this form of reterritorialization never granted residents security of tenure and thus failed to realize the potential stability between the settlement, residents, shelter and the land, giving rise to injustices in the form of demolitions and exploitation by State officials and other local

authorities. Further, this form of reterritorialization created internal divisions within the settlement, which destabilizes the identity of the settlement as a whole. Residents in all parts of the settlement that built hutments or moved to the settlement after 1995 are not entered into the official register and thus there is a division between official and unofficial slum dwellers, which gives rise to the pursuit of different trajectories such as the desire to pursue or not pursue slum rehabilitation schemes.

The reterritorialization of Ganesh Murthy by the State apparatus also stabilized the settlement by creating opportunities to access municipal services such as water distribution and toilets blocks. However, the addition of these components also destabilized the settlement assemblage by feeding its capacity to accommodate more residents. Further, the incremental nature of this reterritorialization created internal divisions within the settlement beyond mere territorial boundaries, such as the emergence of competing social consistencies to procure services, and the establishment of social hierarchies around the control of services. With the acquisition of State elements, Ganesh Murthy changed in kind from a nomadic settlement to some hybrid inhabited by State-facilitated centralization of power and social hierarchies. Concurrently, nomadic tendencies displayed by the Collector in granting Mr. Murthy and the GES squad informal permission to squat the land, and various regulators giving informal permission to maintain three story hutments, would migrate to other State officials and politicians through their interaction with the settlement. The totality of these associations, hierarchies, and divisions emanating from nomadic-State mixtures are at the root of insidious social inequalities and injustices, which move the settlement towards a slum of despair. The need to understand precisely how these hierarchical networks and divisions emerged and how they might become otherwise is apparent. As such, the following chapter empirically investigates the settlement's key components that demonstrate the power to assemble and maintain diverse sociomaterial actors that have come to dominate the settlement in the form of municipal water schemes.

Chapter VI

Water Networks: State and Nomadic Mixing and Forms of Domination

6.1 Introduction

This chapter investigates the water distribution networks in Ganesh Murthy Nagar. Motivated by the desire for water provision and triggered by governmental policies to provide these services to squatter settlements, several CBOs gained consistency in the settlement to address the continually widening gap between a growing population and minimal provision of water. However, the ostensibly participatory-oriented policies of the government, by integrating local elements into the provision of water services, created an administrative platform that was susceptible to, and resulted in, the capture of these services by local actors motivated by profit and power. This platform created a niche for CBOs to establish relationships with local politicians and created opportunities for the networks to enrol segments of the municipal bureaucracy and other actors who themselves display nomadic tendencies beyond the strict legal parameters of the State.

The emergent socio-space within which four major water provision CBOs operate is liminal, existing at once in between and beyond residents of the settlement and the State apparatus, where both strata of the settlement are engaged but also isolated. The CBOs that function in this space utilize fluid infrastructures that are able to conform to evolving patterns of land creation and population growth. Yet, despite the success of these novel configurations to adapt to evolving conditions, CBOs demonstrate unjust, disruptive, and sometimes violent behaviour in maintaining their oligopoly over water provision and in competitions with each other for greater market share. The present chapter thus demonstrates how four local CBO networks at Ganesh Murthy emerged and continue to contribute to the constitution and ordering of space and society in the settlement.

The chapter is divided into three main sections. The first section examines water supply and demand in Mumbai (6.2), with a focus on uneven distribution patterns, and is followed by an examination of participatory-oriented water provision schemes to squatter settlements adopted by the State (6.2.1). The second section (6.3) charts the historical development of the four CBOs that administer municipal water schemes from information derived from the Municipal Water Department archives (WDA) and from interviews with residents. The CBOs investigated are the Ganesh Murthy Nagar Hutment Dwellers Welfare Association

(6.3.1), Seva Sangh (6.3.2), Mahila Pragati Sameti (6.3.3), and Manav Seva Sameti (6.3.4). The final section (6.4) provides analysis of the various patterns of development discernable from the data including: the assembling and capture of CBOs (6.4.1), the nomadic tendencies of State actors (6.4.2) creative infrastructural configurations (6.4.3), the nature of liminal space in the nomadic settlement (6.4.4), and barriers to enter this space (6.4.5).

6.2 Water and Mumbai

The demand for water in Mumbai has consistently exceeded its supply, resulting in historically persistent inequalities in the city. In the mid 19th century the acute disequilibrium between water supply and demand motivated the government of Bombay to examine alternative sources outside of the traditional wells and stone-stepped bodies of water called “tanks” it had been relying on as sources of water. As a result of these efforts the Vehar Water Works project, located 18 miles to the north of Bombay on Salsette Island, came on line in 1860 to deliver seven million gallons of water per day for the 700,000 citizens of the city (MEA, 2006). However, as only some households could pay for the infrastructure necessary to connect residences to the municipal infrastructure, water was distributed mainly to the wealthy (Dossal, 1988). Since then, Mumbai’s State-operated municipal water infrastructure has become one of the largest and most complex water supply undertakings in the world. It produces 3,500 million litres of water a day from seven basins: Vehar, Tulsi, Bhatsa, Powai, Tansa, Vaitrana, and Upper Vaitrana (MEA, 2006). However, inequality still marks the distribution of water in the contemporary city (Gandy, 2008).

One of the main causes of uneven water distribution is the fact that there is not enough water, with supply meeting only 65 percent of domestic demand (BMC, 2000). Natural reproduction and immigration to the city, together with increased industrial usage, has resulted in greater demand for water. Currently, domestic demand for water in slums is valued at 39.85 percent, while non-slum domestic demand is 46.96 percent. Industrial demand is valued at just under 8 percent, commercial demand is at 3 percent, and institutional demand is 2.3 percent (Rode, 2008). While more sources have been cultivated to increase supply, an aging and dilapidated municipal infrastructure, some of which is over 100 years old, results in supply losses of up to 40 to 60 percent (World Bank, 2001 as

referenced in Gandy, 2008). However, along with these demographic, sectoral, and physical flows, social reasons also contribute to uneven distribution. For example, private water tank suppliers conspire with politicians to delay the construction of infrastructure that would connect newer slums to the municipal system, and thus maintain their practical monopoly over water supply (Lokhandwala and Namboodiri, 1999a; 1999b; Shrivastava, 1998). Reacting to the dearth of water from institutional sources, a number of alternatives have emerged to address the disequilibrium in water supply and demand such as bore holes and wells, as well as neo-traditional water management techniques such as rain water harvesting and water conservation (Gandy, 2008).

All social and economic classes in the city are affected by these physical, demographic and social conditions. For example, some luxury condominiums constructed in the city come with all possible amenities, except for municipal water service. Further, upscale condominium blocks and hotels that are connected to the municipal network often employ illegal booster pumps to draw more water from the system, and additionally may purchase private tanker water to meet demand. Socially and economically weaker sectors of society, however, experience the disequilibrium in water supply and demand more acutely than wealthier sectors, and residents of squatter settlements bear the greatest difficulties. As Gandy (2008) argues, the postcolonial Indian state has been captured by the middle class, resulting in the historical perpetuation of dualities in urban governance so that the political agenda is consistently turned away from universal provision of services. For example, water apportioned to individual slum dwellers is 45 litres/day, approximately one third of that apportioned to owners of private residences, which receive 135 litres/day per person (YUVA, 1999). Due to rapid growth at the northern periphery of the city, in places like Thane, Bhayandar, and Mira Road, water access in unofficial squatter settlements is particularly acute. However, even residents of official settlements like Ganesh Murthy Nagar struggle to procure an adequate supply of water. The lack of water in squatter settlements has resulted in political unrest, and when water supply diminishes substantially, as it did with the unfavourable monsoons in 2009, the results can be deadly. In 2009, the city faced a water shortage of 400 million litres of water a day, resulting in widespread reductions and interruptions in service. In Sanjay Nagar slum in Bhopal three residents were murdered by other residents of the settlement for taking water from a municipal

supply line when water started flowing again after three days of interrupted service (Chamberlain, 2009). In Ganesh Murthy, similar uneven distribution in the supply of water is extensively tied to the local distribution of water that is administered by participatory CBOs, which is the subject of the next section.

6.2.1 Water in slums: participatory programmes

In the 1960s urban centres gained acknowledgment for their contribution to national wealth generation, and as a result urban planning came to facilitate development through the creation of infrastructural services and the removal of barriers to growth (O'Hare *et al.*, 1998; Harris, 1990; 1989). Additionally, in the early 1970s the World Bank adopted and promoted self-help programmes, an idea that was gleaned from a series of influential papers from field studies (Stokes, 1962; Turner, 1963; 1967; Abrams, 1964). The Bombay Municipal Corporation (BMC) and the State of Maharashtra responded to these trends by reversing their long-held strategy of slum clearance and eradication. The State apparatus, acknowledging that slums might provide a solution to the housing crisis in the city, initiated policies designed to reterritorialize illegal slums and provide services to those located on State and municipal land (Singh and Das, 1995; Burra, 2005).

The Maharashtra Slum Act (1971) and the Central Urban Land (Ceiling and Regulation) Act (1976) formed the policy framework for the potential delivery of services to notified squatter settlements. Concurrent with these efforts was the creation of the Slum Improvement Board (SIB) in 1974 to administer the State's Slum Improvement Programme (SIP). These slum improvement mechanisms targeted environmental improvements of slums in situ and consisted of development and improvement to piped water provision, sewer systems, toilet blocks, pavement, lighting and electricity (Singh and Das, 1995). Despite these efforts to implement slum upgrading, however, funds from the Central Government's Basic Amenities Programme were stopped two months after the SIB was inaugurated. This left the state government to pay for the implementation of the SIP, which resulted in less than hoped for results (Panwalkar, 1996). In the decade from the mid 1970s to mid 1980s the establishment of infrastructure was supply-driven and carried out by the engineering department of the given municipal agency without consultation or participation with communities (Burra, 2005). Under these conditions and provisions, Ganesh Murthy

Nagar received its first water stand-post sometime before 1981. Water was fed from Navy Nagar to a stand-post that was located adjacent to the military compound on the boundary between Part I and Part II.

At the Nagpur Assembly Session in 1981 the State government announced the regularization of squatter settlements built before 1980, an extension from the previous 1976 cut-off date (as described in Chapter IV), which qualified more slum residents for access to municipal services (WDA-HDWA, 09/02/83). In 1983 the state government and the BMC launched the World Bank-funded (and largely controlled) Slum Upgradation Programme, which addressed the provision of sites and services (O'Hare *et al.*, 1998). Importantly, community consent and participation were structured into the process of leasing land and arranging for government subsidies and loans for infrastructure provision.

During this time changes to the Maharashtra Slum Act led to demand-driven and participatory municipal policies for water supply provision including their administration by “community management systems” (MCGM, 2005). Processes related to these community management systems necessitates the involvement of a registered CBO consisting of not less than 15 member households to apply for and administer a water network on behalf of its members and the use of licensed plumbers to install the infrastructure. These measures, which are still in practice today, correspond to Mumbai's contemporary management strategy where the Municipal Corporation of Greater Mumbai (MCGM) “play[s] the role of regulator rather than the provider of services” (Government of Maharashtra, 2004: 21). This participatory management strategy is more akin to “public-private community partnerships” rather than “government-citizens co-production” (Allen, Forthcoming 2011). The former strategy signals a stronger concern with efficiency rather than social equality and accountability, and understands water provision as a commodity rather than as a State-guaranteed universal entitlement. The focus on instrumental water provision entailing slum dweller “clients” in local administrative positions, rather than as a potentially transformative social and political process would ultimately ill-serve the residents of Ganesh Murthy.

The adoption of participatory processes in service provision arrangements is part of a widespread neoliberal reform agenda of urban management. Related notions of “urban

governance”, as opposed to city government (La Galès, 2005), is based on the hypothesis that market forces can lead to greater cost-efficiency in urban administration (McCourt and Minogue, 2001), which entails the decentralization of state power towards multi-stakeholder agreements that include private sector actors and the participation of civil society (Blair, 2000; Batley, 2004). The move to such forms of urban governance that include participatory mechanisms was triggered by failures of market-oriented policies in the 1980s and 1990s to adequately address service provision, poverty reduction, social inclusion, and environmental protection (Mitlin, 2004).

Those who are optimistic about the long-term benefits of participatory mechanisms recognize a necessary shift from top-down urban management to an assemblage of actors such as NGOs, CBOs, citizens, State actors and corporate partners, engaging in cooperation and negotiation. However, the emergent effects of participatory schemes are dependent not only upon the actors engaged directly with negotiations, but also upon their operating logics, the context in which they function, and the local context in which schemes are realized. There are thus many variables that affect the results of participatory management. Under the right circumstances participation suggests ideas of social inclusion (Mitlin, 2004) and a “deeper” sense of democracy (Appadurai, 2001) based on greater forms of representation (Bacqué *et al.*, 2005). Participatory service provision schemes are expected to be more responsive to the needs of communities and may facilitate the development of participants’ knowledge through administrative exercises (Bardhan and Mookherjee, 2006; Bacqué *et al.*, 2005; Blair, 2000). With the right conditions, participation can reduce costs (Oström, 1996), facilitate improved maintenance of infrastructure (Tounée and Van Esch, 2001) and increase local employment opportunities (Majale, 2008). Further, participatory schemes can foster inclusiveness and empowerment (Cornwall, 2002), with the potential to reshape local power geometries, reducing patronage and dependence, and potentially establishing alternative structures of power over the long term (Zerah, 2009; Fung and Wright, 2003).

Critics of participatory schemes argue that NGOs may be components of neoliberal development plans that shift the control of service provision from the public to private realm. Here, the idea of civil society is depoliticized from a radical force that challenges the

State to a consensual one promoted by donors and developmental agencies (Chandhoke, 2007 from Zerah, 2009). Further, the counter-discourse produced by such private-public partnerships may further undermine more radical critiques of the State (Leal, 2007). The role of NGOs acting as intermediaries between the State and citizens (Botton, 2007), is also criticized. NGOs may develop their own constituencies (Lake and Newman, 2002) and as a result fail to engage with local stakeholders (Benjamin, 2004). Edwards and Hulme (1996) demonstrate that NGOs are increasingly dependent on donors, making them less accountable to citizens. Further, competition between NGOs can divert attention away from local-level interactions (Nainan and Baud, 2009). Finally, participatory schemes can perpetuate patronage relationships (Zerah, 2009) and result in local “social bads” (Durlauf, 1999) leading to hostility, discrimination, segregation, and exclusion (Zerah, 2008; Graham and Marvin, 2001).

Participation in urban governance is thus a contested terrain (Hickey and Mohan, 2005). However, as Zerah (2009) argues, the ambivalent outcomes of participatory schemes come as a result of its uses, rather than their ambiguous origins. Participatory schemes are subject to existent power structures and the capacities of communities (Beaumont and Nicholls, 2008). Multiple factors need to be included in the consideration of participatory schemes including, “the role of the public sphere and politics, the initial endowment of communities, the socio-political and cultural context, and the nature of civil society” (Zerah, 2009: 859). Thus, an evaluation of the successes and failures of participatory schemes may be aided by an assemblage approach, which recognizes that emergent outcomes derive from a confluence of various components and their proper operating logics which may constrain and enable action. Further, while several studies have examined outcomes of the World Bank’s Slum Sanitation Program (McFarlane, 2008a; Sharma and Bhide, 2005) and other participatory schemes in Mumbai (Zerah, 2009), there is very little research that focuses on the assemblage of local organizational components of participatory water provision services in Mumbai. As Emmel and Soussan (2001: 282) point out:

Further iterative action research is needed which recognizes the dynamics of organizations and their abilities and failures. It is these organizations which define the quality of the built environment in low-income urban communities in developing countries.

Addressing this need for research is Nikhil Anand's work (2011), which makes an important contribution to slum dweller water access by examining the politics and materiality inherent to slum dwellers' diverse tactics of gathering water from both inside and outside the municipal system. This chapter then, builds on Anand's research through an historically informed study of the four main water distribution networks that have come to shape the local power geometry at Ganesh Murthy Nagar.

6.3 Historical formation of water networks at Ganesh Murthy

This section investigates the historical evolution of the four municipal water schemes that operate in Ganesh Murthy Nagar as of 2010: the Sri Ganesh Murthy Nagar Hutment Dwellers Welfare Association, the Seva Sangh, the Mahila Pragati Samiti, and the Seva Sameti. The emergence of these networks and their related administrative CBOs are illuminated from documentation at the Municipal Water Department Archives (WDA) in Colaba, from interviews with residents of the settlement, and from participant observation. The data reveal a developmental space where access and control over water is highly contested and transpires in a context that includes political and municipal actors.

6.3.1 Sri Ganesh Murthy Nagar Hutment Dwellers Welfare Association

The earliest settlers at Ganesh Murthy made do without a local source of water and had to carry it home from their places of work in Cuffe Parade and later Navy Nagar. In addition to these sources, a fenced-off well located in Navy Nagar provided residents with irregular and tentative access. There, residents had to wait outside the enclosure until the well overflowed to siphon off excess water with banana leaves into containers (Interview, resident of Ganesh Murthy Nagar, 10/03/09). To the great relief of the incipient community, sometime before 1981, a temporary water stand-post was erected at the western edge of Part I, which was fed directly from the adjacent military compound. At roughly the same time as the stand post was connected, legislative enactments creating the potential for municipal water provision (as discussed in the previous section) together with insufficient water supply triggered the emergence of the first administrative CBO in the settlement, the Sri Ganesh Murthy Nagar Hutment Dwellers Welfare Association (HDWA).

The CBO, which was registered between 1976 and 1980, includes the original 111 hutments enumerated by the 1976 census, and is administered by a committee of 11 people, composed of nine male and two female members. The first documentary evidence of the CBO's existence in the WDA consists of a letter written to the Slum Housing and Area Development Board on February 9, 1983, to procure permanent water and electrical supply for the settlement (WDA-HDWA, 1983). The letter specifically references the 1980 cut-off date for the regularization of hutments (as per the 1981 Nagpur Assembly Session) and its provision of services to slums, as legitimizing the CBO's many requests for services since 1980 (which are not present in the archives). The letter further references correspondence pertaining to the provision of water for the settlement between a local Member of the Legislative Assembly (MLA) and various state departments. Other documentation in the archive reveals that the MLA, a Municipal Councillor, and ex-Municipal Councillor frequently intervened on the resident's behalf through letters and meetings with the municipality to help procure water for the settlement. However, by October 1984, according to a desperate letter from the CBO to the MLA, no permanent water supply had been provided to the settlement. The letter goes on to explain that residents frequently engaged in quarrels over water, which sometimes erupted into fights that motivated the military to stop the flow of water to the one stand-post operating in the settlement. The same letter tells the MLA that residents do not have the capacity to buy water from private vendors and as a result residents often had to beg for water.

A plan for four taps and a latrine in the settlement was drawn up by the Bombay Housing and Area Development Board by February 1984, and was sanctioned by the city by the end of the year. The network plan of pipes and their diameter is calculated to deliver a certain amount of water over a certain amount of time at a precise pressure. When the new connection was finally established (presumably in 1985) it consisted of four taps fed by an unmetered two-inch connection to a new 24-inch diameter water main that supplied Navy Nagar. The water main was initially activated for several hours every two days from the substation located at Malabar hill, whence water would be delivered to the four standpipes in the settlement. Residents would fill containers and ration their supply for the next 48 hours. Later, water flowed along the water main every day thus doubling the volume of water collected by residents in Part I of the settlement.

In 1989 the WDA documents the existence of an illegal water tank, called a “suction tank” for its ability to draw water by gravity from the water main, that was located between the connection to the main and the distribution network (WDA-HDWA, 1989). The water department was informed of this augmented infrastructure by a letter written by a HDWA committee member alleging that the president of the CBO had collected funds from residents for the new tank, and expressed concerns that the illegal behaviour would result in the removal of water privileges. Instead of forcing the removal of the tank the water department decided to regularize it. The secretary and president of the CBO successfully argued that the tank, drawing from the southern end of the municipal water main, was necessary because poor flow resulted in insufficient amounts of water to meet the community’s needs. The schism between various committee members, which prompted the water department to investigate, represents a fracture between two factions in the society that is on going in Part I of the settlement. In the 1990s one faction, led by the Singh family was successfully ejected from the committee for allegedly stealing funds.²¹ However, the family continues to influence the social dynamic in Part I through various means including their control of a muscle gang that intimidates residents and committee members. The introduction of an organized gang to influence control of water prodded members of the HDWA to organize their own muscle gang. This build-up of actors and tactics between the Singh family and the HDWA signals a movement towards violence in control over water. Muscle gangs will be explored in more detail in the following chapter, however, the immediate point here is that control over water supply to Part I is dominated by the committee, but fragmentation in the emergent social hierarchy has caused on going tensions.

In February 1994, other discrepancies were found by the water department between the authorized network configuration and its actual manifestation in the form of illegal private connections to individual residences. Residential connections are prized assets in the settlement as they obviate the need to stand in line for water and then transport it home. Further, private connections may feed a large (around 200 litres) elevated domestic water tank that, with the force of gravity, feeds internal pipelines connected to faucets and

²¹ The surname “Singh” is a pseudonym adopted to protect the identity of the family.

sometimes latrines. The installation of illegal private connections represents a substantial revenue stream for the CBO. The price for such a connection in 2010 is roughly INR 10,000 of which INR 2000 goes directly to the CBO, while the rest pays for materials and labour. Finally, private connections may reduce the HDWA's expenses by negating the need to have water distributed at taps, which elsewhere in the settlement is a job performed exclusively by women. Despite several opportunities afforded by the municipality to regularize the illegal connections for a nominal fee of INR 100 per connection, and threats of stopping water unless regularization was undertaken, none of the connections had been regularized by 2010.

In 2008 the leader of the HDWA was arrested after the Singh family complained to the police of illegal electricity tapping. The CBO had tapped into municipal streetlights to operate their pumping equipment. Such checks on the CBO's power, together with the fact that demand in Part I has not substantially increased due to limited space for development, has resulted in the best water service in the settlement. None of the residents of Part I complained of water supply problems, and there is enough water to allow members of the Singh family, among others, to sell and trade excess water collected for money and influence. Beyond this, this section demonstrates that political support for the water connection was an important part of the process, with at least three politicians lobbying on behalf of the HDWA. The section also demonstrates the occurrence of infrastructure augmentation, in the form of an additional water suction tank and individual private connections. Further, the implication of the continued existence of this augmented infrastructure, whether regularized or not, is that the water department has allowed the perpetuation of illegalities either through legal accommodation in the case of the suction tank, or, as in the case of the individual connections, negligence or some form of illicit agreement.

6.3.2 Seva Sangh

By the time residents of Part I received their four water taps in 1985, the alignment of desire for water in the rest of the expanding settlement had led to the emergence of the Seva Sangh, a CBO originally consisting of 116 member hutments with an administrative committee of 11 people composed mainly of male members. The gathering of hutments

into the CBO was initiated in 1983 by the secretary who has remained in control of Seva Sangh since it was officially registered in 1987; the same year the cut-off date for inclusion in the official register had been moved to 1985 by the Congress government (Singh and Das, 1995). Supported by a local Municipal Councillor and local MLA, the Seva Sangh formally requested a water connection in 1988 for residents of Ganesh Murthy located in what came to be known as Part II of the settlement. In negotiations with various government bodies, including the Slum Improvement Board and water department, the Seva Sangh was “represented” by the Municipal Councillor, who in 1988 secured sanction for a two-inch diameter connection and seven standpipes for Part II. The archives, while not containing details, also refer to a second 40 X 50 mm connection created in 1993 for approximately 100 hutments in Part II that was initiated outside the Seva Sangh, but which subsequently came under its control.

By 1990, two years after the initial water distribution system was completed, the Seva Sangh had substantially (and illegally) augmented its infrastructure. A 5,000 litre suction tank was installed along with pumping arrangements to collect and distribute water. Booster pumps were also reportedly in use as per a 1992 water department report (WDA-SS, 1992). A booster pump is attached to the infrastructure network between the water main and the suction tank to draw extra water from the municipal system, which increases the potential capacity of the system (Figure 6.1). The delivery infrastructure was also augmented to provide private residential connections, thus creating an additional revenue stream. As it had done in the case of the HDWA, the water department offered the Seva Sangh an opportunity to regularize the connections (WDA-SS, 28/10/93) but the secretary argued (falsely) that the pipes entering individual households were installed to distribute privately purchased water and not municipal water. Multiple threats by the municipality to cut off water supply were eventually realized, followed by the CBO illegally reconnecting the water, and subsequent municipal re-dismantling of the illegal connections. Finally, the Seva Sangh enrolled the help of another local Municipal Councillor and the MLA, who together secured the reconnection with the city (WD-SS 6/4/93).



Figure 6.1 Booster pump being repaired at Ganesh Murthy
Credit: Author

The cat and mouse game between various water networks and the State is a constant theme that emerges from the archives. In 2005 the city once again disconnected the Seva Sangh’s water for having installed two additional 5,000 litre suction tanks, a booster pump, and dismantling the water meter that measures consumption (Figure 6.2).²² In response to the disconnection, on June 6, 2005 the water department received a pledge on INR 100 stamp paper²³ to discontinue use of the booster pump and extra water tanks, pay bills regularly, not re-connect private connections, and install and maintain a water meter “placed at such locations, so as to be always visible for meter readings” (, 6/6/05). The Seva Sangh’s campaign to reconnect the water was aided by the water department receiving “a number of

²² There is a large gap in the Seva Sangh water department archive documentation from 1993 to 2005. Similar gaps and other curious omissions in documentation were observed in other files as well. Based on inductive logic hypothesizing that there are spurious links between the department and CBOs (developed later in the chapter) the author surmises that documentation may have been pulled in various files to protect illegal behavior committed by water department employees.

²³ Stamp paper is akin to a notarized contract.

telephone calls from Municipal Councillor [name withheld] and MLA [name withheld] requesting to reconnect the water connection at Ganesh Murthy Nagar Part II” (WD-SS, 6/6/05). Calls on the 3rd and 4th of June convinced an assistant engineer to inspect the situation immediately. On the 6th of June the assistant engineer noted that the offending machinery had been disconnected (although not removed) and allowed the reconnection of one water network immediately. The second water connection was officially sanctioned for reconnection a week later on June 13, 2005. The archives contain no other records related to the matter except for a field report made in 2008, which identifies the persistent existence of the illegal individual connections. As of 2010 the offending 5,000 litre water tanks and booster pump were still present and in use and private connections have become the norm in Part II.



Figure 6.2 The Seva Sangh’s two additional water tanks
Credit: Author

In 2010 the Seva Sangh continues to be run by the secretary, or “Bhai”, as he is known in the settlement.²⁴ According to residents, the secretary has held onto power over the CBO for the last 27 years because of his knowledge of how the infrastructural systems work and his ability to negotiate with the municipal departments. Further, the secretary has maintained strong connections to local politicians, and admits to writing and visiting the local Member of Parliament (MP), the local MLA, and a local Municipal Councillor. During the state legislature elections held in Mumbai in 2009, I witnessed the secretary and the local Municipal Councillor touring the settlement followed by a dozen or so supporters. Additionally, in interviews with residents, the secretary is allegedly unscrupulous in enforcing his power over the CBO. No open committee meetings take place and requests made by residents for changes or ameliorations to the CBO and its administration are simply ignored. More vocal critics of the CBO have lost their water privileges and allegedly their homes as well. Finally, several members of the committee are also members of the Singh family. The muscle gang protects the interests of the committee by creating problems for competing factions (as discussed earlier), by providing physical deterrents to those hutment dwellers that would complain of poor service, and by terrorizing those that do voice resistance to the dominance of the CBO.

In 2006 a new CBO, called the Colaba Back Bay Association, was registered to procure water and three years later the standpipe infrastructure was erected on the boundary of Part II and Part III (Figure 6.3). In addition, a four-inch diameter water pipe connected to the network proceeds down the main commercial street into Part III which is controlled by the Manav Seva Sameti (another water network examined in 6.3.4) to potentially usurp the latter’s territory. While someone else is ostensibly the president of the association, the secretary of the Seva Sangh has come to assume control over the administration of the network. In an interview with the president of the Colaba Back Bay Association I was given the distinct impression that the secretary’s influence with the local Municipal Councillor helped to represent the nascent CBO at the municipal level, and his influence with the MLA helped to secure funding to pay for the infrastructure (Interview, president of Colaba Back Bay Association, 11/11/09).

²⁴ The term “bhai”, literally meaning “brother,” is a term of respect that has its roots in Mumbai mafia culture.



Figure 6.3 Installing a new water line for the Colaba Back Bay Association
Credit: Author

Despite these political allegiances the expansion of the Seva Sangh through the Colaba Back Bay Association did not proceed straightforwardly or go unchallenged. The first difficulty was convincing residents to become members of the association and handing over their identification documents, which are necessary to prove to the water department they

are eligible for municipal water service. Residents were apparently fearful of joining the group, and the president also encountered friction from residents who were nervous about giving him their documents for fear of losing them and their being used to give acquiescence to other potential projects (Interview, president of Colaba Back Bay Association, 11/11/09).²⁵ Another difficulty in setting up the new network was made by the president of the HDWA who complained to the police that the land in front of the settlement was not intended to house infrastructural components, and filed a case in the city's High Court under his sister's name arguing the same. However, as the land belongs to the state Collector, the file was thrown out. Former Municipal Councillor Rathod²⁶, who controls the Seva Sameti water CBO in Part III, put an additional roadblock in the way. Rathod argued with the MCGM that the members of the Colaba Back Bay Association were in fact not eligible for the service. Although Rathod succeeded in substantially delaying the network, ultimately the Executive Engineer of the municipal water department in Colaba sided with the Colaba Back Bay Association, and a suction tank and pumping arrangements were installed in the parking lot of the settlement along the road. Finally, the president of the Colaba Back Bay Association admitted to bribing police officers to make sure there was no trouble moving the project forward – something he later had to repeat with the BMC surveyors, and employees of the Collectors office (Interview, president of Colaba Back Bay Association, 11/11/09).

Currently, the Seva Sangh has approximately 216 official members but distributes water to approximately 900 hutments in Ganesh Murthy. Nominally located in Part II, the tentacles of the network penetrate to areas in Part III, and plans are underway for further expansion via the Colaba Back Bay Association. The current distribution network is fed from two municipal connections, which each distribute water to nine lanes on alternate days. Four male employees turn the valves on and off to deliver water directly to hutments between 12pm and 7pm, and from 11pm to 3:30am. There are also 4 stand-posts where the employees sell water at the nominal, if not legal, rate of INR 2 per 20 litres. Because the

²⁵ Reprisals against slum dwellers that challenge existing water networks may include losing access to the existing service (as discussed later in the chapter). Further, a proliferation of CBOs to nominally procure services, but in reality used for other purposes such as providing false acquiescence for redevelopment schemes (as detailed in chapter VIII) has created emergent sentiments of fear and distrust. These emergent factors may otherwise mitigate against the formation of potentially more just schemes.

²⁶ This Municipal Councillor's name has been changed.

distribution of water is so wide, hutments receive an average of 60 litres a day, rather than the 225 litres they are apportioned by the city.²⁷ 60 litres of water is not enough for an average sized family of five and thus requires additional energy, money, and time to procure water from alternative sources in the settlement.

The Seva Sangh is the second largest (after the Manav Seva Sameti) municipal water distributor in the settlement. With 900 hutments paying an average of INR 125 a month, its annual revenue from water alone are INR 1,350,000.²⁸ Expenses for employees, water from the city, and electricity may equal roughly half of the total, however additional money is collected from other sources. The CBO receives money from the municipality for maintaining the toilet block in the territory and for managing solid waste. Beyond these legal revenue streams, the CBO earns INR 2000 per private connection installation, revenue from illegal electrical connections, the sale of land in Part II, the sale of houses, and payment from merchants who set up stalls on the commercial street. The secretary also runs a restaurant located at the BEST bus station and receives rent from a *balwadi*, or day care, that operates in the territory. Finally, reliable sources suggest that Part II committee members receive INR 100,000 each from real estate developers intent on developing the slum, who pay the committee for their permission to collect signatures needed to proceed with slum redevelopment schemes (to be discussed further in Chapter VIII).

The Seva Sangh is an important organization in Ganesh Murthy, with 4500 people depending on it for a good portion of their daily water requirements. The power it holds over water distribution has been leveraged to reduce by more than three quarters resident's legally sanctioned supply of 225 litres per day per hutment. Along with documenting the by now familiar infrastructural augmentations, the WDA reveals the extent to which politicians intervene on the behalf of the CBO. The archives also depict the complicity or negligence of municipal employees not only in allowing illegal infrastructure to persist, but also their participation in the ineffective processes involved in rectifying illegalities, as displayed in their disconnecting, but not removing, illegal water tanks and booster pumps.

²⁷ The city calculates 5 people per hutment with each person apportioned 45 litres each.

²⁸ This is equal to GBP 18,602

Finally, the archives point to the capturing of a start-up water-based CBO in Part II in 1993 and the expansion of the Seva Sangh through the Colaba Back Bay Association in 2010.

6.3.3 Mahila Pragati Samiti

By the year 2000 Ganesh Murthy Nagar had experienced a large migration and was home to some 7000 residents. Municipal water supply, however, had fallen well below demand. The HDWA and the Seva Sangh received water for only 111 and 216 hutments respectively, or a combined total of water for 1635 people. Their water supply had been increased through various infrastructural augmentations, which helped address demand from the new settlement following a line of flight westward. In response to the burgeoning population several social consistencies emerged to procure more water from the city. A wealthy businessman assembled a small CBO in 1993, which distributed water to 15 households from one standpipe. The standpipe was located in Part III on the commercial alley, eight feet below ground in a large dug out hole to allow the gravity-fed system to function, and members had to climb down a ladder to collect their water. However, the small distribution network fell through in 2005 due to unpaid bills (Interview with wife of businessman, 11/21/09). Additionally, a private water supplier had taken root in the settlement ten years earlier on the main commercial thoroughfare of the settlement, which sells water from an underground tank (fed by water tanker trucks) at five to ten times the standard rate of municipal water (WDA-MPS, 10/17/00). In 2010 this private merchant is the largest single supplier of water in the settlement, selling an average of 100,000 litres of water a day.

Despite these additional sources, the ratio of demand to supply for water continued to be far from equilibrium. Triggered yet again by new changes to the cut-off date for inclusion in the official slum register, this time set to 1995, several consistencies congealed in the social strata along a trajectory to procure water services. The organizer of a start-up CBO successfully enrolled a newly elected Municipal Councillor (in 2000), and self-admittedly naïve politician, to provide funding and political representation (Interview, 12/15/09). One particularly difficult hurdle to overcome in the establishment of the nascent network was competition from Municipal Councillor Rathod, who had his own ideas for the territory the CBO had staked out. While the nascent CBO was distributing water through 20 standpipes,

Rathod was installing marble commemorative signs to his future water network on the same alleys (Interview, resident of Ganesh Murthy, 11/20/09). The newly elected Rathod organized his political clout to destroy the incipient CBO, which he ultimately accomplished.

Literally picking up the pieces of the obsolescent CBO were members of another CBO called Mahila Pragati Samiti, which had merged with another CBO called the Sai Seva Mandal in 2000 (WDA-MPS, 19/12/00). The president of the Mahila Pragati Samiti is a woman of approximately 60 years old and was a former member of the Shiv Sena's local *shakha*, or slum branch. The vice president of the new CBO is a long time resident of Ganesh Murthy, and had captured and developed over 100 hutments in the settlement, and still collects a sizeable revenue from the continued rental of these hutments. The CBO employs 30 women to distribute water at standpipes, and is the only water CBO in the settlement to be run exclusively by women.

Members of Mahila Pragati Samiti took the defunct pipeline and relocated it to the territory now referred to as Part III Backside. The CBO, which officially registered with the MCGM to distribute water in 2002, consists of 236 member hutments. The leaders of the organization also operate the Banjara Samaj CBO, which is a municipal water distribution network based in Ambedkar Nagar. The Colaba Resident's Welfare Association, located in Ganesh Murthy, is another "social work" CBO affiliated with the Mahila Pragati Samiti that actively lobbied against the efforts of Rathod in 2000.²⁹

The Mahila Pragati Samiti's infrastructural network consists of a cluster of several tanks and pumping equipment near Prakash Pethe Marg to collect and push water to a second set of tanks and pumps located on the Backside commercial street (Figure 6.4 and Figure 6.5). Unfortunately, the archives do not contain information related to the size of tanks or pumps, although the president of the CBO asserts that the tank has a capacity of 30,000 litres (Interview, president of Mahila Pragati Samiti, 11/15/09). The CBO distributes water directly to individual private and semi-private (consisting of two or three hutments)

²⁹ Social work CBOs are discussed at length in the following chapter.

connections as in Part I and II, and also runs fifty standpipes operated by 30 women. The average daily allotment to residents is 70 litres, for which they pay INR 100 a month.



Figure 6.4 Women sitting in front of the Mahila Pragati Samiti's water tanks
Credit: Author

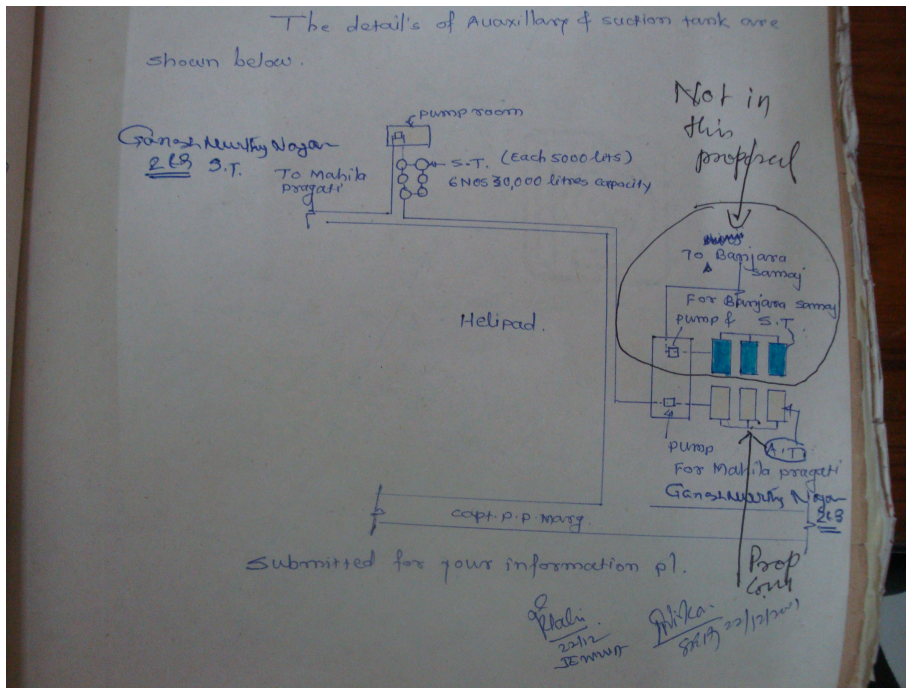


Figure 6.5 Network map for Mahila Pragati Sameti and Banjara Samaj pumping arrangements
Credit: Colaba Water Department Archives

Soon after the infrastructure was installed in 2003 (upon receiving a complaint by Municipal Councillor Rathod) the water department found an illegal pipe branching off the sanctioned network into Ambedkar Nagar behind the bus depot, and took legal action. However, the WDA does not contain any information pertaining to the resolution and follow up to this intervention. The next document in the archive dates from 2005 in the form of a request for police backup to disconnect the water source. In the letter 30 police officers were requisitioned for the disconnection, as the previous attempt to disconnect the line was met with “stiff resistance from a mob of 100 women and limited police bandobast” (MDA-MPS, 15/10/05). The tactics employed by the CBO here recall the aggressive communal action embodied by women Shiv Sena cadres as depicted by Sen (2006), and has served the CBO leaders well in maintaining their power in Ganesh Murthy’s context of otherwise male-dominated water delivery networks.

In 2006 a municipal inspection found an illegal booster pump and a node in the piping network that preceded the water meter. A follow up inspection deemed that a booster pump was necessary and should be permitted, but that the one currently being used was drawing too much water and a request was made to change the size of the pump. Further legal action was taken but as before, there is no documented resolution to the dispute. Curiously, the original field report spoke of a node that preceded the meter, but the formal letter sent to the CBO and the Executive Engineer of the Water Department mentioned an unauthorized meter having been substituted for the official meter, and made no mention of the unofficial node. Again there is no follow up documentation to these actions. Several months later, in November 2006, the Water Department responded to a complaint placed by a resident of Ganesh Murthy about threatening behaviour demonstrated by the president of the Mahila Pragati Samiti, by dismissing the complaint and saying it was a matter for the police (WDA-MPS, 11/28/06). There is no evidence to suggest that muscle gangs played a past role in the enrolment and regulation of the CBO, and perhaps, given the leader’s experience with the militant Shiv Sena, there was no need to employ outside muscle components (see Sen, 2006). Recently, however, the Singh family’s muscle gang has been protecting the Mahila Pragati Samiti’s interests through their association with the Seva Sangh in a redevelopment effort (examined at length in Chapter VIII).

The archives and supporting interviews surrounding the Mahila Pragati Samiti permit a different perspective concerning the assembling of the CBO from those afforded by investigations into the HDWA and Seva Sangh files. Consistent with these latter files, political representation was necessary to gain representation and funding, municipal negligence or corruption is also apparent, and infrastructure was augmented soon after the establishment of the water connection. However, what emerges from the file is also the convoluted nature of the establishment of the CBO network. Heretofore, the assembling of infrastructure and people appears relatively straightforward. The Mahila Pragati Samiti file suggests perhaps a more accurate representation of CBO assembling and functioning that is far more competitive and contested.

6.3.4 Manav Seva Sameti

Historically concurrent with the emergence of the Mahila Pragati Samiti was the assembling of the fourth and final water network currently operating in the settlement. In 2001 a “master plan” to provide infrastructure for Ambedkar Nagar and Ganesh Murthy Nagar was conceived by Municipal Councillor Rathod and the state Collector (WDA-MSS 18/09/01; WDS-MSS 25/09/01). The master plan called for one large water distribution network in each settlement and new toilet blocks to accommodate the swelling population. Lending itself to a holistic vision for potential up-gradation and re-development is the fact that the area comprised by the slums forms a distinct block sandwiched between the luxury condominiums of Cuffe Parade and the military installation at Navy Nagar. In fact, the block of slums endures as an attractor for holistic development to this day.

In 2000, while Rathod was competing for land with the aforementioned nascent CBO that was ultimately disbanded, he was simultaneously assembling autonomous CBOs in Ganesh Murthy to form an umbrella CBO called the Manav Seva Sameti (MSS). In this effort, there is only fleeting evidence to suggest that Rathod may have enrolled the help of the Singh family muscle gang. Subsequently, however, the two parties have come to represent conflicting efforts to redevelop the slum and there is no evidence that any muscle gang currently supports the MSS. Rathod enrolled the leaders of these groups, who held what Suketu Mehta (2004) calls “powertoni,” the power of attorney over member hutment dwellers, with promises of more power. Six CBOs consisting of 32, 136, 9, 33, 29, and 7

members, joined the MSS leading to 246 member hutments. In interviews with a former leader of an amalgamated CBO and several powerful women in the settlement, expressions of betrayal by Rathod abounded as the latter, upon receiving their legal consent to merge their groups with the MSS, shut them out of the operation.

The MSS was officially registered in 2002 and a Rathod loyalist was chosen as president of the CBO. He was replaced in this capacity before 2008 by the secretary of the CBO who is reputed to be one of the larger landholders in the settlement. Rathod secured funding from the MCGM General Budget for the Welfare of the People, and so the State's engineering and bureaucratic machines slowly engaged with the calculations and logistics required for the project. Over two years, Rathod and the MSS campaigned to move the project along, carving marble signs, writing official letters, and organizing pleas from thirsty slum dwellers (WDA-SS). In 2004 a formal contract was signed between the MSS and the city for a municipal connection. The cost of the project was INR 1,350,000 and water started flowing through the network on August 8, 2004 (Interview, former president MSS, 11/11/09). Noteworthy is the fact that the Competent Authority and Water Department Executive Engineer, ostensibly in charge of the network for the State, refused to certify the infrastructural network: but the water was turned on anyways (WDA-SS, 22/9/04).

The MSS network is the largest in the settlement, running along both commercial corridors and servicing 30 taps (WDA-SS, 19/10/07). The existing infrastructure exposes inconsistencies between the planned and actualized network. For example, the plan for the network called for an 80 mm connection, but a later report refers to an actual connection of 100 mm (WDA-MSS, 16/3/05). The plan also called for 17 standpipes, but 26 were factored into later network drawings, and in 2008 thirty taps were claimed by the CBO. Similarly, the municipal technical engineer's report called for a 28,000 litre suction tank and an 11,000 litre auxiliary tank, but curiously, the formal plans approved by the Executive Engineer, granted 35,000 and 11,500 litre tanks (WDA-SS, 23/05/01; WDA-SS, 27/06/01). Rathod later slipped in a request just before work began asking that the tank volume be augmented by 50% (WDA-SS, 19/09/02). No follow up on this matter is located in the archive but the former president of the CBO asserts that the tank's capacity is 100,000 litres (Interview, former president MSS, 11/11/09).

The network accesses the municipal water main located underneath Prakash Pethe Marg at the southern boundary of the BEST bus depot. There, on the lot owned by BEST, a suction tank and pump house collect and feed the network, which terminates at the auxiliary tank at the southwest corner of the settlement. The system collects and distributes water daily for three hours from 11am to 2pm, and hutments are apportioned 60 litres a day. Operating the stand-posts are 30 women who, as of 2010, are paid INR 300 a month for their daily labour. They meet with Rathod, who they refer to as “the teacher,” and his assistant, known only as “Baby”, every month in one of the buildings Rathod operates out of Azad Nagar: a slum located less than a kilometre away from Ganesh Murthy on the eastern side of the peninsula. These standpipe operators distribute water to members of the CBO and others subscribing to the service. All recipients of water pay between INR 50 and 100 for 60 litres of water a day (the higher charge is paid by renters), and must carry the water back to their hutments. According to the former president of the MSS, the water networks in Ganesh Murthy and a similar network (controlled by Rathod) operating in Ambedkar Nagar, produce monthly revenues between INR 200,000 and INR 250,000, or roughly GBP 3000.

The MSS file in the WDA is completely different from the other three network’s files. Firstly, Rathod’s name appears prominently in many documents, rather than fleeting references to politicians found in the other files. Further, there are no reports for unsanctioned infrastructure and reprimands for unpaid bills. Instead, the file shows Rathod and the MSS working in tandem to gain concessions from the State as already demonstrated in the requests for augmented infrastructure. Another request for INR 5,000,000 to extend the network to individual houses was made in October 2007 (WDA-MSS, 17/10/07). In addition to augmented infrastructure, in June 2007 the CBO wrote the water department asking them to revoke the membership of a resident of the settlement due to assault upon various members of the CBO, non-payment of bills, and a series of other accusations (WDA-MSS, 05/06/07). More demands to remove additional people from the MSS membership base followed shortly thereafter, indicating an effort to punish people that contravened the CBOs expectations (WDA-MSS, 08/06/07; WDA-MSS, 09/06/07).

In fact, efforts to delist members of the MSS reveal that Rathod’s 2001 master plan exceeded the mere creation and control of infrastructure. The WDA files, together with

documentation from the Slum Rehabilitation Authority (SRA), show that attempts were made by Rathod to secure the redevelopment rights of Ganesh Murthy through the SRA (to be examined at length in Chapter VIII). One trajectory he pursued in this endeavour was delaying a competing developer called Plymouth Constructions Ltd. from completing the necessary requirements demanded by the SRA. To this extent, the president of the MSS wrote a detailed five-page letter to the water department vaulting accusations of beatings and fear mongering attributed to 19 “agents” of Plymouth who resided in Ganesh Murthy (WDA-MSS, 08/06/07). Among these agents are some familiar names like the secretary of the Seva Sangh and the president of the Mahila Pragati Samiti, and there are other powerful personages from the settlement as well. In a follow up letter addressed to the Prime Minister of India, the president of the MSS accused police officers of working for Plymouth (WDA-SS, 08/06/07):

Officer Salvi even threatened to arrest the President of the Organization (me) in false case. Chances of false complaint being lodged by this [sic] agents against me, my committee members and advisor [name changed to Rathod] cannot be ruled out in Cuffe Parade Police Station and Colaba Station.

While the president was working to delay Plymouth, Rathod pursued another trajectory towards the redevelopment of the settlements: the collection of resident signatures, which is a necessity under SRA guidelines. In this endeavour he used his leverage over resident’s water supply to force them to sign over control of their hutments. Those who resisted had their water access cut off, like one resident who later wrote in a report to the Maharashtra Human Rights Commission (WDA-SS, 07/06/07):

He [Rathod] is forcing us to sign on certain stamp paper in his office at Pestonji Street, Colabawadi, wherein he has set up a video camera to record the proceedings. Before the people are brought to his office they are threatened sometimes at their residences, work places and even outside the office and are told that if they do not sign their water connection will be cut off, their houses will be demolished and false and fabricated cases will be slapped against them due to the money and muscle power that he commands. A major portion of the water supply and distribution in Ganesh Murthy Nagar and Ambedkar Nagar is controlled by him and people are forced to sign.

The MSS water network, with Rathod as its leader, functions quite differently from the other networks operating in the settlement. Rathod, as a former politician, had access to municipal funds and associations with other politicians and municipal employees. He was able to use these connections at the state and municipal levels to acquire a robust infrastructural network that did not need many illegal augmentations, as they had already been sanctioned by the State. However, Rathod took this relationship further, actively

pursuing ameliorations and using the State apparatus to combat his enemies, rather than defensively playing a cat and mouse game with the water department. Rathod himself is an important actor in the settlement assemblage due to his perceived power as a former Municipal Councillor, his control over water and toilets, and his continuing role as a real estate developer.

6.4 Patterns of development

The development of water distribution networks in Ganesh Murthy Nagar reveals several noteworthy patterns. Despite reports to the contrary, the assembling of CBOs may be a contested practice with contradictory effects on society. The further development of CBOs towards gaining water access necessitated the involvement of local politicians, and created association with municipal employees, which shaped both the tendencies of State actors and the ordering of the nomadic settlement. The emergent space issuing forth from this potent mix is a liminal place composed of, but also isolated from, the State apparatus and residents of the settlement and which is fiercely guarded by increasingly powerful water distribution CBOs.

6.4.1 Assembling and capturing the CBO

Few studies have focused on how local CBOs in Mumbai are assembled. What surfaces from research conducted by Edleman and Mitra (2006), which is predominantly based on statistical analysis of secondary data sources together with a shallow survey, is a benign process of group formation culminating in the election of a leader who heads the political association. In this thesis archival analysis and interviews demonstrate that, on the contrary, the assembling of CBOs may involve contested processes. Further, the historical record demonstrates that processes have become more challenging over time. The assembling of people in the HDWA and Seva Sangh appears to have been more straightforward than the assembling of multiple CBOs to form the Mahila Pragati Samiti and the MSS, and the assembling of residents for the Colaba Back Bay Association.

The enrolment of people consists of assembling their signatures, and importantly, their documents to prove they are registered with the electoral office, which qualifies them for municipal services. The assembling of signatures and documents leads to *powertoni*, one of

four major powers in operation at the settlement. *Powertoni* may be strengthened by making copies of signatures and documents, or worse, not giving the documents back at all. *Powertoni* allows those who have assembled documents to use them for purposes other than those for which they were intended, such as to gain municipal contracts for waste management and other services. In cases where documents are not returned, resident's ability to join other CBOs is greatly limited. Unsubstantiated stories in the settlement point to other abuses resulting from *powertoni* such as the sale of hutments and the eviction of rightful owners. The multiple ways in which these documents have been abused have fuelled fear and distrust amongst residents of Ganesh Murthy, and this is apparent in the difficulty the president of the Colaba Back Bay Association had in assembling signatures and documents.

Tensions may arise from assembling various CBOs, as with the case of the MSS. Interviews with members of the original six CBOs that combined to form the MSS revealed feelings of disenfranchisement, betrayal, and extreme dislike (Interview, residents of Ganesh Murthy, 11/29/09). The leaders of the CBOs had all allegedly been promised powerful positions in the new CBO, but quickly found themselves on the outside: no longer holders of *powertoni* and powerless to prevent the unjust treatment of themselves and their constituent members. Tensions may also arise between social consistencies that are competing to collect signatures and documents to operate a water service in the same territory.

The capturing of CBOs to derive personal wealth at the expense of the welfare of residents has had two conflicting results in Ganesh Murthy. First, the success of CBOs in procuring infrastructure as well as facilitating individual wealth may contribute to a proliferation of start-up CBOs. An informal survey of a sample set of 10 alleys, or roughly one third the settlement, revealed that there were no fewer than two known CBOs existing per lane. Second, along with other factors that are examined in the following chapter, the capture of the four water networks in the settlement, has created a general distrust of CBOs in general. Interviews with residents throughout the settlement reveal a general malaise in regards to CBOs with complaints of being shut out of committee meetings, duplicity and theft in their dealings with CBOs, and for over paying for too little water.

Distrust is a pervasive sentiment in the settlement and has deleterious effects. Ironically, as social consistencies in the settlement congeal towards some form of societal organization, a concurrent trajectory of social fragmentation manifests. The organization of CBOs, and their subsequent capture and misuse, have fuelled this fragmentation through fear and distrust. The lack of trust, in turn, may create barriers towards the formation of new or larger social consistencies, which may otherwise succeed in realizing more democratic and just governance. Fear and distrust also result in the inability to form a unified body or movement, which might otherwise work towards dismantling some of the dominant and unjust strata of the settlement. One resident pointed out that there is no unity in GM because there is no trust.

Everyone tries to get ahead over everyone else. They say nice things to you and then go behind your back. People don't care about the greater society. People only care when they have no water. There are no credible leaders either. They say, 'we will' and never do. They say they will fix things on Sunday but Sunday never comes (Interview, resident of Ganesh Murthy Nagar, 15/11/09).

The lack of trust and the pervasive sense of fear are important components of the settlement assemblage that contribute to a fragmented community whose lack of cohesiveness impairs its ability to move towards a more just and equitable society.

6.4.3 Nomadic tendencies of the State apparatus

Based on archival data at the municipal water department, gaining access to municipal water goes beyond the assembling of people and their documents and following legal procedures. It also requires funding for infrastructure and political influence to motivate governmental agencies. These components of water access create a niche for local politicians, who are motivated by a logic to acquire and maintain votes, and engage in *vote bank politics*; a stalwart component of Mumbai's political dynamic that is blamed by political actors, the middle class, and the media for everything from the proliferation of slums to the city's crumbling infrastructure.

A vote bank is a bloc of voters from one community that votes consistently for one politician or political party. Vote bank politics is the term used to describe the process of negotiation between slum dwellers and politicians whereby land tenure regularization, stopping evictions, and facilitating the provision of basic amenities are exchanged for votes and support at election time (Benjamin, 2005; Mujtaba, 2004). Slum dwellers are especially

reliant on political networks for living improvements because of their lack of access to other social and economic networks, and so politicians are understood to be in a position to exploit this vulnerability (Edelman and Mitra, 2006). Concurrently, politicians must compete with each other for office so slum dwellers have been able to leverage their voting power into guarantees of tenure and access to basic services (Jha *et al.*, 2004; Aldrich and Sandhu, 1995).

In India, Edelman and Mitra's (2006), research reveals that while political access is crucial for slum dwellers to receive ration cards, acquire land tenure, and gain services, vote bank politics does not reduce their vulnerability in the long run. For the most part this argument is based on Werlin's argument (1999) that politicians would rather ignore or exploit social and economic tensions rather than promoting community cooperation in the pursuit of slum up-gradation. A similar statement about the fragmenting role of vote bank politics is put forward by Bhide (2009: 380) when she says that political representatives are interested in "cultivating slums as their vote banks perpetually obligated to them thereby dividing communities and preventing a larger struggle for housing rights to become a strong and effective force." At Ganesh Murthy, the historical record reveals that vote bank politics clearly played an important role in procuring municipal water. Throughout the development of the settlement, emergent social consistencies sought the help of politicians to navigate their demands through the State apparatus, and relied on politicians for funding to pay for the infrastructure. The development of multiple distribution systems has fostered forms of fragmentation in the settlement and does indeed leave the community less able to make greater demands. What remains to be explained is the various ways this happens.

The investigation of Ganesh Murthy exposes a novel dimension of this relationship between slum dwellers, politicians, and technical networks. While slum dwellers do indeed rely upon patron politicians to procure services, there is also a sense in which politicians may go beyond normative parameters to maintain the existence of their allies in the slum. This comes through in the efforts of politicians to have the Seva Sangh's water connection re-established in June 2005. The local Municipal Councillor and MLA both made several calls to the water department to re-establish water connections that were shut down due to illegal components having been added to the infrastructure. The calls were made despite the

offending infrastructure having been merely disconnected and not removed. In the context of significant historical evidence pointing to the eventual reconnection of offending infrastructure in the settlement, the efforts of these politicians may be interpreted as potentially contrary to the strict legal parameters defined by the State. These nomadic tendencies oriented towards maintaining a form of existence outside the legal parameters of the State apparatus are most apparent in the work of Rathod, who used the mechanisms of the State to create alternative revenue streams in the form of water distribution systems and toilet blocks. In fact, this points to another motivational logic underlying politician's actions: to make money. A former politician admitted in an interview that Mumbai's politicians "do not enter politics for votes or for politics, but to make money" (Interview, 01/05/10). Beyond maintaining vote banks or deriving revenue there may be other motivations for these nomadic tendencies. From the perspective of the politician, water distribution networks are not only mechanisms for assembling votes, but tactical weapons to be used in discrediting or weakening their political rivals. An internal document in the WDA (WDA-SS, 05/04/94) describes illegal infrastructure in Parts I and II of the settlement and concludes:

The main problem in these colonies [Ganesh Murthy Nagar] is the dispute between two groups each led by Municipal Councillors. There are allegations and counter allegations as seen in the complaint under reference and Corporation [the municipal corporation MCGM] is not a party to these allegations.

During the course of informal conversations with residents of Ganesh Murthy I also encountered unsubstantiated reports of contemporary political rivalries that had manifested in similar ways. Therefore, water distribution schemes may become metonymic for particular politicians and an attack on the former weakens the latter. Considering for a moment (to be elaborated upon in the next section) that water distribution schemes are elements in the nomadic war machine, the present example demonstrates how these tools for maintaining an existence outside the State may be used by State actors to wage war against each other. And of course, casualties in these exchanges are borne by slum dwellers, whose water service and lives are dramatically affected by the altercations.

Water distribution networks are also assets that politicians manipulate to manifest desired results. A local Municipal Councillor (Interview, 11/11/09) said during an interview:

All politicians take money from builders operating on their land. The politicians are paid to get signatures by forcing people to sign. They can stop their water from coming, stop them from using the toilet, or use force to reach their goal. The only politicians that did not take money are myself and [one other]. The government is useless. I am ashamed of the greed displayed by politicians and those in the government while those around us live in such poverty.

The above demonstrates that the provision and maintenance of functioning infrastructure by politicians goes beyond merely the establishment of a block of sympathetic voters. The association between politicians and water networks manifests in nomadic tendencies on the part of the former that use infrastructure as an asset to leverage in the sale of their influence to developers, to make money from selling services, and as tools in political warfare.

Beyond the nomadic tendencies of politicians there is strong evidence to support the hypothesis that CBOs also enrol municipal engineers at the water department into their networks. The continued operation of private connections in Part I, Part II, and Part III Backside, despite their initial and subsequent identification from the early 1990s, suggests an undocumented and unofficial permission for the usage. Further, and related to this, are patterns in the WDA where illegal changes are documented but gaps appear in the resolution of such issues. In the case of the Seva Sangh, the WDA file was missing the names of hutment dwellers, their signatures, photocopies of their identification papers, as well as a map of the infrastructure network. Other signposts indicating connections between CBOs and the municipality include the pervasive non-functionality of meters that measure the CBOs consumption of water. The WDA reveal that of the four networks operating in Ganesh Murthy, three have dysfunctional water meters, with one of them having been broken for seven years. In these cases water consumption is calculated according to the last meter reading, and would not take into account changes to the system to draw more water. Water meter dysfunction is not limited to Ganesh Murthy, but occurs in approximately 50 percent of slum water connections in the ward, suggesting either widespread incompetence or corruption. In addition to these inductive indicators of enrolment, are direct admissions of the bribery of BMC officials, including a water department engineer who admitted that corruption was still highly prevalent in the MCGM apparatus (Interview, 12/31/09). Thus, the interaction between the nomadic settlement and the State apparatus have led some actors of the latter to adopt nomadic tendencies in their pursuit of an existence outside the legal parameters of the State.

6.4.4 Creative infrastructural configurations

State infrastructural arrangements for distributing water in slums are designed as authoritative arborescent networks that distribute water equitably to a distinct set of people segmented from the rest of the community. Water flowing at a precise pressure through the municipal main for a discrete amount of time will yield an exact volume of water depending upon the size of the connection to the main. These known quantities are then engineered to allow water to flow through pipelines, whose diameter ensures that the defined number of standpipes receive a precisely calculated amount of water. It is at this point that the CBO may then take control of the water to fairly distribute it to members lining up with 20-litre plastic containers.

The water distribution schemes at Ganesh Murthy Nagar, however, reveal completely different network configurations resulting in very different outcomes. Whether the network was augmented before the infrastructure was in place, as in the case with the Manav Seva Sameti, or whether augmentation took place incrementally after the infrastructure was functional, as is the case with the other three CBOs, all water networks followed a line of flight from State configurations. These augmentations represent important creative configurations that fed the growing nomadic settlement and facilitated its spreading out over the marsh while surpassing reterritorialized iterations of itself. With some standpipes delivering 400 percent of their intended capacity, the peripatetic movement of the settlement would arguably have been much more limited without augmentations.

The establishment of underground water tanks are critical components of nomadic water schemes that follow a line of flight away from State networks designed for remote control. Holding tanks consolidate water in a state of potentiality, rather than allowing the water to manifest equitably through the arborescent network. The capture of the water in the tank thus deterritorializes it as a component of the State apparatus and reterritorializes it under the authority of the CBO. The addition of booster pumps increases the volume of water drawn from the system, and thus the potential and power of the CBO. These basic components, manifested in all four of the nomadic water networks, may also be aided by larger connections, as is the case with the Manav Seva Sameti, or additional connections as in the case of the Seva Sangh. While these changes to the infrastructure increase the volume

of water and transfer control to the CBO, other changes to the infrastructure also reduce State control, such as the dismantling of water metres. This increases the power [by increasing net profit] of the CBO through cost reduction, and follows other cost-cutting tactics like the theft of electricity from municipal light posts in the case of the Mahila Pragati Samiti and HDWA, or from regular residential meters as was the case with the Seva Sangh.

The supply side of the infrastructure also follows a line of flight from State configurations and segmentations. Perhaps the most dramatic example of this in Ganesh Murthy was the movement of infrastructure from Part III to Part III Backside to meet the needs of a nomadic settlement assemblage as a plurality in transformation. The distribution of water to thousands of non-members is another large deviation from State striation and segmentation. Additionally, communal standpipes have been replaced to some extent by private or semi-private connections. Standpipes continue to exist, but water is not necessarily distributed equally, as those residents regarded as threats by the CBO administrators are told to stand at the back of the line, or are simply refused service by female actors distributing the water for the CBO. People who are refused water may then join other disenfranchised residents who purchase the illegal sale of water from standpipes operated by other water networks. The mixture of State elements and nomadic tendencies manifested in water networks thus creates a multitude of hierarchical class distinctions, which contribute to social fragmentation.

The employment of women to distribute water is also noteworthy. All of the 80 employees that distribute water for the Mahila Pragati Samiti and the Manav Seva Samiti are women. Ostensibly, as men leave the settlement for work during the day, the employment of women for several hours each day makes logistical sense. However, there may be other reasons as well. This was hinted at by the president of CRIT, who had surveyed the population of Ganesh Murthy for the Slum Sanitation Project follow-up evaluations (discussed in the following chapter). He obliquely asserted that there were political reasons why women were employed by the CBOs. Residents of Ganesh Murthy clarified this when they insisted that: “there is less chances of physical violence against women. The police will not hesitate to beat a man, but they will shrink away from touching a woman” (Interview, residents of

Ganesh Murthy, 12/23/09). Therefore women employees may provide an important buffer between CBO leaders and authorities.

The settlement is divided into four parts, and each territory holds a position in a hierarchy that is partly determined by the quality of water service. The perception of value attached to hutments in certain territories in the settlement are judged on several things such as the legal standing of hutments, their general quality, susceptibility to flooding, access to transportation corridors, and also the quality of water service. In Ganesh Murthy, Part I is largely recognized as having the best water supply with no survey respondents complaining of water problems. In Part II 46 percent of those surveyed complained of water service, however the many private connections are highly valued. Part III and Part III Backside have the worst water service in the settlement with 68 percent of people surveyed complaining about water service. These figures are reflected in the price of hutments as those in Part I may sell for as high as INR 1,300,000 while hutments in Part III may be found for as low as INR 300,000. Beyond hierarchies established by territorial water supply are intra-territorial hierarchies with those having private connections occupying positions at the top, and those denied water at the bottom. Additionally, there are tensions between CBO administrators and members, and also between members and non-members of CBOs as the latter siphon water away from amounts stipulated by the city to the former.

The State configuration of water distribution in slums is designed to be administered democratically through CBOs and provide water equitably to a segmented portion of residents that are officially recognized. However, the admixture of State elements and nomadic tendencies results in a centralized abuse of power in Ganesh Murthy. Power accrues to those individuals that have the desire and the ability to both gather *powertoni* through the collection of documents, and establish relationships with influential people, called *touch*, such as politicians and municipal employees. With these various associations and infrastructural augmentations another important form of power accrues to the same individuals: money. The total annual revenue derived from the sale of municipal water in the settlement is INR 3,703,875 or roughly GBP 50,000. The cost of this water, calculated by the nominal cost of water to slums at INR 2 per 10,000 litres is about 17 Pounds.

The revenue generated by water networks pays for the costs of water, electricity, salaries, and maintenance. The profits, however, may be used to consolidate power in the form of payments to municipal employees that authorize illegal systems, politicians to sanction and petition, police officers to turn a blind eye, and muscle gangs to physically enforce the emergent power geometry. These costs are paid by residents who receive inadequate amounts of water and who bear the social costs of a slum headed towards despair composed of life-destroying relationships. Further, the success of water networks have led to their expansion and control over waste management services, toilet block management, related CBOs that perform “social work,” and private enterprises (all to be investigated further in the next chapter) in a trajectory towards greater centralization of power and greater domination over the settlement and society.

6.4.5 Liminal space in the nomadic settlement

The centralized power that has accrued to water networks has created the conditions for an emergent space that exists both between and beyond the State apparatus and residents. This liminal space sits between but also encompasses aspects of the State, including the legal, material, financial, and administrative components from which municipal services derive, and residents, for whom these services are oriented and to whom they are delivered. However, much of the management of the CBO service extends beyond these borders as well. On the State side of the equation, a “porous bureaucracy” (Benjamin, 1996), consisting of local politicians and municipal employees, are enrolled by the CBO to accommodate illegal infrastructural provision and augmentation. These State actors exhibit nomadic tendencies by shielding illegal components of the network from the State apparatus itself. This is a politics of stealth, akin to Bayat’s (1996) notion of quiet encroachment, where CBOs quietly gain concessions that remain “illegible before the gaze of the state” (Nigam, 2008: 2). As witnessed by the WDA, components of the State apparatus may identify augmented infrastructure and sometimes take action against it. But ultimately, the porous bureaucracy conspires to shield illegalities and works to maintain the status quo. A prime example of such a conspiracy, beyond the continuing existence of illegal infrastructure in the settlement, is apparent in the outcome of the aforementioned letter written to the Human Rights Commission of the State of Maharashtra to complain of water problems. This plea for help against the water network was ultimately deflected by

the municipal water department, as actors there were unable to locate the necessary paperwork demanded by the Registrar of the Human Rights Commission. This precluded the investigation from going any further and maintained the status quo (WDA-SS, 07/06/07).

Benjamin (2005) suggests a metaphor for this liminal nomadic space in the form of “entrepreneurial grassroots urban politics,” as it conveys a profit motivated and situated local politics. However, the dynamic he captures glosses over the violent relations that occur in squatter settlements. Daily life in Ganesh Murthy Nagar is not played out in “various Associations’ meetings,” (Benjamin, 2005: 247), as indeed these meetings are not accessible to regular residents. This is the other side of the liminal nomadic space that is ostensibly composed of slum dwellers, but concurrently isolates them from the mechanics of power. Both Edleman and Mitra (2006) and Benjamin’s (2005) studies fail to acknowledge the potentially contentious and violent processes that take place everyday around the formation and maintenance of CBO practices. By discontinuing meetings, or holding meetings behind closed doors, and by simply ignoring the requests of CBO members, the administrators of the CBO effectively shut slum dwellers out. Further, intimidation, ostracization, and occasionally physical violence perpetrated by muscle gangs associated with CBOs contributes to forms of domination that muffles the voices of residents from travelling beyond their hutments and the narrow alleys of the settlement. On occasions when these desiring voices do overcome the perimeter of the settlement, the enrolment of politicians, police, and municipal employees effectively leaves little room for slum dwellers to be heard. This darkest corner of the nomadic settlement has unfortunately emerged as the pervasive space of Ganesh Murthy Nagar.

6.4.6 Barriers to Entry

Entry into this liminal space is fiercely guarded. Ganesh Murthy Nagar, with a population of 11,000 people, has four de facto water distribution networks. By contrast, Ambedkar Nagar, composed of a similar socio-economic base and number of residents, has over 50 official water connections (WDA, 01/10/10). The water networks at Ganesh Murthy have maintained their exclusive access to municipal water through a variety means and benefit from a spatial context that favours limited access.

As described above, CBOs have effectively isolated residents from the State apparatus by enrolling actors in the porous bureaucracy of the State. However, local pressure for increased and improved water access still manifests in the settlement. Those who complain about poor water distribution risk being the last in line to have their water containers filled and having their water access summarily cut off, necessitating the purchase of poorer quality water at a higher price, often from further away. Beyond these privations CBOs also have alliances with muscle gangs that operate in the settlement that spread fear through physical threats and violence. Discussed further in the following chapter, there are at least four organized muscle gangs in Ganesh Murthy, and their activities seemingly touch upon every illegal activity in the settlement, including the regulation of people's behaviour so as to reduce expectations of better water access.

Beyond these direct defences, potential CBOs have to overcome emergent factors. Fear and distrust of CBOs make it difficult to collect signatures and procure documents. Further, the CBO has to approach a local politician for funding and to navigate the CBO through the municipal apparatus. Yet local politicians are already affiliated with established networks, which make it difficult to gain their acquiescence.

Beyond these barriers to gaining new water connections is the spatial layout of the settlement, which favours the established networks. Ganesh Murthy abuts 50 meters of Prakash Pethe Marg, over which lies the water main, and much of this space is taken up by a communal area and parking spaces, thus making it difficult to establish a pump house and water tank there. This is why Manav Seva Sameti and Mahila Pragati Samiti located their infrastructure centres on the periphery of Ambedkar Nagar and the helipad area. By contrast, Ambedkar Nagar has 700 meters of contiguous space with the water main and numerous access points to the settlement along the road provide space for infrastructural arrangements. The networks in Ganesh Murthy guard the remaining open space where water distribution infrastructure could be placed. For example, as described above, the administrator of HDWA in Part I makes it very difficult for incipient networks to acquire space in this territory near the road by arguing with the municipality that the space is required for communal use.

It takes a special person or group of people to overcome the many barriers to entry: people who have the determination to gain *powertoni*; have the power of *touch* with local politicians; have the economic standing to not wither from water distribution privations, and those that can defend themselves against physical threats and violence. Sometimes, however this is not enough to gain a new water source. A nascent CBO was allegedly shut down by Rathod in 2009 after having assembled the signatures, permissions, and funding (Interview, president incipient CBO, 11/20/09). The leader of the incipient network alleges that Rathod used his connections with a builder constructing the condominium complex next to the settlement to revoke the State's previously granted permission to put a water tank on their land. Since then the fledgling CBO has been unable to secure an alternative location. When the president of the CBO went public with the events of their misfortune, local newspapers decried the construction of luxury condominiums in an area where slum dwellers could not even get sufficient water. Another dimension of this reality, however, is the fact that the water mafia operating in the settlement had protected its exclusive power in the settlement.

6.5 Conclusion

The water distribution ecosystem in Ganesh Murthy is a multiplicity. Residents bring water to the settlement from their places of work in the nearby neighbourhoods of Cuffe Parade, Navy Nagar, and farther away still, travelling a kilometre or more carrying 20-liter water containers. The sea is also used as a source of water for washing up. There is a fresh-water spring that flows into the sea where women do their washing, and where some people fill their containers. Water may also be borrowed or bought from an acquaintance in another part of the settlement with better water access. More formally, four municipal water schemes distribute water to about 85 percent of the population. Privately sold tanker water is also available for the many that cannot make do with the 60 liters issued per day by municipal water schemes. Most people wash up with this water that has previously been known to carry cholera, but some are forced to drink it as they cannot afford, or have been denied access to, potable water supplied by the city.

Water access has always been problematic for the residents of Ganesh Murthy but the redundancy of the water ecosystem can compensate for irregularities in service delivery. In

2010, after having left Mumbai an informant in the settlement reported by email that the private tanker system had been shut down by a local politician with affiliations to one of the municipal water schemes, and residents were barely managing by exploiting other sources of water. Further, services from municipal water schemes are regularly interrupted due to some form of illegality; to wit the Mahila Pragati Samiti was shut down for a week during my fieldwork when the president of the CBO was jailed for stealing electricity to run the pumps that distribute water. The water distribution ecosystem in the settlement is highly contested, and often, political clashes between various competing actors are to blame for interruptions of service, which can have grave consequences.

Municipal water schemes are important components in the settlement assemblage, providing service to an estimated 85 percent of the population. The CBOs that operate these schemes congealed from desiring social consistencies triggered by State legislation promoting participatory programs. Under the right conditions, such programs hold real promise as transformative processes that may foster inclusiveness and empowerment and which may reduce patronage and dependence. As the chapter demonstrates, Mumbai's ongoing experiment with participatory forms of water provision in Ganesh Murthy has indeed been transformative; only the results have been the polar opposite of what proponents of participatory programmes hope for.

Older residents describe the original settlement as a socially unified community. However, this unity was diluted with the migration of people with diverse regional affiliations, following various religions, and showing considerable variation in terms of employment and income. This social meshwork of the settlement was incrementally transformed into a fragmented and divisive society with distrustful and fearful residents, as water networks assumed greater control over water service and relationships of domination began to emerge. These "social bads" (Durlauf, 1999) that mitigate against life-affirming relationships push the settlement from a slum of hope towards a slum of despair. Beyond the daily privations and sense of fear, social bads negate against residents from improving their individual livelihood conditions, and they prevent social consistencies from gaining force to become transformative community movements. For example, no group has emerged in Part III to challenge the Manav Seva Sameti because "the people do not trust

any one person, or committee of people, to have power and work on their behalf” (Interview, resident of Ganesh Murthy Nagar, 15/12/09). The historical exposition of the settlement’s development reveals a convoluted and contradictory pattern of development such that the organization of society to procure and administer water services concurrently worked to fragment and divide the society.

It is clear from the analysis that the critical failing in participatory water programmes stemmed from skewed forms of political affiliations and ineffective regulation. State and municipal administrators have not instituted less political and more impartial mechanisms to facilitate participatory programmes, as did Bogota with its Community Action programs or Valencia, Colombia with its National Programme for Community Development for example (Gilbert and Ward, 1984). Instead, the platform erected by the State demanded that CBOs work with local politicians to gain funding for their projects and to navigate the labyrinthine municipal apparatus. The emergent relationships between politicians and CBOs go beyond dependence-based patron-client models, to produce stronger connections where politicians use water networks for personal profit and to fight political rivals. Water networks are thus assets upon which politicians rely, which may foster illegal behaviour. Further, the municipal water department persistently fails to adequately regulate illegal infrastructural augmentations. The MCGM does move junior water engineers from office to office every two years in part to offset the possibility of close relationships being created between employees and members of CBOs. However, senior engineers are not subject to this policy, and if indeed there are untoward relationships developing, as the overwhelming amount of evidence suggests, then it is likely that it takes place at this medium level of government. State actors closely interacting with the settlement thus exhibit nomadic tendencies and trajectories in their pursuit of an existence outside strict legal parameters.

Inversely, through interactions with the State, the nomadic settlement has come to assume sedentary lines of ordering resulting in the centralization of power and resulting social hierarchies. Water distribution schemes were designed as closed systems, whereby the State could remotely control the flow of water to residents from a sub-station on Malabar Hill. However, opportunities to circumvent and augment this system were quickly exploited by entrepreneurial slum dwellers that moved networks along a line of flight away from the

State model. Creative configurations captured the potential of water and derived more water from the system. Water tanks transferred control of water from the State to the CBO, while booster pumps increased the volume of water for sale. Supply side augmentations also increased revenues by expanding the market to unofficial slum dwellers and through the installation of private connections. Increased revenues, together with decreasing costs from electricity theft and water meter manipulation, led to increased profits that could be used for other things such as the enrolment of State actors. Clearly, without enrolling elements of the porous bureaucracy the line of flights exhibited by all the networks would not have been sustained. These relationships maintain the central control of CBOs to limit or stop water distribution to individual members, and add paying customers as they seem fit. The inequitable and unjust administration of municipal water services have resulted in fragmenting social hierarchies in terms of territorial quality of water service, intra-territory quality of service, and multiplied tensions between official and unofficial members of CBOs.

The mixing of State components and actors and nomadic tendencies and trajectories followed a line of flight from the original model of participatory water service. The line of flight is "both the line of maximal creative potential and the line of greatest danger, offering at once the possibility of the greatest joy and that of the most extreme anguish" (Patton, 1984; 66). Augmentations to water networks produce more water and distribute it to more people. They thus feed the hopes and needs of new slum dwellers as they are drawn to the nomadic settlement, which continues to function outside the strict parameters of the State. Contrarily, augmentations have also resulted in insufficient amounts of water being delivered to over-paying residents. They have also contributed to the fragmentation of the community into divisive units that are distrustful and fearful of one another, and isolated from the State apparatus. This is the emergent space of the nomadic assemblage: a liminal space where atomized individuals are isolated from State mechanisms to redress injustices, and where the State is kept from regulating and enforcing their interests.

The water networks are tools of the settlement's war machine that wages violence against the State to maintain a nomadic existence. Water networks enrol and corrupt State actors, destroy State equipment, and steal State resources like electricity and water. However, here,

the war machine is also turned against its own tribe. *Powertoni* in the form of signatures and documents limit the action of residents and allegedly may lead to the sale of their hutments and their subsequent eviction. *Touch* isolates residents from the State apparatus to redress wrongs. The money that accumulates from networks helps to maintain the whole assemblage and expand it into other areas of the settlement. These are three of the main powers in the settlement and water networks have marshalled these forces to the detriment of residents and the community. However, there are other forms of social consistencies and power that operate in the settlement that align with water components of the settlement assemblage as a plurality in transformation. The next chapter examines these components and the nature of their interrelationships in the settlement.

Chapter VII

**Municipal Services, CBOs, and Muscle Gangs: The Emergence of
Domination**

7.1 Introduction

Ganesh Murthy is an assemblage of numerous components that enable the settlement to exist as a residential enclave. People, hutments, and land are perhaps the basic components that have generated the possibility for other components to form such as water distribution schemes. This chapter examines other municipal services and components of the settlement assemblage, some of which share similarities with water networks such as the implementation of participatory practices that have gone awry. Participatory programs have facilitated several service-oriented components in the settlement, but concomitant with access to services is the consolidation of power in the form of CBO conglomerates that have come to dominate governance regimes. The consolidation of power, along with the continuing fragmentation of society, and the emergence of a defensible space that attracts new services and associations puts into question the efficacy of participatory programmes in promoting democratic participation and community empowerment at Ganesh Murthy. Thus, the chapter identifies and examines these other important components and traces their inherent relations, shared associations, and follows these connections as they extend outside the settlement

The chapter is divided into four sections and begins with an investigation of municipal services (6.2) that are available in the settlement including electricity (6.2.1), sewer systems and alley paving (6.2.2), solid waste management (6.2.3), and toilet facilities (6.2.4). The second section (6.3) describes “social work” CBOs and their role in providing sundry civic services to segments of the population that would not otherwise have access. The final components of the settlement to be examined are muscle gangs, which are the focus of the third section of the chapter (6.4). Finally, information from this and previous chapters are brought together to create a rhizomatic representation of the settlement (6.5).

7.2 Municipal services

7.2.1 Electricity

Electricity, along with water, was one of the first services demanded from the State by the Sri Ganesh Murthy Nagar Hutment Dwellers Welfare Association (HDWA) in 1983 (WDA-HDWA, 1983). The service was introduced to the settlement three years afterwards in 1986 without local participatory components and controlled by the state-run Bombay

Electrical Supply and Transportation Company (BEST). Despite the direct control of the service by the state, irregularities in local connections manifested. Several residents allege that a member of the HDWA committee in Part I conspired with a member of the Seva Sangh committee in Part II to illegally connect hutments to the power grid. The member of the HDWA has knowledge of electrical wiring procedures and this expertise was put to use with the authority of the Seva Sangh member, who maintains strict management of Part II.

The settlement's electrical system connects to the municipal grid at two substations located in Part II (Figure 5.16). As Figure 7.1 demonstrates, the substations are cluttered with meters that measure consumption and wires that then run to individual hutments. In some cases wires from the substation run to smaller nodal points with five or six meters attached and which then connect to hutments. The result is a cacophony of connections and dangling wires running throughout the settlement that make tracing individual connections challenging (Figure 7.2). This murky and ambiguous situation was exploited by the two committee members who would allegedly connect new wires to the electrical main and to existing meters for a fee and collect monthly charges as well.

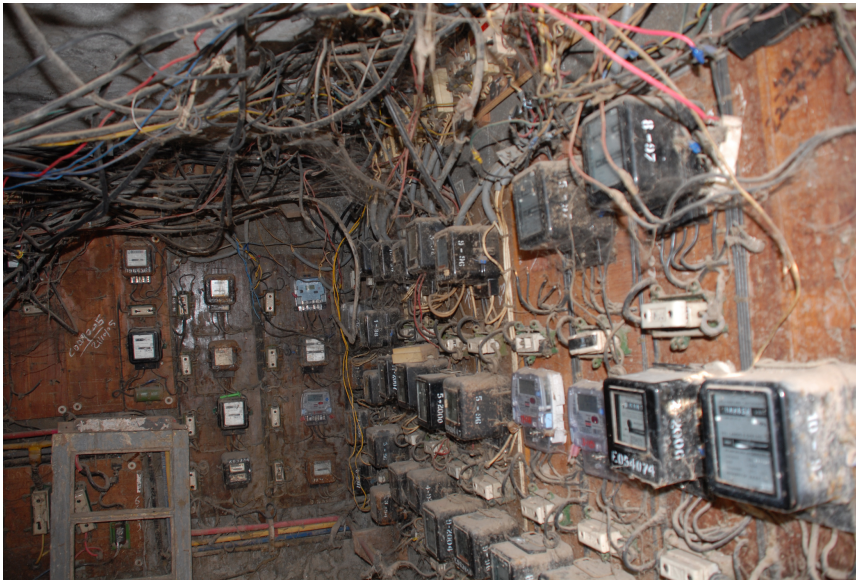


Figure 7.1 Interior of electric substation
Credit: Author



Figure 7.2 Wires leading out of an electrical substation
Credit: Author

In 2006 the Daily News and Analysis (DNA) newspaper ran an article entitled “Illegal power lights up Cuffe Parade slums” (Gangan, 2006), which investigates electricity thefts in Ambedkar Nagar and Ganesh Murthy Nagar. The article reports that 60 percent of slum

dwellers in the two settlements receive unlimited electricity for INR 300 a month, and that these thefts cost BEST INR 4,000,000 from 2003 to 2006. The article also quotes a community leader in Ambedkar Nagar that alleges that BEST employees are party to supplying the illegal electrical connections. The article may have motivated authorities to stem the rise of illegal connections because the socioeconomic survey revealed that only 17 percent of hutments surveyed did not have their own meter. This movement towards regulation may also have been aided by the 2003 Indian Electricity Act, which opened electrical service provision to private companies. As a result, many residents of Ganesh Murthy switched over to a private supplier, which may be more efficient in enforcing their services as compared to BEST.

Despite increased electrical regularization, some actors in the settlement continue to use illegal connections, especially residents of *pucca* hutments that are not eligible to acquire formal service due to the nature of their hutments using minimally secured materials. For other residents, the price of regularized electricity can be cost prohibitive. Eight percent of survey respondents complained of electrical costs being too high. The DNA (Gangan, 2006), article quoted one residents as saying: “Last year, I took my own meter and I regret the decision. My bimonthly bill is now between Rs [INR] 1,500-2,000 for two tube lights a TV set and a refrigerator, which earlier used to be Rs 300 through an illegal connection. With these rates, why should one opt for a legal connection?”

Water CBO administrators may also share these sentiments. Members of the CHWA, Mahila Pragati Sameti and Seva Sangh committees have been jailed for electricity theft used to power their pumps. In 2008, the Singh family, in their continuing battle against administrators of the HDWA, reported the latter’s illegal usage of electricity and one committee member was arrested. Thus, electricity supply contributes to the power geometry in the settlement, but this has diminished in recent years. New electrical connections created by the two committee members in Parts I and II added to their revenue and strengthened the degree of dependence on which the relationship between the committee and individuals is based. Residents were no longer beholden to committees only for water, but for electrical supply as well. This relationship contributed to the long lasting power of the two committee members who continue to dominate the CBOs and their

territories as well. Despite the recent regularization of electrical services in the settlement, illegal connections may still feed into the power structure although this is likely to be more dispersed among individual hutments that sponsor renters or neighbours for a fee, rather than through a more centralized authority like the committee. Further, the continued use of stolen electricity reduces costs for water distributors, but rivals may also leverage this illegal usage. When this occurs, slum dwellers are burdened with service interruptions, as happened when a member of the Mahila Pragati Sameti was arrested for electricity theft in 2009.

7.2.2 Sewer systems and alley paving

The lack of sewer connections in slums are linked to higher rates of mortality and intestinal parasites, and are thus important components of settlements that contribute to health (UN Habitat, 2003). Proper storm water drainage systems are also important, especially in Mumbai, where the annual monsoon can deposit massive amounts of water very quickly, as happened in 2005 when almost a meter of rain fell in 24 hours. Without proper drainage slum hutments easily become inundated, destroying personal property and rendering hutments uninhabitable. Water drains were installed in Mumbai's slums as part of the supply-driven Slum Improvement Program from 1993 onwards. With the Slum Redevelopment Program in 1997, the service became demand driven through applications from slum dweller cooperative societies. There are several drainage arrangements in Ganesh Murthy, reflecting the fact that State and local actors created various territorial systems over time. Parts I and II have older drainage systems, which collect water from alleys and pump it to a processing plant north of the settlement. The diameter of pipes in these systems is small, limiting the volume of water they can handle. For this reason the committees act to restrict direct connections to hutments for use as sewage systems. Residents of Parts I and II rarely have urinals and must wash clothes and dishes in the alleys, where wastewater then drains into the system. These drainage systems were paid for and built by the State following a similar process for water service provision. The paving of alleys in Parts I and II were procured the same way, and all alleys in these territories are paved with stone and mortar.

In Part III and Part III Backside drainage and paving arrangements followed from the congealing of social consistencies into CBOs in individual alleys. There are some exceptions to this such as the role of the Mahila Pragati Sameti in building sewers and paving alleys in a larger section of Part III Backside. Another CBO, mentioned in the previous chapter for procuring a water standpipe located in a large hole, also had sewers built. This CBO built sewers in the late 1990s in each alley from Alley 4 to Alley 11, and the president of the committee insisted on using larger diameter sewer pipes. As such, many of the hutments in this region accommodate a place to urinate and sinks that drain into the system. As these alleys extended northwards, with the building of new or renovated hutments, residents incrementally extended the sewer system as well. In Part III Backside, similar configurations exist as well as incorporating large drainage systems with removable concrete slabs to allow for their cleaning by State employees. The sewer systems in Part III and III Backside spill out into the mangrove forest where the high tide gradually removes the effluent. Most alleys in Parts III and III Backside were paved through local politician funding, but some alleys on the fringes of the settlement are still composed of dirt or garbage.

All the sewer systems in the settlement have diverged from the State system to some degree. In Part I and II, the committees have greatly restricted the extension of the system to individual hutments. However, several hutments owned by wealthy residents, such as some members of the Singh family and a few committee members, do have direct connections, which allows these hutments to accommodate toilets and sinks. In Parts III and III Backside the original State system accommodates more incremental additions and augmentations. This results in the near daily need to unblock lines, which is undertaken by the hutment dweller wherever the blockage occurs. Parts I and II also have their problems due to the small diameter of the pipes, which are overwhelmed during heavy rainstorms and cause flooding to occur (Figure 7.3). Throughout the settlement, flooding during the monsoon is a constant worry for residents, 13 percent of which complained of annual flooding.



Figure 7.3 Flooding after a light rain
Credit: Author

The role of CBOs in procuring sewers and alley paving has generally worked towards consolidating the existing power geometry in the settlement, despite their triggering smaller social consistencies. In Parts I and II the infrastructure was undertaken by the two dominant CBOs, which contributes to their standing in the community as functional, if not corrupt organizations. In Parts III and III Backside, the congealing of consistencies to procure such infrastructure had a different result. The formation of smaller CBOs towards procuring these services could have resulted in various political forces that would theoretically stem the domination of one particular CBO. However, because these systems are passive, in the sense that they do not require regular centralized management, interest in these CBOs waned and eventually dissipated. The wife of the president of the CBO that built sewers from Gully 4 to Gully 11 explains this as such (Interview, 11/20/09):

At the time, people had no money and no basic services. They had to come together to get things. Now they have the basic necessities and there is too much political interference. Now no one is interested in doing this kind of social work. [Rathod] has taken over the control of society here.

7.2.3 Solid waste management

Solid waste management originally manifested in dumping garbage onto alleys and beneath hutments to build up the land, and in newer parts of the settlement this continues to be the case (Figure 7.4). Later, residents would throw their garbage onto Navy Nagar, until the military compound erected a tall fence to prevent such behaviour. Currently, organized solid waste management is funded by the municipal government, which pays local CBOs to collect waste off the alleys. The HDWA, Seva Sang and a branch of the Manav Seva Sameti, called the Soniya Mahila Mandel, all have contracts with the city. However, from the large amounts of refuse throughout the settlement, it is clear that these duties are not adequately performed (Figure 7.5). There is little, if any enforcement of the municipal schemes, and this results in refuse-filled alleys that attract rodents, all of which leads to serious implications for health and safety. As one resident (Interview, resident of Ganesh Murthy, 12/21/09) says: “Garbage is a real problem right now. So much garbage has caused 1000 cases of typhoid, and malaria is on the increase because of it too. The BMC gives Soniya Mahila Mandel 40,000 a month to remove waste, but they don’t do anything.” Funds directed to the settlement’s CBOs under programs designed to remove waste have little impact on the built environment and instead function to solidify the position of CBOs through increased revenues.



Figure 7.4 Build of refuse and debris under a hutment
Credit: Author



Figure 7.5 Refuse spread throughout the helipad area
Credit: Author

7.2.4 Toilets

Toilet blocks are important components of the settlement assemblage that contribute to the evolving power geometry because they provide an essential service to residents that can be withheld. Despite a substantive literature on sanitation in India (Bapat and Agarwal, 2003; Burra et al, 2003; Chaplin, 1999; Hobson, 2000;), there is little research existing on sanitation in Mumbai in general, and sanitation schemes for slums in particular. This section thus contributes to a necessary discussion of slum sanitation in the city and newer research being done (Sharma and Bhide, 2005; McFarlane, 2008) on the effects of the World Bank's Slum Sanitation Programme, which commenced in 1997. The following section sets the context for slum sanitation policy in Mumbai (7.2.4.1), investigates the toilet blocks in the settlement (7.2.4.2), and discusses the role of the NGO SPARC as a component of settlement assemblages (7.2.4.3).

7.2.4.1 Context

Sanitation services in the settlement are ranked as the second largest problem facing residents, with 31.5 percent of survey respondents identifying access and quality of toilets as problematic. Sanitation services at Ganesh Murthy, like the majority of slums in Mumbai, are insufficient and improperly managed. Many settlements in the city lack systems to remove solid waste, rainwater, water used for cleaning, and human excrement, which all contribute to health and environmental problems; although the latter is particularly dangerous (McFarlane, 2008; Swaminithan, 2003). 63 percent of slum dwellers in the city, or 3.92 million people, are reliant on public toilets, largely in the form of toilet blocks. For these slum dwellers, there is an average of 81 people to 1 toilet, which is above the targeted rate of 50 people per toilet, but variation in this ratio ranged from 273 to 1 and 56 to 1 (MW-YUVA, 2001). Of the public toilets available, many are in poor working order, poorly maintained, over used, overpriced, or simply locked. Of the 37 percent of slum dwellers without access to public toilets, only 9 percent had private toilets, while the others had to make use of open spaces (BMC, 2000 as quoted in Sharma and Bhide, 2005).

From 1970 onwards, toilet blocks were supplied to slums in Mumbai on an ad hoc basis and paid for through funds delivered by local politicians working at various levels of government. Thus, toilet block creation was supply-driven and largely related to the patron-client dynamics of vote bank politics. In 1997, however, the World Bank, together with the State of Maharashtra, and the MCGM, embarked on the Slum Sanitation Project (SSP), which introduced a new paradigm for sanitary service delivery by changing the stakeholders involved and thus reconfiguring the relationship between the State and slums. The main trajectories of this new paradigm are community mobilization, participation, inclusion of the private sector, and cost recovery mechanisms. Increasingly, multilateral agencies like the UN and the World Bank advocate that local residents become partners in multi-stakeholder sanitation projects to create a sense of ownership and support structures for the facilities (UN Millennium Report, 2005; UN Habitat, 2003). Local community participation is deemed necessary where, “the state machinery in countries like India is considered to be highly corrupt, non-accountable, inefficient, manipulative, non-participatory, and anti-poor” (Sharma and Bhide, 2005: 1785). Thus, community participation is a prerequisite of the SSP (World Bank, 2003), and is intended to further grassroots democracy, empower communities, and improve health-related knowledge. The participatory component is largely manifested in the enrolment of local CBOs that apply for toilet blocks, rather than their being supplied in an ad hoc basis. Members of the CBO pay an initial fee to help offset the cost of construction up to 15 percent, and further pay a monthly fee into a corpus fund, which the CBO uses to maintain the toilet blocks. Because residents have a stake in the project, it is assumed they would provide better maintenance than the State could.

Further changing the stakeholders in the provision of sanitary services under the SSP is the exclusion of local politicians, who are theoretically not involved in the process, and the replacing of State agencies as general contractors with private contractors. To this extent, three contractors were chosen for the SSP: two engineering firms, Babul Uttamchand and B Narayan Associates, that respectively received 18 and 13 percent of work orders, and an NGO called SPARC, which won 69 percent of work orders. SPARC was the first NGO in Mumbai to be awarded construction contracts in the city and the amount of work it received was the largest granted to an NGO in India (McFarlane, 2008).

SPARC won the majority of SSP contracts for several reasons. Firstly, its bid was INR 10 million less than its competitors (Patel and Mitlin, 2004). Secondly, it has extensive contacts with the State and with the World Bank. Finally, because the NGO is allied with two CBOs, the National Slum Dwellers Association, and Mahila Milan, it is involved in a number of local community projects and thus has a large slum dweller constituency. The connection to this constituency is deemed an important component of the NGO that would speed up the process and lead to greater participation of local communities (McFarlane, 2008). Further, the inclusion of the NGO, as a representative of civil society, adds depth to the participatory approach (Sharma and Bhide, 2005).

7.2.4.2 Toilet blocks in Ganesh Murthy

In Ganesh Murthy there are four toilet blocks (Figure 5.16) with a combined total of 106 seats (including five for children), for 10,500 people, which is a ratio of 1 to 99. The most basic toilet block in the settlement is located at its entrance along Prakash Pethe Marg (Figure 7.6). Built by the MCGM in 1990, it consists of two buildings, one for men with 10 seats a wall to urinate on, and one for women with 10 seats. There is no water connection so residents bring small containers with them when necessary. The toilets are connected to the municipal sewer system that runs underneath Prakash Pethe Marg. There is little maintenance required of this basic system, which is occasionally performed by MCGM personnel, so despite lacking in cleanliness it remains largely functional and open to whom ever needs access.

The second block of toilets, located in Part II is no more elaborate than the first, but does feature a water service. This block was built in 1993 by MHADA and has nine seats for women, 18 seats for men, and two urinals. The same family has been in charge of maintenance since the toilet's inception and is paid INR 2000 a month by the Seva Sangh, who collects a monthly fee from residents of Part II for its maintenance and the sweeping of alleys (Interview, resident of Ganesh Murthy, 12/9/09). The family makes additional revenue by charging INR 1 for water to be used at the toilet block, which is purchased from the private water distributor. The Seva Sangh allegedly receives money from MHADA and Municipal Councillors to maintain the toilet block, but the funds accrue to committee

members that do not invest in needed renovations (Interview, resident of Ganesh Murthy Nagar, 25/10/09).



Figure 7.6 Toilet stall in Part I toilet block
Credit: Author

The other two toilet blocks are located in Part III and Part III Backside and were built in 2001 as part of the SSP, with SPARC acting as the general contractor. Two CBOs, Jijamata Mahila Mandal and Soniya Mahila Mandel were selected by SPARC to manage the toilets, and as part of the program, the CBOs collected INR 200 from member hutments to contribute to the construction. The resulting toilet blocks are much more elaborate than the other two in the settlement. They are both two stories tall, tiled, have toilets for children, and have access to the municipal water supply (Figure 7.7). One has 16 seats for both men and women, seven urinals, and three children's toilets, and the other has twelve seats for men, ten for women, 2 for children, and five urinals. However, the participatory components of the program have not yielded the results expected such as sense of ownership, support, or better functioning toilet blocks, let alone increases in health-related knowledge, or some sense of grassroots democracy. If anything, the toilet blocks have undermined a sense of democracy's potential and contribute to the consolidation of the existing power geometry.



Figure 7.7 Toilet block in Part III
Credit: Author

Contributing to this dynamic is the unjust distribution of toilet passes. Resident-members of the CBOs that contributed INR 200 to offset the initial construction of the toilets have not received passes to use the toilet blocks as planned, and thus have to pay non-member fees such as INR 1 to use the facilities and a similar charge for the use of water (Interview, resident of Ganesh Murthy Nagar, 12/21/09). Even children must pay to use the facilities, resulting in substantial aggregate fees for families. Only thirty passes have been issued to the two toilet blocks and all were given to residents that are directly linked to the administration of the CBOs (Shetty, 2005). Additionally, water is allegedly siphoned from the municipal supply line and sold to residents for domestic usage rather than reserved for use in the toilets, which can lead to a lack of water for this purpose (Interview, resident of Ganesh Murthy, 4/12/09). Because contributors were not given passes and because the management of toilet blocks is oriented towards earning revenue rather than servicing members, there is no sense of ownership of these toilets; rather residents feel their money was stolen. As one resident put it, “SPARC should run it. Why did they let the CBO run it? They are wasting our money and should do something about it. When they run out of water, they just lock the door” (Interview, resident of Ganesh Murthy Nagar, 12/21/09).

The two CBOs have subcontracted the management of the toilet blocks to private contractors, which is not abnormal within the rubric of the SSP (McFarlane, 2008). However, these private contractors limit resident’s access to the service and fail to adequately upkeep the facilities. The toilets are only open from 8am to 6 pm and several times I visited the toilet block in Part III, it was locked. Children’s toilet seats in both toilet blocks are dysfunctional, and in one of the blocks the children’s booths had been turned into storage closets. Further, several individual adult toilets were out of order and drainage problems were observed. The level of sanitation in the facilities is questionable at best, and it is readily apparent that they are not cleaned daily. For this level of service the private contractors derive INR 2000 daily revenue from each toilet block (Shetty, 2005), while the CBOs earn INR 20,000 a month from renting out the facilities (Interview, former president MSS, 9/12/09). Thus, instead of yielding a more knowledgeable, coherent, and empowered community, the SSP toilet blocks have resulted in social disenfranchisement and friction between normal residents and members of the CBOs.

In an article about the SSP, Sharma and Bhide (2005: 1785) note that: “The inherent assumption here has been that the NGOs and the CBOs to be involved in the SSP were accountable, non-corrupt, and pro-people.” In the case of Ganesh Murthy Nagar this was a faulty assumption. The Special Advisor to SPARC, in charge of the SSP for the NGO, recalled during an interview that former Municipal Councillor Rathod approached him early on in the SSP process (Interview, Special Advisor, 26/10/09). Rathod was intent on forwarding the names of certain CBOs at Ganesh Murthy to manage the toilet blocks, however, the Special Advisor, having heard of Rathod’s questionable reputation, apparently steered the contracts away from the CBOs he put forward. Not to be excluded from the project, Rathod facilitated the formation of two new CBOs, the Jijamata Mahila Mandal and Soniya Mahila Mandel, that competed with other CBOs to win the management contract. Allegedly, the president of the other CBO’s were paid by Rathod to withdraw from contest, which ultimately went to the Jijamata Mahila Mandal and Soniya Mahila Mandel (Interview, Officer of the MCGM, 01/05/10). The toilets are now locally referred to as “Rathod’s toilets.” Thus, even though the SPARC administrators were conversant with the power geometry in the settlement to a certain degree, the NGO was still unable to successfully negotiate a fitting local administrator, which crippled the participatory goals of the project before they even had a chance to succeed. Instead, the toilet blocks are used to derive revenue, and in light of the actions of the Manav Seva Sameti as related in the previous chapter, are likely used as a mechanism of control over residents.

Sanitation facilities are substantial assets in the settlement assemblage, and the more developed and elaborate they are the more they become targets for capture because of the potential revenue and power that may be derived from them. The limited services in the Part I toilet have not led to its capture and manipulation by local parties, although the continuing power struggle between committee members and the Singh family may contribute to this. The toilet in Part II, which is slightly larger, is more directly under the control of the Seva Sangh, whose administrators may derive income from municipal funds for its maintenance. Nevertheless, these two toilet blocks remain free to use by all. The two World Bank toilets, in contrast, were captured upon their inception due to the potential to derive money and power. More toilet seats translates to more potential income, and the water supplied by the city is a valuable scarce resource in the settlement from which the

toilet block administrative apparatus profits from in various ways. Perhaps if the toilet blocks were smaller, less elaborate, or offered less services (i.e. water) they would not have been an attractive target for capture. At least, the local manifestation of SSP toilets should be more flexible and tailored to the specific needs and conditions of particular communities. In the case of Ganesh Murthy, the president of an outside verification agency, employed indirectly by the World Bank to assess the work done at Ganesh Murthy suggests that individual toilets in private hutments would have been a better solution (Interview, President of CRIT, 16/12/09). As McFarlane (2008: 13) says of toilet blocks being the only option put forward by the SSP: “This inflexibility is remarkable when we consider claims that the SSP is ‘demand driven.’”

7.2.4.3 The NGO as a component in the slum assemblage

The construction of SSP toilet blocks introduces a new actor into the settlement assemblage: the NGO SPARC. SPARC’s performance in the SSP has drawn criticism for a number of reasons including their overreach into the realm of construction, their inability to mobilize residents, and their sacrificing of radical politics for the agendas of realpolitik, amongst others (McFarlane, 2008; Sharma and Bhide, 2005). However, the point I would like to make here concerns their continuing influence over slum dwellers through the SSP. In slums where SPARC and its partners in the Alliance, the NSDF and Mahila Milan, had strong connections with local slum dwellers the handover of toilet blocks to local community groups appears to have gone smoothly. Further, in some cases where local connections were lacking, as at Ganesh Murthy, SPARC did succeed in transferring power over the toilet blocks to strong (albeit corrupt) local CBOs, which thereafter limited their ongoing contact with the settlement. However, this was not the case for many settlements impacted by the SSP under SPARC (Interview, president of CRIT, 16/12/09). In some cases no adequate CBO could be found so SPARC personnel manage the toilet blocks. In other cases, CBOs are registered but their administration is alleged to be in name only, and it is SPARC that is the de facto administrator. Thus, instead of producing a solid local community-based structure that can administer the new toilet blocks, some communities have come to rely on SPARC. The toilets may thereby become an unintentional control point for the NGO that nonetheless helps to maintain the alignment of their constituency base.

This base is an important component of the NGO in the current developmental landscape in Mumbai. Through the World Bank's SSP and other interventions in the city (e.g. Mumbai Urban Transportation Project, Mumbai Urban Infrastructure Project) the relationship between NGOs and the State has gone from adversarial to one of partnership. Instead of NGOs fighting the State to help slum dwellers procure infrastructure, some NGOs, like SPARC, have become small businesses that win contracts from the State to implement infrastructural projects. Unlike private contractors, however, SPARC uses alternative mechanisms of delivery that redistribute revenue and work back into the community. For example, SPARC set up a non-profit construction company, called SPARC Samudaya Nirman Sahayak that contributes profits to the Alliance and gives 30 percent of project work to qualified members of the community (SPARC, 2011: <http://www.sparcindia.org/housing.aspx>, accessed 10/10/11).

As an entrepreneurial contractor, SPARC establishes connections and maintains a presence with the central State planning apparatus, not only to leverage subsidies from the State for public projects and to procure work. In this role, a large and potentially vocal constituency is decidedly an asset. As the president of CRIT says of the new NGO paradigm, "you need a base network to get jobs; needy citizens who will gather and shout for them [SPARC] to help them get things like toilet blocks." Further, when pitching for a project it is better to be a stakeholder rather than merely an individual actor, like an engineering firm. A constituency base provides this position as a stakeholder in a developmental landscape oriented towards participation, and contributed to SPARC's successful SSP bid. Thus, SPARC's extended role under the SSP may unintentionally transfer slum dweller dependency from political actors to civil society actors. This emergent dependency is then translated into enrolment of slum dwellers, which facilitates SPARC's expanding presence in the city's governance regime.

7.3 Social work CBOs

7.3.1 Mechanisms to access civil services

CBOs that are organized to administer infrastructure and municipal services are but one kind of CBO that operates in the settlement assemblage. Another prolific type of CBO exists to facilitate forms of civic services or "social work" as it is known in the settlement.

This type of CBO may arise in a number of ways. Several CBOs that were assembled to procure infrastructure, but have become obsolete due to the passive nature of the infrastructure (such as alley paving or drainage systems), have become social work CBOs. Similarly, infrastructure CBOs that were replaced by other CBOs may also continue their existence under a different rubric. Existing infrastructure CBOs may also manage social work CBOs, and the Seva Sangh, Mahila Pragati Sameti and Mahila Seva Samiti all operate social work CBOs. Finally, individuals may initiate this type of CBO for a number of reasons.

The ostensible need for social work CBOs derives from slum dwellers' difficulties in accessing social services. Slum dwellers that may be mired in poverty and who do not have access to robust social networks may experience economic, social, political, and cultural exclusion (Gareau and Sclar, 2004), which leaves them unable to access basic necessities. Such necessities in Ganesh Murthy often include getting a doctor's appointment, being seen at a hospital, intervening with school authorities or the police, arranging and paying for a marriage or funeral, navigating the State bureaucracy to obtain a ration card or other service, or diminishing tensions that may arise between neighbours living in close quarters. The need for such services has triggered the formation of many registered and non-registered CBOs in the settlement, which are oriented towards facilitating these kinds of actions. Generally, CBOs of this variety are built around one or several people's spoken and written language skills, access to funds, connections or *touch* with relevant authorities, and a certain amount of moxi to intervene and accomplish something. Generally, the people I encountered that run social work CBOs were successful in their chosen domains, educated in verbal and written communication skills, and had a degree of confidence necessary to establish new connections and demand action.

As mentioned above, social work CBOs are operated by members of infrastructural CBOs, which may make demands on the State in parallel with their infrastructural counterparts, as described last chapter. Conversely, social work CBOs may morph into infrastructure-oriented CBOs. For example, the president of the Manav Seva Samiti started a *balwadi*, or day-care service, when she first moved to Ganesh Murthy. She would ask her clients about any difficulties they were experiencing and became a local trouble-shooter. From the

connections established at the day care together with her ability to negotiate solutions, she registered a CBO, which was eventually enrolled in the Manav Seva Sameti in the late 1990s to mobilize support of a new water connection for Part III.

Currently, there are many CBOs emerging in the settlement under the auspices of providing social work, but which in fact are used for other purposes. During several days spent investigating new CBOs through informal conversations, I encountered several people that had started new organizations. There was an organizer of an incipient CBO that “would be made in one to two weeks” (Interview, resident of Ganesh Murthy Nagar, 01/03/10). He had apparently assembled 500 hutments in Gully 1, 2 and 3 (in Part III), to procure water, toilets, and road cleaning. He was well aware that it would be difficult to get a water connection, and expected the Manav Seva Sameti to fight them and “shut our water down.” Another CBO had started up two to three months ago in Gully 4 with 39 members for “general welfare, infrastructure, repave the alley” (Interview, resident of Ganesh Murthy Nagar, 01/03/12). Another resident said: “Every alley has a society now. Before there was no committee, when we went to a nearby gully committee they had no power because we were not members. So we decided to make our own society” (Interview, resident of Ganesh Murthy Nagar, 01/03/09). In fact, the informal survey I conducted on new CBOs demonstrated that there is at least two CBOs per alley in Part III, and the proliferation of start-up organizations represents an important development currently taking place in the settlement. Informants reviewing the informal survey of new CBOs indicated that many CBOs were emerging to assemble *powertoni* to sell signatures to real estate developers intent on developing the settlement. This is an important trajectory that is reconfiguring power relations in the settlement, and will be explored in depth in the next chapter.

Social work CBOs are important components of the settlement assemblage as they provide mechanisms for otherwise disenfranchised residents to procure services they would not otherwise have access to. However, they may also become important tools to accumulate power. A resident may come to rely on the CBO to provide social services and thus a relationship of dependence is established. Alternatively, the CBO may provide a much-needed service, for which the resident feels indebted. One resident I interviewed said he was forever indebted to the president of the Singh family’s social work CBO, and thereafter

would do whatever the president asked him to do. The resident had been ejected from high school and the president of the social work CBO registered him in a different school board. A little bribery was needed to convince the principal of the school, but the financial investment on the part of the president pays off in the fidelity she receives from the resident (Interview, resident of Ganesh Murthy, 11/11/09). These relationships are then leveraged as needed. For example social work CBOs attached to water CBOs leverage relationships beyond controlling access to water, making it more difficult for the resident to report unjust behaviour. Another example is the leveraging of relationships between young adults and the Singh CBO in the family's on going dispute with members of the Part I committee, when the time comes for physical fighting.

7.3.2 Community management role of women in the settlement

A noteworthy aspect of social work CBOs is that, to the extent of my research, the vast majority are run by women, which points to a gendered dimension of social networks in the settlement. Gender-oriented studies of slum dwellers in Mumbai are increasing (see for example Saigal, 2008 or Sen, 2006; 2007). However, the various roles women play in the functioning of Mumbai's slums, which entails different needs and different planning interventions (Moser 1989; Moser and Peake, 1987), and the motivations underlying their behaviour continues to be understudied and ill-accounted for in planning decisions. This section then serves as an indication of where further research may be oriented towards crafting appropriate planning interventions that take account of the important role women play in Mumbai's slums.

Various scholars (Saigal, 2008; Roy 2005; Foster, 1999) have demonstrated that women, whose roles are traditionally tied to the domestic sphere, are excluded from full participation and status in political, civil, and social strata. Women's struggle for inclusion in politics as full citizens is often contested and their incorporation in public life is inherently different from men due to their sexual embodiment as women (Pateman, 1989). Feminist scholars (Yuval Davis, 1999; Anthias and Yuval Davis, 1989) argue that the notion of citizenship needs to be extended beyond the nation state, which is normatively associated with the masculine and the public domain (Saigal, 2008). Citizenship should, these scholars argue, include multiple layers of collectivities including family, ethnic

groupings, trade unions, state, and supranational groupings for example, to properly understand the political roles women engage in. Still other scholars argue that community-based action should also be considered as “acts of citizenship” (Mirza and Reay, 2000; Naples, 1998). However, as Lister (1998) argues citizenship in this capacity must exceed self interest and depends on the identification with a wider collectivity to achieve common ends. Supporting a broader conception of politics beyond the formal public sphere, Morgen and Bookman (1998: 4, as quoted in Saigal, 2008: 74) define political activity as “activities that are carried on in the daily lives of ordinary people and are enmeshed in the social institutions and political-economic processes of their society. When there is an attempt to change the social and economic institutions that embody the basic power relations in... society—that is politics.”

Addressing the paucity of research into women’s lived experience as community-based actors, Saigal (2008) adopts this framework for understanding political activity and citizenship in the context of women’s roles as teachers in a Mumbai slum. The author (2008: 74-75) concludes that her research subjects do indeed engage in political action by working towards “the collective agenda of educational inclusion of marginalized children.” Women teachers running *balwadis* interpreted their role as community caregivers grounded in interpersonal relationships with a desire to socially advance the disadvantaged. The idea of singularly altruistic motivations of teachers running *balwadis*, however, is challenged by findings at Ganesh Murthy, which suggest a more self-interested, if not less political, motivation. I interviewed two women that run *balwadis* at Ganesh Murthy, and they communicated to me similar motivations grounded in a desire to help those less fortunate than themselves (Interview 11/08/09 and 12/03/09). Their words, however, are tempered by additional research into the multiple connections between the *balwadis* and various other social consistencies. As mentioned previously, the leader of the Manav Seva Samiti runs a *balwadi*, and this platform for assembling associations with other people was parlayed into the creation of a CBO, which later led to her becoming the president of the largest municipal water network in the settlement. Day cares, by their inherent assembling of local people and their trust, provide a venue to establish strong connections, which may then be parlayed into other associations. To cite another example, a member of the Singh family operates a day-care from her house, and when she encounters parents with difficulties she

sends them to her sister who runs a social work CBO. Thus, at Ganesh Murthy, these modes of citizenship, performed under the rubric of community development, are exposed as concurrently serving the interests of associated organizations, thus helping to enrol more people and consolidate the power of the networks. This is certainly political action as it impinges on the local power structure, but it is not remotely akin to notions of citizenship advanced by Lister (1998).

Running a *balwadi* or social CBO are venues through which women may come to participate in the political landscape of the settlement, where gender roles are otherwise circumscribed by traditional morays. In general, it is observed that the father figure of resident families is responsible for earning income. The mother figure generally tended to domestic duties and child rearing. As a group of women explained to me: “Men provide food, a house, and work. Women have to take care of everything else (Interview, residents of Ganesh Murthy, 12/23/09).

This has several observable effects. Men are largely absent from the settlement during the day as 92 percent of residents are employed outside the settlement. Thus, women spend more time in the settlement, and as they are charged with domestic duties, such as collecting water, cleaning drains in front of their hutments, purchasing food and other activities, they have more occasions to meet and talk with other women, which may lead to the formation of social consistencies. Further, because women’s duties concern hutment management and child rearing, there is motivation to address inequitable, unfair, or non-existent services.

As a result of this dynamic, women may play a larger role than men in the settlement’s social meshwork. For example, a group of women asserts that there were 20 key female figures that played leading roles in developing Part III (Interview, residents of Ganesh Murthy, 12/23/09). Presently, the presidents of the Mahila Pragati Sameti and the Manav Seva Samiti are both women, as are the 80 employees employed by these networks. As described last chapter, there may be underlying reasons, beyond logistical concerns, why women occupy these positions. Their embodiment as women, may work to a degree to safeguard them from physical abuses doled out by authorities.

A female social meshwork may also facilitate networks of communication. A long standing dispute between male members of the Singh family and the private water distributor's family was apparently intensifying, when female members of the families intervened. The mothers and wives of the two family patriarchs met to discuss ways to resolve the conflict, which they ultimately did, thus avoiding continued conflict and physical violence. Yet, it should be understood that women do not only play a passive or secondary role, acting on behalf of male actors as in the case of the water-tap distributors and presidency of the Manav Seva Samiti, or alongside male actors as the case of the disputing families suggests.

A case in point is the Mahila Pragati Sameti water distribution network. This CBO is run by two women that have built up extensive wealth and power in the settlement seemingly without the help of men. The vice president is unmarried and apparently owns over 100 hutments in the settlement, from which she derives revenue from rent. Unfortunately, she was not willing to be interviewed for this research. The president of the CBO, roughly 60 years old, migrated to Mumbai from Bangalore some time in the 1970s and became a cadre in the Shiv Sena political party, from where she probably learned tactics including the use of violence and physical force. As Atrayee Sen (2006; 2007) demonstrates, several economically poor female slum dwellers in the 1980s joined the Shiv Sena and learned to use violent collective action to gain control and power over a range of important factors in their lives. This was apparent in the last chapter through the water department archives, which reported over 100 women associated with the Mahila Pragati Sameti having organized to disrupt regulators and police. I was also witness to two instances where the employees and administrators of the Mahila Pragati Sameti organized to disrupt an eviction and demolition in one instance, and a physical fight between the leader of the CBO and a leader of another CBO as the former defended new infrastructure that had been added to her network. The tactics of aggression, physicality, and violence, which were possibly learned from her days in the Shiv Sena have benefited the president as she sought to fight, and continues to fight Rathod and a host of other competing actors to maintain her power in the settlement.

This rather sprawling section is not meant to be representative of the role women play in community management at Ganesh Murthy. Indeed, this was and is not the point of the

research. Rather, in identifying and unravelling some of the social consistencies operating in the settlement, a gendered dimension became apparent and this section examines this to the extent of the empirical data available. The section demonstrates that women's roles are both diverse and significant. The role of women and gendered networks may constitute an important trajectory for further research into creating appropriate planning interventions into Mumbai's slums.

7.4 Muscle gangs

7.4.1 Context

To write a chapter about important components that contribute to the functioning of Ganesh Murthy Nagar it would be inaccurate to omit the various muscle gangs that operate in the settlement. Gangs have long existed in cities; however, the proliferation of these groups in connection with the increase of squatter settlements has led to the investigation of these phenomena beyond their traditional domain of study in the field of criminology to include other branches in sociology (Weinstein, 2008), history (Davis, 2006) and geography (Hagedorn, 2008). The proliferation of gangs throughout the world is associated with increased patterns of urban migration, immigration, economic and social marginalization, and weakened states (Hagedorn, 2008). Gangs that emerge from this social, political, spatial and economic morass are frequently understood as the manifestation of expressions of alienation and nihilism. At Ganesh Murthy, however, gangs have emerged to fill a regulatory and enforcement vacuum in the settlement, by maintaining a visible presence, using surveillance techniques, and physically enforcing the unilateral terms set by water CBOs.

There is little if any consensus as to what exactly constitutes a gang and further definitional problems arise in differentiating between gangs, mobs, mafia and organized crime groups (Esbensen et al., 2001; Ball and Curry, 1995). Generally, distinctions are based on age and the degree to which associations between actors are formalized. Beyond the definitional problems surrounding the term 'gang' that derive from logical forms of identity (as explored in Ball and Curry, 2001), is the observation that gangs are not stable entities. As Hagedorn (2008: xxv) says: "Today's youth gang might become a drug posse tomorrow or, in some places, even transform into an ethnic militia or a vigilante group the next day." The

transformative power of gangs is also noted by Ball and Curry (2001: 240) who define gangs as “integrated but mutable” and comprising “adaptive mechanisms for dealing with other significant social systems in its environment.” As associations between a gang and other entities grows, so does the potential for entrepreneurial behaviour, and these loosely connected entities may be flexible enough to change and follow a new trajectory; they are not “stable, clearly defined entities” (Hagedorn, 2008: xxv). The mutability of gangs not only creates definitional problems but points towards a creative adaptability.

7.4.2 Gangs in Ganesh Murthy

There are currently five gangs operating in the settlement, and the most elaborate and powerful of these has its origins in a time and place outside of Ganesh Murthy Nagar. Before it was destroyed in the mid to late 1970s a squatter settlement named Dandy (located in Navy Nagar) was home to five percent of Ganesh Murthy’s current residents. There, two friends allegedly operated an illicit smuggling ring that brought items into the country through the naval base. With the 1949 Bombay Prohibition Act and import barriers placed on gold, electronics goods, and luxury items in the 1960s, illicit marketplaces emerged in the city to address desires for these products, and the two friends worked with a larger mafia network to supply goods to the market. The two friends, with reputations as good fighters, thus accumulated money and status in Dandy, which they brought with them to Ganesh Murthy when Dandy was destroyed by Naval authorities. The friends had married sisters of the Singh family in Dandy, who also moved to Ganesh Murthy along with two other sisters, a brother, their parents, and their uncle’s family. It is likely the two friend’s smuggling activities continued at Ganesh Murthy. Apurtham Jockin, the founder of the National Slum Dwellers Federation, identified Ganesh Murthy as a gateway for illegal items smuggled into India via Navy Nagar in the late 1970s and 1980s (Interview, 2/17/08). Corroborating this information is an informant’s account of a Ganesh Murthy hutment, rented out by one of the two friends, in the 1980s that was raided by police who found “*crores* worth of drugs, guns, and money. [The owner] knew what they were doing. They were part of his connections from the old days”³⁰ (Interview, resident of Ganesh Murthy Nagar, 12/18/09).

³⁰ A crore is equal to 10,000,000

In Ganesh Murthy Nagar the Singh family proved prolific and now counts over fifty members living in Parts I and II. Shortly after arriving in the settlement three of the family members joined the Part I HDWA committee, but were later allegedly expelled for stealing committee funds (Interview, resident of Ganesh Murthy Nagar, 11/15/09). One of the sisters that had been on the committee then created a social work CBO with over 200 members. Known as “the don”, she is a local authority figure in the settlement that is often called upon to settle disputes. Her husband, one of the original friends from Dandy, was allegedly murdered in a police *encounter* in the 1980s.³¹ The Don’s brother-in-law, the original friend from Dandy, sits on the Seva Sangh committee and is the highest-ranking member after the Secretary. He and his wife (who operates a day-care) sired a son named Pradeep³², who joined a young gang operating in the settlement during the 1980s.

The 1980s were a period of elevated violence in Mumbai. By then, small gangs that often originated in slums had congealed into organized mafia groups engaging in illegal smuggling activities (Weinstein, 2008). These groups fought with each other for control over territory and goods. Inflaming this dynamic was the right wing, Hindu-oriented Shiv Sena political party that adopted a strategy to re-territorialize the political orientation of Mumbai’s squatter settlements. This was done by creating associations with local *goondas*³³ in squatter settlements that would intimidate and violently coerce support from local residents (Lele, 1995; Hansen 2001).

One of these *goondas*, associated with the Shiv Sena, lives in Ganesh Murthy Nagar, and had enrolled Pradeep into his gang in the late 1980s. The gang then consisted of the *goonda* and his brother, and another set of brothers that were connected to the former by marriage. With impunity derived through their associations with the Shiv Sena, the gang would allegedly eve-tease, rape, and cut residents on their way to fetch water at the spring located along the road to Geeta Nagar. They would also steal items from homes and resell them to

³¹ To stem the tide of growing gang violence in the 1980s the police came to rely on “the encounter”, which is essentially the murder of a suspected criminal by the police, without due legal process. According to Mehta (2005), encounters were often sanctioned by the police hierarchy and could be manipulated from outside groups like gangs that had nurtured powerful connections within the police hierarchy. Under the regime of the encounter suspected criminals were murdered and this created an attractor that diminished criminal activity in the city (Interview with police officer, 01/04/10).

³² Pradeep’s name has been changed to protect his identity.

³³ *Goonda* mean thug

make money. Owners of stores and retail stalls located on the main commercial street were forced to pay protection money to the brothers and those that did not pay would be roughed up and reported to the authorities under false pretences. It was in this context that Pradeep learned to fight and exert physical intimidation for money and power, which he then parlayed into his own gang.

Pradeep's new gang operated in proximity to his hutment and engaged in eve teasing and demanded protection money from residents and businesses. In these endeavours Pradeep was encouraged by his father, a former fighter with connections to larger mafia groups, and his aunt (the don), who recognized the power that accrued to those able and willing to exert physical force in negotiations. These family members motivated the larger family network to financially support Pradeep and his family while maintaining his violent activities and increasing his influence in the settlement. The family also contributed to the success of the gang by providing influence at the Colaba police station through an uncle stationed there. Further, younger members of the family in their teens and twenties work for the gang in various ways such as performing errands, attending to daily tasks, and fighting when necessary; although fighting is now mostly done by non-family members.

The family's war machine has been used repeatedly to engage and escalate conflicts. The gang was a force used against the private water merchants operating in the settlement. Pradeep allegedly sought to collect funds from the water merchant but the enterprise was vigorously defended by their own gang, led by a family member with a vicious reputation for not hesitating to fight with weapons. The tensions between these two parties were eased by the intervention of mothers and wives, who negotiated a peace as discussed earlier. Pradeep's gang also engages the Part I committee in the form of threatening their supporters and upsetting the workflow of the territory's civic services. In response, the Part I committee recruited two brothers in the territory to defend the committee, who now operate their own gang with about 35 members. The two factions go through cycles of elevated tensions, which have resulted in large fights. In November 2009, for example, I experienced one of these fights during a celebration of one of the Singh family's children. A member of the Part I gang attended the celebration, which took place in an alley of the settlement, but he brought with him a guest who was not at welcome. As tensions escalated

a member of the Part I gang called in 15 reinforcements, one of whom was hit over the head with a bottle by Pradeep's gang. A general melee ensued while the person that was stuck by the bottle went to the police station to file a First Information Report (FIR), against his aggressors. However, four hours after arriving at the station, no one would take his information. An informant reported that the police came under Pradeep's influence for INR 100,000 and told me "you can't have any power without touch" (Interview, resident of Ganesh Murthy, 11/15/09).

While the tensions between the Singh family and the Part I committee continue, Pradeep's gang have created other associations. There is some evidence to suggest that the gang was involved in Rathod's attempts to secure water distribution in Part III in the late 1990s, through alleged connections between the MMS and the social work CBO run by Pradeep's aunt (Interview, resident of Ganesh Murthy, 17/11/09). Currently, however, the gang is aligned against the MMS through connections with the Seva Sangh and the Mahila Pragati Sameti. The gang, which is composed of some 100 members, is employed by these two water networks to intimidate and abuse customers that protest the unjust conditions of water service delivery.

The gang's enforcement of the water CBOs unilateral terms regulating water access compliments other techniques they use to maintain power in the settlement. The gang is reputed to have informants all over the settlement, and I encountered this force early on in my fieldwork while I was conducting the socioeconomic survey. I noticed that I was being followed by a couple of young kids – maybe seven years old. When I confronted them, they told me that Pradeep had asked them to keep an eye on me. Pradeep maintains this surveillance apparatus partly through a cricket league he runs in the settlement, where every week on Saturday eight teams composed of Ganesh Murthy's youth play cricket on a pitch in Navy Nagar. The cricket matches provide a mechanism to maintain a more legitimate and less threatening group identity, works to consolidate his influence over adolescents, and also attracts children into the fold. Contributing to a sense of surveillance are tactics of presence and visibility. The gang seemingly does not waste an opportunity to demonstrate their presence through large gatherings that are held outside Pradeep's hutment every fortnight or so. The hutment is located along one of the main transportation corridors of the

settlement, so these large gatherings, which include loud music and often alcohol, provide an arena to demonstrate not only the gang's visibility and presence in the settlement, but also a sense of wealth, and thus power.

Beyond their associations in the settlement, Pradeep's gang is also allegedly part of the largest criminal ring operating in Colaba, together with two other groups in Ambedkar Nagar. Pradeep is responsible for distributing and re-selling the stolen items. The gang also acquires significant revenue from their associations with various real estate developers that are intent on redeveloping Ganesh Murthy Nagar. Under the Slum Rehabilitation Scheme (SRA), the current policy in force to redevelop slums in the city, a developer must acquire the signatures of 70 percent of the settlement, or 70 percent of a pocket in the settlement, to give their permission for future development. Theoretically, residents should come together themselves and decide to redevelop their settlement, and then approach a developer. However, at Ganesh Murthy, developers approach CBOs and gangs to collect signatures for them, for which they pay hundreds of thousands of rupees. Pradeep's gang has been so employed for several years, and have become adept at producing signatures. The gang regularly forges documents and provides false thumbprints for their "validation," with members using their toes so that anyone looking close enough would not notice the same thumbprint being used over and over again. Intervening more directly in resident's lives, gang members ostracize those that do not sign by promising that problems will come their way, and ensuring their isolation from their community when these problems do arise.

Pradeep and his gang have become one of the most formidable and fractious groups in the settlement. One resident asserts that he "is the biggest problem in Ganesh Murthy. If you are not with him, he will make trouble for you" (Interview, 11/13/09). Pradeep's gang enforces elements of the water oligopoly and coordinates developer signature gathering, and both these processes take advantage of and threaten residents. The success of the gang may motivate nascent gangs currently congealing in the settlement. As of 2010 there was a small gang forming in part III composed of 6 young men who recently moved to Ganesh Murthy. They rough people up, engage in "problem solving" activities for individuals, steal, and do "political" work such as motivating people to attend political rallies. Three members sought to stake their reputation by attacking the private water enterprise. They

roughed up members of the business and on November 25, 2009 smashed the windows of their retail outlet. The response elicited was more violent. The leader of the family enterprise slapped one of the incipient gang members, and then his fighters gave him a beating. This was followed by inflicting lacerations with a barber's knife, which they had procured from a nearby saloon on the main commercial street. The youth received 70 stitches on his chest and 50 stitches on his arm, for a total of 120 stitches, which prompted him to go to the police to press charges.

While in the hospital convalescing, the leader's wife and family went to see the youth and gave him money for him to drop the charges, which he subsequently did. However, three of his gang attacked the leader directly, for which two brothers were in jail and one was on the run from the police (Interview, resident of Ganesh Murthy, 12/15/09). The incipient gang has sought an alliance with Pradeep, but as there is already an agreement in place with the private water seller, there could be no formal association. Nonetheless, members of the gang have apparently accepted money from both Pradeep and the private water seller for small favours, which demonstrates that the larger gangs are attempting to enrol the start-up into their established networks.

The above examination reveals that gangs have become important components in the slum assemblage. At Ganesh Murthy, their enrolment has become a necessity for larger organizations to defend their interests through physical violence and techniques of surveillance. In a sense, then, gangs function as a type of social glue that maintains the functionality of networks by motivating the adherence of individual people. These war machines, however, are not only oriented towards residents to keep them in line, but are also oriented against one another in what has become a constant battle to maintain and expand influence and power. Muscle gangs are not only a perverse form of social glue, but also concurrently represent and embody the forces of friction and fragmentation that necessitate the glue. The investigation of Pradeep's gang in particular also reveals that gangs have an ability to adapt quickly to changing circumstances. They create associations, shift alliances, and rapidly respond to opportunities that present themselves. Gangs, because of their flexibility and adaptability, are very successful social organisms in the context of a constantly evolving settlement with ever shifting social dynamics.

7.5 Rhizomatic assemblage

The settlement assemblage is populated by a plurality of actants and consistencies with overlapping and convoluted lines of associations the emergence of which have led to various instances of injustice and inequality. Identifying important components of the settlement, understanding how they emerged, and mapping their interrelationships is essential to understand not only how the settlement functions internally, but also how State and multilateral organizations affect the power geometry as a plurality in transformation. Investigating one dimension of the settlement, such as water distribution, waste management, or sanitary systems for example, is not enough to adequately represent the entirety of that segment's functionality and influence. Components of the settlement must be investigated together with others within a temporal dimension of the settlement's evolution to derive an adequate representation of the assemblage, its functionality, the power geometry, and the effects various components have on residents.

7.5.1 Congealing consistencies and stratification

The emergence of social consistencies has taken place over forty years of the settlement's history in confluence with its spatial development. Throughout this history, change has remained one of the main constants. Because there is little regulatory oversight, the spatial attributes of the settlement are in constant flux, accommodating the needs and desires of various social actors, consistencies, and their potentials for the future. Just as the land and built environment are fluid components of the settlement, so too is the social stratum, in which various overlapping networks are assembled, held together, dissolved, and realigned due to a diverse array of factors.

Water networks were some the first social consistencies to emerge in the developing settlement and they each form a base layer for the macro organization of society in each of the territories. Their emergence, triggered by state legislation, soon followed a line of flight from State-designed water systems. Thereupon, water networks established relationships of dependence with residents, where the former leverages this dependence to gain greater concessions from the populace. With the enrolment of politicians and MCGM employees, a defensible space of operation emerged that is both composed of and isolated from the State and residents. This liminal space of the settlement employs war machines that aggresses

upon the State and residents. The operational space of water networks controls access to State funds and information about State programs and in this way has acquired the administration of other municipal services.

Electrical supply was an early target for members of the HDWA in Part I and the Seva Sangh in Part II, and although the service has become regularized in recent years, informal connections are still apparent, while the revenue and power accumulated by the above mentioned CBOs have facilitated their expansion of power. Similarly, the procurement and management of sewer systems and alley paving in Parts I, II and Part III Backside helped to consolidate the position of the CBOs within their territorial social strata. In Parts I and II waste management is controlled by their respective water networks and the Manav Seva Samiti controls waste management for Parts III and III Backside. The same organizations have come to control toilet blocks as well, with the Seva Sangh directing the management of sanitation facilities in Part II and the Manav Seva Samiti controlling facilities in Parts III and III Backside. Thus, water network CBOs have expanded and consolidated their operations to become stratified components of the assemblage: now seemingly a native part of the settlement's functional ecosystem, rather than existing tentatively within the overall instability of the intensive assemblage.

Alongside the management of infrastructural services the stratified water networks are buoyed by social work CBOs that may lobby on their behalf, extend their networks beyond spatially defined parameters, and increase resident's level of dependence by controlling access to other services. Beyond these associations, the CBOs are connected to other social consistencies that increase their reach in the settlement through religious affiliations, familial networks, day cares, friend groups, schools, and other associations. Thus, it becomes clear through the assemblage analysis that these CBOs are in reality not just CBOs administering limited infrastructural arrangements, but conglomerate assemblages composed of diverse components that dominate most, if not all the services in their territories.

7.5.2 Resistance

Assemblages are inherently unstable entities that are caught between virtual potentials and actual, or extensive, realms of reality that have reached some state of equilibrium. Because

of this inherent instability, there is always potential for resistance, and this manifests in the slum assemblage in diverse ways. For the most part, resistance in the settlement takes place in small-scale actions and movements because the functional strata of the settlement, dominated by CBO conglomerates, have effectively fractured society into small units that are generally disinclined to forge larger compounds because of a lack of trust, and because of effective enforcement of local policies and actions. Examples of resistance already discussed in previous chapters include individual communications with State regulators and direct communications with CBO administrators.

Other types of resistance may include conversations about the unfair infrastructural arrangements in the settlement. A group of women I interviewed had such discussions and advanced their position of resistance to writing letters addressed to a local Municipal Councillor and authorities in Delhi. However, the writer's fears of retaliation by those they accuse prevented them from ever sending the letters – though they still keep the letters in the hopes that someday they will be in a position to send them. I observed other micro-resistances in the actions of some of the gang members associated with the Singh family. Gang members who had grown tired of their associations with the family chose to leave their mobile phones at home so they could not be contacted. Others no longer spent much time in their hutments so that the gang would not know where to find them. Others still, presented their inability to work with the gang under the guise of having to perform schoolwork or having to attend to sick family members.

Residents may be more vocal in resisting the trajectories pursued by various CBO conglomerates. At a public meeting called by members of the Seva Sangh to introduce a new real estate developer interested in redeveloping Ganesh Murthy, one resident spoke up publicly about her reservations about the project and managed to scuttle the meeting. The resident alleges that a member of the Singh family gang at first offered her money to suppress her feelings about the project. However, when she persisted in raising questions around the settlement they took action against her nephew, who had served time in jail. A member of the family allegedly entered a false complaint to the authorities at the Cuffe Parade police station, which can have serious implications for a convicted criminal because after accumulating too many complaints police can banish or even *encounter* a person. The

resident who had complained was forced to apologize to the family and then had to send her nephew away from the settlement so that he could no longer be used as a lever of power for the family to exploit (Interview, resident of Ganesh Murthy Nagar, 11/13/09).

Micro forms of resistance may take place across the settlement on a daily basis, but the fragmentation of society, together with CBOs being firmly entrenched in the settlement's strata have not yielded significant breakthroughs in affecting the power geometry. Larger scale demonstrations of resistance, though rare in the settlement, have also met with little success as witnessed by the strenuous efforts of an incipient CBO assembled to procure water as described in the last chapter. Nonetheless, in an assemblage no one actor or component totally dominates all the others, so again there is always potential to change the power geometry, and there was seemingly such a shift in power that I observed at the tail end of my field research.

There is evidence pointing to the diminishment of the MSS's power over their territory. This initially became apparent through various informal conversational interviews with residents conducted at the end of my fieldwork that were less likely to not complain about the MSS, compared to interviews I had conducted at the beginning of fieldwork. Additionally, large blocks of power in the settlement have created associations through which they may attack the MSS. Through common associations with the Singh family, the Seva Sangh and Mahila Pragati Samiti have formed an alliance to enter a participatory slum rehabilitation scheme. A member of Mahila Pragati Samiti asserted that the domination of the settlement by the MSS was coming to an end, and had plans to capture the SSP toilet blocks through an acquaintance with Jockin Appurtham, one the leaders of the NSDF and the Alliance (Interview, 11/23/209). An additional indication that a large shift in power may be occurring in the settlement is evident in the new, but not yet functional, water pipeline controlled by the Seva Sangh that penetrates MSS territory along the main commercial street. Besides these shifts in power relations and new infrastructural arrangements it is also observed that with the construction of second floors more people are moving to the settlement as renters. It is possible that new migrants are making demands upon owners for better water services, which owners could seemingly charge more for. This may constitute a force for new and renewed demands for better water access. The

emergence of these various factors signals the potential to shift power away from the MSS to smaller, more democratic organizations, but unfortunately, with infrastructure in place it is likely that established CBOs will quickly move to consolidate the territory. This, sadly, would not seem to benefit residents at all.

7.6 Conclusion

This chapter contributes towards a more holistic account of the functioning of the settlement by identifying municipal services that are available in Ganesh Murthy and demonstrating their constitutive associations with other components such as muscle gangs and various social consistencies in the settlement. The majority of services discussed in the chapter were procured by, or eventually came under the control of, CBOs that had initially been organized to administer municipal water schemes. Waste management services, alley paving, toilet block administration and in some cases sewer construction and maintenance are all services that were absorbed by existing water delivery based CBOs. In the case of electricity, its initial distribution also benefited water-based CBOs in Parts I and II, but have since become mainly regularized under State auspices. The capturing of additional services by corrupt CBOs consolidates the emergent hierarchical ordering in the settlement by enhancing centralized authority in increasingly stratified CBOs. The liminal space of domination in the settlement is thus expanded and concomitantly so is the scope for injustice, inequality and the movement towards a slum of despair.

The examination of municipal services in Ganesh Murthy in this and the previous chapters demonstrates that a recurring pattern contributing to access and later the stratification of power in the settlement has been the improper implementation of participatory programs. Participatory programmes in Ganesh Murthy Nagar have facilitated the assembling of various forms of power in the settlement: *powertoni*, *touch*, *money*, and *muscle*. These powers are operationalized through a governance platform isolated from residents and the State that fragments society and limits the potential of new consistencies to penetrate the power geometry in the settlement. Participatory programs in Ganesh Murthy, proceeding through local politicians without adequate checks on regulation and enforcement, yield uneven and unjust local governance regimes.

Thus, it becomes clear that in older slums like Ganesh Murthy Nagar, where the power geometry has become more stratified, participatory policies may not trigger the most optimal solutions for service provision. However, even in new settlements, participatory policies can be problematic. In McFarlane's (2008) investigation of the SSP, slum residents consistently did not mind if the CBO in charge of the new SSP toilet block made extra money from the asset as long as the service functioned according to expectations, and on the surface this seems to be an adequate position for the moment. However, the examination of Ganesh Murthy demonstrates the real problem with this kind of relationship. Money accumulated beyond that required to meet basic needs, may be translated into political and bureaucratic *touch* and local muscle enforcement, from which the emergence of CBO conglomerates may arise. Where SSP toilets may not be an immediate problem for residents, the potential for uneven distribution and unjust relationships to emerge is a looming threat to all slum populations reliant upon participatory programmes.

Enmeshed within powerful, participatory programme-triggered CBO conglomerates are various other CBOs and social consistencies that extend the range and influence of the networks. Some CBOs were formed to act as "independent" lobby groups for their associated service provision CBOs. Many CBOs provide access to other important services, such as health care, educational access, police services, ration cards, or other services such as helping to organize and pay for a funeral or marriage. In addition, day cares, technical schools, friend groups, and familial and religious affiliations have all been marshaled in the consolidation of CBO conglomerate influence.

Woven into this social fabric of dominance is the specter of violence that emanates from muscle gangs that have relationships of exteriority with CBO conglomerates. Gangs exist independently through various forms of criminality but they also play a key role in holding conglomerates together through fear and the promise of violent reprisal. Gangs translate fear into a malevolent social glue and act as mechanisms of visible authority, surveillance, and enforcement. Further they are sometimes gatekeepers allowing access to other networks through their inherent associations.

Thus, water networks form a base organizational stratum of society upon which other diverse forms of organization have been assembled. However, rather than playing a unifying role in the settlement, the CBO conglomerates they have engendered have fostered distrust, fear, and disenfranchisement, fragmenting society and diminishing the potential for social consistencies to emerge to challenge this stratified order. In the final chapter of the thesis examines the potential cooptation of this stratified order into a larger assembly of actors that threatens the very existence of Ganesh Murthy, by focusing on the Slum Rehabilitation Scheme and the various private real estate developers that have been working to capture the settlement.

Chapter VIII

The Slum Rehabilitation Scheme and Developers as Components of the Settlement Assemblage

8.1 Introduction

As the previous chapters demonstrate, Ganesh Murthy Nagar emerged from a confluence of actors and forces with distinct logics, embedded within hierarchies, and moving along diverse trajectories. This chapter examines a newer set of components in the form of real estate developers and slum redevelopment policies, and their impact on the settlement assemblage. Real estate developers intent on redeveloping squatter settlements function according to a profit oriented logic that is ordered within an assemblage consisting of geographical location, developmental policies, and political and economic currents. Redevelopment policy, in the form of the Slum Redevelopment Scheme, functions according to a logic comprised of progressive land tenure reform, participatory guidelines and neoliberal developmental ideas. The potential to redevelop the settlement and the introduction of real estate developers to Ganesh Murthy have motivated emerging alliances and sharpened rifts in the settlement, spurring the reassembly of sociomaterials that are intensifying the unequal and unjust relations already apparent in the settlement.

The chapter then, focuses on the effects of the Slum Rehabilitation Scheme (SRS), which facilitates the potential to redevelop slums in Mumbai, together with several real estate developers working in Ganesh Murthy Nagar. The first section examines Mumbai's slum redevelopment strategies (8.2) by detailing policies that led to the creation of the SRS (8.2.1), the mechanics of the scheme (8.2.2), and results and problems with it (8.2.3). The second section investigates positive and negative attractors present at Ganesh Murthy for redevelopment (8.3). The third section surveys various developers interested in Ganesh Murthy (8.4). The fourth section provides an intensive empirical examination of the work of one developer that played a large role in advancing the potential to redevelop the settlement (8.5). The final section analyses the patterns of behaviour that have been triggered by the SRS (8.6) including those stemming from associations between developers and residents of Ganesh Murthy (8.6.1), associations between developers and the state (8.6.2), and finally competition between developers to develop the settlement (8.6.3).

8.2 Redevelopment strategies

Mumbai has long struggled to manage slums from their origins in the city in the 19th century. As previous chapters have demonstrated, the city's policy towards slums has

evolved from negation, to tolerance, to acceptance. This section examines the evolution of the current policy in place, in the form of the Slum Rehabilitation Scheme, and describes its basic mechanisms as well as results and problems that have manifested.

8.2.1 Evolving strategies to eliminate squatter settlements from Mumbai

In the mid 1980s, following Mumbai's failed strategies of slum clearance and slum up-gradation, the government of Maharashtra initiated an unconventional pilot project in the city called "Slum Reconstruction." The strategy was to redevelop squatter settlements by demolishing existing slums and building higher-density, medium-rise apartment blocks for slum dwellers in their place that were cross subsidized by state and federal actors (Dua, 1989). The project signalled a substantial move away from past strategies of clearance and up-gradation. The former consisted of eradicating the settlement and relocating the slum dwellers to another site, which opened up the land to commercial development. However, as slum dwellers are loath to relocate away from their current jobs and upset their livelihood patterns, slum clearance projects often resulted in physical confrontations and political conflict. The latter strategy of up-gradation gave squatters a degree of land tenure and could include State provision of basic amenities, infrastructure, and housing finance loans. Ganesh Murthy gained its first public services from such rehabilitation programmes, but the strategy ultimately failed to convert many slums into more formal configurations in the city (O'Hare, 1998).

The Slum Reconstruction initiative was supported by slum dwellers that hoped to receive more valuable housing, and its initial success led to a citywide mandate under the 1991 Slum Redevelopment Scheme (SRD). This was later modified in 1995 through suggestions made by the State appointed Azfulpurkar Committee, which was composed of State bureaucrats, representatives of civil society (including members of SPARC), and private developers (Burra, 2005; Mukhija, 2001). The modifications made to the SRD became the Slum Rehabilitation Scheme (SRS), which is the current policy in force and is administered by the Slum Rehabilitation Authority (SRA). The SRS pertains to all squatter settlements that are located on state land and all hutments that were built before 1995. The basic components of the 1991 scheme are integrated with market components by encouraging private real estate developers to redevelop squatter settlements for profit, which reduces the

state's financial commitment to redevelopment. The SRS was adopted shortly after national economic liberalization policies had opened India to foreign investment, which dramatically increased real-estate prices in Mumbai. In fact, increased demand and speculative trading would propel real estate values in the city to some of the highest in the world in 1996 (Nijman, 2000), which provided incentive for developers to engage in slum redevelopment schemes for profit. Thus, the logic underlying the SRS is a product of neoliberal currents towards urban management that diminish the role of government in urban interventions in favour of market mechanisms. Within this framework, the logic of private developers was accommodated to bring land onto the formal market for profit and participatory guidelines were included in alignment with representatives of civil society to meet community needs.

8.2.2 Mechanics of the SRS

The SRS theoretically functions through the participation and self-organization of squatter residents that apply to the SRA for a redevelopment project. The whole slum community may be involved in the project, or only a pocket of the slum that is serviced by an access road (State of Maharashtra, 2009). In either case 70 percent of residents in the territory to be redeveloped must sign on to the scheme for it to be considered by the SRA (Nijman, 2008). The SRA then transfers the legal title of the land from the state to the community, thus representing a large portion of the state's financial contribution to the scheme. The squatter community may then engage a developer to demolish the settlement and build new medium-rise buildings, or they may manage these themselves if they are able to secure the necessary funding from outside sources. During the demolition and construction phases of redevelopment slum dwellers must be housed on site in temporary lodgings (Mukhija, 2000).

Key to the enrolment of a developer is the "sales component" of the scheme. This refers to the excess number of residential units above those required to re-house squatter residents, which are to be sold on the open market for profit. The amount of units that can be constructed on any given piece of land is restricted by the Floor Space Index (FSI) attributed to the land, which regulates the amount of built-up area. On a hectare of land with an FSI of 1, for example, one hectare of area can be built. In Mumbai the nominal FSI

is 2.5, although this may be less in environmentally sensitive areas or more in high priority development areas.

The redevelopment process is regulated by the Development Control Regulations for Greater Bombay and Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971. If, under these regulations, there is not enough space to build an adequate sales component, the developer is entitled to Transferable Development Rights (TDR), which allows them to build on state-owned lands to the north of the original site, in congruence with on going efforts to limit the densification of South Mumbai. TDR provides a degree of flexibility to facilitate redevelopment schemes and it may also be traded on the open market once its value is set at the moment of completion of the original project (Burra, 2005).

8.2.3 Results and problems

At the time of its inception the SRS was an innovative strategy to integrate multiple stakeholders in addressing continuing squatter settlement proliferation in Mumbai (Mukhija, 2003). Theoretically, there is a degree of community participation as residents assemble and organize to hire a developer and participate in the planning of the new buildings. The strategy is facilitated by the state that contributes land and integrates market forces in cost recovery mechanisms through the sales component of the scheme.

Despite the innovative qualities of the program various problems with the SRS have been identified. Deshpande (2004) reports that the SRS has not generated significant redevelopment as only 26,000 new households had been produced as of 2002. Many squatter settlements are located in risky areas such as in marshes or on hillsides, or are poorly located in the city; all of which reduces the potential profits derived from the sales component of the scheme. Additionally, Nijman (2008) suggests that developers find ways of passing on their costs to slum dwellers to increase their profit margin. Finally, slum dwellers may not be the final proprietors and beneficiaries of the new housing. Slum dwellers may be convinced to sell their units before they are built to the developers who then resell them at a higher cost on the open market. Further, costs associated with living in formalized housing, such as taxes and maintenance costs, may prove too expensive for slum dwellers to absorb (Shaw, 2004). Another problem with the SRS is that it is reliant

upon market values of real estate in Mumbai, such that when prices are high, developers are more inclined to commence projects. When prices are low, however, or when there is less capital flowing in the market, as witnessed after the global economic recession following 2008, demand to redevelop may decrease. Academic research has not yet shed much light on how the SRS may affect slum dwellers themselves, and this chapter aims to address this omission.

8.3 Ganesh Murthy's attractors

The SRS creates the potential to privately develop slums and thus functions as a motivating attractor for developers keen on making profits from slum redevelopment. From this perspective, Ganesh Murthy constitutes a virtual singularity signalling strong potential for capital accumulation. The settlement is located in Ward A, at the southern most tip of the peninsula. This alone gives developers the chance to trade TDR for any other property available to the north and thereby increasing the value of the TDR. Ward A is well positioned to access the two main north-south railway lines in the city, and many important financial institutions such as the Bombay Stock Exchange and the National Mint, as well as the corporate headquarters of several multinational and domestic corporations. As such, the settlement is nestled among some very wealthy neighbours, such as members of the Ambani and Tata families, and neighbourhoods, such as Cuffe Parade and Nariman Point. Ganesh Murthy is also located on the Arabian Sea, which not only allows for potentially marketable views, but offers an equally important dimension in congested and often sweltering hot Mumbai: fresh air blowing in off the sea. Finally, the settlement is adjacent to the military compound of Navy Nagar, which generally creates the perception of heightened security, which is an important consideration after the terror attacks in Mumbai in November 2008. Considering the many assets the settlement has in relation to its geographical position, in the words of a community leader in the settlement: "Ganesh Murthy is a VIP area" (Interview, 27/11/09). Most residents of Ganesh Murthy feel the same way. 55 percent of residents would rather stay in the settlement as is, rather than moving somewhere else into new residential units. 14 percent said they should receive new housing on site, while less than a quarter would be happy to move to new residences in a new location. Six percent of residents said they would ultimately have no choice in the matter and would do what they were told. Given the generally substandard state of housing

in the settlement, people's strong desire to stay in the same location might not bode well for redevelopment efforts.

Concomitantly, however, there are several negative attractors related to the site that may repel the interest of developers. According to U.P.S. Madan, Project Manager of the All India Institute of Local Self Government, former member of the Indian Administrative Services, and former Vice President of MHADA, the largest hurdle in the way of redevelopment efforts at Ganesh Murthy is the limited FSI available for construction (Interview, 23/11/09). The land of the settlement is affected by tidal movements, and is thus subject to Coastal Regulation Zone (CRZ) legislation and is specifically defined as CRZ II land. Until early 2011, the FSI of CRZ II land stood at a maximum of 1.33 instead of the nominal 2.5 applicable to most of the city, making it extremely difficult to secure adequate sales units to make redevelopment worthwhile.³⁴ Aggravating this negative attractor is the growing population of the settlement. An Assistant Engineer at the SRA, who is familiar with Ganesh Murthy, says it will be difficult to sort out all the people in the settlement who arrived post 1995 (Interview, 16/12/09). On this subject, Madan says that the large increase of people means there is a high degree of sub-tenancies (around 20% according to the socioeconomic survey), and "sub-tenancies make it difficult because they do not qualify for housing in the case of redevelopment, so they will either refuse to leave or demand payment for leaving."

There are other singularities that work to repel developers from developing the settlement. The Assistant Engineer at the SRA notes that because the settlement is so close to Navy Nagar it will take a non-objection clause (NOC) from the Ministry of Defence to build there. Additionally, the Metropolitan Rail Transportation Project (MRTP) is trying to reterritorialize the area as a rail shed to facilitate a proposed rail line. In arguing for the land the MRTP is relying on the 1967 BMC Development Plan for the city (revised in 1984 and 1991), which reserves the land for a railway depot. The rail depot would have to be integrated into any residential project if the MRTP succeeds in securing the land. Further, the BEST bus depot and proposed helipad would likely have to be integrated in any large-

³⁴ In early 2011 the government announced changes to CRZ building regulations, which increased the FSI to between 2.5 and 4 and reducing the no-construction zone from the high tide line from 200 to 100 metres.

scale project, and certainly complicates any potential redevelopment effort. Finally, the Mumbai Metropolitan Regional Development Authority's (MMRDA) interpretation of the land at Ganesh Murthy complicates potential redevelopment efforts. The MMRDA is the Special Planning Authority for the Back Bay, and the Town and Country Planning Division of the MMRDA defines the land at Ganesh Murthy and Ambedkar Nagar as water on their Development Plan. Thus, as far as the MMRDA is concerned, there can be no development at Ganesh Murthy, because not only does the settlement not exist (in accordance with standard Development Plan procedures that do not acknowledge the existence of squatter settlements), the land does not exist either.

8.4 Developers circling

Despite negative attractors repelling potential developers from redeveloping Ganesh Murthy, there has been significant interest in the settlement. There are five confirmed developers that have sought signatures for redevelopment schemes, and there are five more that are talked about in the settlement. As of March 2011, three schemes have been submitted to the SRA to develop all or parts of Ganesh Murthy and one developer continues to collect signatures for a potential redevelopment scheme submission. The end purpose of these various builders is not immediately clear. Some builders genuinely appear to be interested in redeveloping the settlement, while others are seemingly only interested in reterritorializing the land under the SRA to receive money from other builders that might come along afterwards.

In all cases, efforts to redevelop Ganesh Murthy have caused malaise amongst residents. As one person in the settlement (Interview, 11/01/09) says: "There is so much fear of builders here. Why are they working in secret? Why do they pay for signatures?" The whole process of redevelopment is murky for residents, who are generally not knowledgeable about laws or rights related to redevelopment. Further, they are offered money to sign long legal documents written in Marathi (which most immigrant residents do not comprehend). If they do not sign, they are threatened to do so. Redevelopment then, is accompanied by a sense of fear related to the loss of services, documents, and hutments. Redevelopment efforts also exasperate existing fault-lines in the settlement between territories, service providers, rents and owners, and those belonging to various social consistencies.

For the real estate developer, redevelopment is a process of assembly: of permissions, political allies, financing, plans, and slum dwellers. As regards the latter, developers enrol various social consistencies (mainly CBOs and muscle gangs) to help in the assembling of signatures and this can lead to a broad range of problems for residents. This section surveys all the developers that have held an interest in Ganesh Murthy, and is followed by an in depth examination of Plymouth Constructions Pvt. Ltd., which worked to assemble a multitude of components and advanced the redevelopment of the site from a virtual possibility to something closer to actuality.

8.4.1 Ganesh Murthy's developers in history

In 1999 the developer, Raj Yoge Builder, came to Ganesh Murthy to engage the settlement in the context of the SRS (Interview, 22/12/09). Apparently they accumulated 90 percent of the signatures they required, but there was a quarrel between the four partners of the company and the development scheme was scuttled. An important artefact that remained, however, was a map of Ganesh Murthy that was reassembled into the plans of a second builder that approached the community in 2003 called Plymouth Constructions Pvt. Ltd. Plymouth worked through various CBOs to collect signatures and was interested in developing the entire block including Ganesh Murthy, Ambedkar Nagar and Rajak Nagar. They enrolled 75 percent of the residents for the SRS by 2005, but various court cases and institutional inconsistencies conspired to delay the scheme, which remains in a state of flux.

Sneh Developers was brought to Ganesh Murthy in 2006 by a CBO consortium composed of the secretary of the Seva Sangh, the president of Mahila Pragati Samiti, and the two leaders of the Singh-family social work CBO. Members of the consortium apparently received INR 100,000 for their work with the developer, much of which consisted of collecting signatures. Sneh submitted their proposal to the SRA in 2009 for a pocket of the slum that corresponds to the Seva Sangh's extended territory (including that of the Colaba Back Bay Association) and Mahila Pragati Samiti's territory (Figure 8.1). However, the intentions of the developer to actually redevelop the site are questionable. Upon investigation, the paperwork outlining the scheme submitted to the SRA is only half complete. Further, as the Assistant Engineer at the SRA attests, the developer's financial capacity is far too limited to redevelop the site (Interview, 16/12/09). Because of these two

facts it is possible that Sneh is merely trying to reterritorialize the settlement to later sell this control to a developer that is genuinely interested in redeveloping the site.

In 2006 Darshan Doshi Builders started collecting signatures, and like Sneh, they submitted their proposal in 2009. The Darshan scheme corresponds to Rathod's territory and in fact Rathod is one of the proprietors of Darshan, along with his father and another partner. The latter said that Darshan offered residents INR 500 for signing with them and that they had collected 1300 signatures (Interview, 18/12/09). The fact that other developers (Plymouth and Sneh) had submitted schemes to the SRA did not trouble him, and he felt confident that they could "work something out". With the Assistant Engineer's indication that Darshan also did not have the financial assets to develop the site, the partner's statement can be interpreted as a desire to sell their interest in the settlement, rather than a desire to redevelop it.

As of March 2011, Shapoorji Pallonji & Co. Ltd. was continuing their efforts to collect signatures in both Ganesh Murthy and Ambedkar Nagar, which they initiated in 2008. Pallonji is a large multinational developer that recently completed an SRS redevelopment in Tardeo, Mumbai. A friend of the Singh family, who has ties with Pallonji, introduced the company to the settlement (Interview, friend of Singh family, 14/01/10). Since then, the secretary of the Seva Sangh and the president of Mahila Pragati Samiti have allegedly provided them with access to their records of the settlement's residents. Members of the Singh family war machine and their social work CBO are among those employed to convince residents to sign with Pallonji. Leading members of the war machine allegedly provide a show of force for those residents that are initially unwilling to sign. Close friends of the leaders of the gang have expressed feeling of isolation, exclusion and fear when they or their parents would not sign. Threats have escalated into violence for those who continue to withstand the muscle gang, although usually other tactics are employed first, such as losing access to water or toilets. Leaders of the muscle gang and CBO actors have apparently been paid INR 200,000 for their services. Additionally, Pallonji offers an INR 5000 finder's fee and INR 10,000 to sign with them (Interview, resident of Ganesh Murthy, 20/10/09).

Other smaller developers have allegedly tried but failed to collect enough signatures at Ganesh Murthy, often as part of a scam perpetrated by various social consistencies in the

settlement. The scam is run by leaders of muscle gangs, water distribution CBOs, and social work CBOs that enrol developers in a potential SRS scheme and receive payment for collecting signatures or allowing agents to work in their territory. Once paid, however, the actors do not collect the 70 percent of signatures necessary, so the developer unplugs their apparatus from the settlement, while gangs and CBOs search out new developers. In 2007 Zoom developers commenced their operation in Ganesh Murthy. They were brought in by an ally of the secretary of the Seva Sangh, but only collected 30 to 40 percent of the signatures required and thereafter left the settlement. An ally of Rathod's allegedly brought in Bollster Developers. Members of the Singh family CBO together with a muscle gang operating in the settlement apparently attracted Diwan Builders. Another member of the Singh family brought Satyan Tandon. Finally, there are unconfirmed stories of Handa Developers being introduced by two brothers that had at one time operated the muscle gang that introduced Pradeep into the business. However, there are few traces of its passing presence.

8.5 Plymouth Constructions Pvt. Ltd.

Plymouth Constructions Pvt. Ltd. has been trying to redevelop Block VI of the Back Bay Reclamation Scheme for eight years. During this time actors in the company have assembled diverse components to advance the potentiality of the project. However, strong opposition to their redevelopment efforts have delayed their progress and in the meantime other developers have used components assembled by the company to take a lead in redeveloping the settlement. The following, then, recounts the efforts of the developer to enrol and hold together an assemblage of actors in the most sustained effort to redevelop Ganesh Murthy Nagar so far.

8.5.1 Attracted to a Holistic Vision

Plymouth Constructions Pvt. Ltd. is run by the son (the Director) of a wealthy businessman, whose company Liotlier Group is involved in real estate, financing, and construction supplies all over India. For example, in 2010 Litolier announced plans to build four five-star hotels in New Delhi, Chennai, Mumbai, and Goa (Pal, 2010). When the Director of Plymouth Constructions returned from the college he attended in Lugano Switzerland in 2002, he “wanted to do something good for the people, and good for the city, so I became

interested in this plot of land [Block VI of the BBRSS]” (Interview, 22/12/09). Certainly, with offices on the 10th floor of Free Press House in Nariman Point with a view of the Back Bay, the Director was drawn to the large tract of squatter settlements sitting in one of the most expensive areas of Mumbai. The SRS provided a mechanism to approach and redevelop the settlement and so he first enlisted the help of an expert on SRA regulations. He then registered Plymouth Constructions Pvt. Ltd. under which the work could be accomplished.

The Director was attracted to the idea of redeveloping the entirety of Block VI of the Back Bay, including Ganesh Murthy, Ambedkar Nagar, Rajak Nagar, the MHADA transit camp, the helipad, and the bus depot. He envisaged not only new residences, but a school, sewage treatment plant, hospital, dispensary, jetty, water way, and the re-plantation of mangroves (Interview, 22/12/09). Such a redevelopment plan lies outside the scope of the SRS, as it involves other components besides squatter settlements and residential units, yet it would also have to include the SRA, which is the sole planning authority for squatter settlements. A holistic development of the entire area seemed only natural to the Director, as it had to former Municipal Councillor Rathod many years earlier. Such a large development would necessitate the assembly of multiple associations with political entities such as the Urban Development Department (UDD), which defines the terms of development for the state, the MMRDA as the special planning authority for the Back Bay Reclamation Area, MHADA, BEST, the Metropolitan Commissioner, and most probably the Chief Minister of Maharashtra, among other political offices and officers.

8.5.2 Assembling political institutions and defining the project

The first step in the process of redeveloping the site was to enrol important government agencies. To this extent Plymouth purportedly sent a letter of intention to the MMRDA, MHADA, and UDD in November 2003 (Assertion by the Director of Plymouth Constructions, PIL 45, 2007: 98). The exact contents of the letter and any responses are not known as they are not included in the public interest litigation, but official letters were written three months later to MHADA and UDD outlining Plymouth’s broad vision (Letters, Director Plymouth Constructions, 06/01/04 and 04/02/04). However, these authorities replied that unless the file was submitted as per SRA guidelines, they did not

have the power to sanction the plan. This required a survey (submitted in March 2004) and plans for a transit camp to house residents during construction (submitted July 2004).

MHADA was a critical ally for Plymouth to enrol as its two-hectare transit camp sits in the middle of the potential redevelopment zone and their cooperation is integral to any holistic redevelopment vision for the area. Plymouth asserted that the existing transit camp, built in the 1980s, was dilapidated and in urgent need of repairs. They argued that if MHADA went ahead with redeveloping their site in the form of multi-story buildings to include a sales portion of the new edifice as a cost recovery mechanism, the units would not fare well on the market because they are surrounded on all sides by squatter settlements and do not even have a road giving access to the MHADA land. The only solution, as advanced by Plymouth, was to develop the entirety of Block VI of the BBRS. The CEO of MHADA ultimately agreed with the holistic vision and wrote the Commissioner of the MMRDA to enrol that agency along the trajectory of a holistic redevelopment (Letter, CEO of MHADA to the Metropolitan Commissioner of the MMRDA, 02/06/04).

Concurrently, Plymouth filed the redevelopment plans with the Deputy Collector for South Mumbai that administers the land on behalf of the state and as such is responsible for implementing and executing the scheme for redevelopment. However, the Deputy Collector directed Plymouth to the SRA as the competent authority. The SRA, in turn, directed them to the MMRDA as the special planning authority (SPA) for the BBRS. In fact, there were two competing authorities for this redevelopment project: the MMRDA as the SPA for the BBRA, and the SRA as the planning authority for all slum redevelopment projects in Mumbai.

Plymouth pressed the MMRDA to classify the redevelopment as an “Urban Renewal Infrastructure Development” due to its inclusion of roads, a jetty, water ways, a hospital and a school rather than merely the construction of residences (Letter, Plymouth to Additional Metropolitan Commissioner, MMRDA, 07/08/04). The MMRDA had creatively altered plans for the BBRS in 2000 when it rezoned parts of Block VI from industrial usage (an historical trace of the 1967 Development Plan calling for a rail shed) to residential and communal usage (Notification No BBR.1092/60/CR-6/92/UD-11 dated 9/6/2000). This was strictly illegal under CRZ legislation, which prevents rezoning of land in coastal areas.

Nevertheless, that MMRDA had rezoned the land suggests that certain creative planning could be accommodated and Plymouth pursued this course. If the developer had been successful in classifying its scheme as an infrastructure project instead of as a slum redevelopment project, residents of the squatter settlement could be defined as Project Affected Persons (PAP). The reterritorialisation of residents as PAPs would make it much easier to remove them from the site, which would create more space for private residences to be sold at market value.

Ultimately, the MMRDA claimed to be the competent authority and the scheme was filed with a small SRA cell embedded within the MMRDA. The Second Amendment to the MMRDA Act (2002) states that the MMRDA is a Slum Rehabilitation Authority when infrastructure is involved in a project. Although there is no documentation supporting or confirming any decision to define the Plymouth scheme as an infrastructural project, this was the reason given by the MMRDA to the Deputy Collector to justify the MMRDA as the competent authority instead of the SRA. “MMRDA is the Slum Rehabilitation Authority for the implementation of Slum Rehabilitation Projects for housing the Project Affected People (PAP housing) affected by vital public viz. MUTP & MUIP”³⁵ (Letter from MMRDA to Deputy Collector, 12/02/05). While the MMRDA somewhat spuriously assumed the authority to supervise the project, the Deputy Collector was deemed to be the competent authority to implement and execute the SRS (Notification No. G.N.H.D. No. Gavasu, 13010KR-375/Zopasu-1, 18/05/02).

8.5.3 Assembling slum dwellers

Plymouth had to gain the acquiescence of eligible residents that could prove they had been on site since 1995. To this extent the developer took the locally unusual step of directly approaching residents through public assemblies in the settlement. Plymouth also, however, enrolled the secretary of the Seva Sangh who helped facilitate the creation of 22 CBOs registered according to the Bombay Cooperative Societies Act, 1925 (PIL 45, 2007: 93). These societies garnered *powertoni* over their members to legally negotiate with Plymouth, which offered the SRA requisite 225 square foot residences and free temporary housing during the construction period.

³⁵ MUTP is Mumbai Urban Transportation Project. MUIP is Mumbai Urban Infrastructure Project.

The developer then entered into agreement with the 22 societies for the right to redevelop the settlement, including transferring the power of attorney to Plymouth to approach various authorities necessary to redevelop the land. The societies also gave Plymouth lists of all their members, the majority of which had been on site before 1995 and had the necessary documents to prove this. Following, the developer's network of local agents, consisting primarily of the Singh family muscle gang and social work CBO, entered into individual negotiations and agreements with residents. In this way Plymouth assembled some 3300 households into its redevelopment assemblage, which represented more than 70 percent of the eligible population in Block VI, by January 2004. For some, signing with Plymouth offered the promise of moving into new residences, while for others it was the beginning of years of water access privation, toilet block access privation, threats, and physical abuse. Rathod, at the head of a competing development company would use everything in his power to unplug residents from the Plymouth assemblage and scuttle the project. Many slum dwellers suffered through the competition to redevelop the settlement (this discussion continued in section 8.5.5).

8.5.4 Assembling land

With residents and State institutions enrolled in the development assemblage, Plymouth thereafter worked to reterritorialize the land. Some of the land in Block VI of the BBRS was officially recognized by the State apparatus, but zoning particularities and CRZ legislation prevented redevelopment there. Further, the land that housed 11,000 people at Ganesh Murthy and about the same amount of people in Ambedkar Nagar did not officially exist. Therefore Plymouth and its allies engaged other actors to help them reterritorialize the land under the redevelopment assemblage.

8.5.4.1 Changes to the Development Plan

Several important zoning changes to parts of the area were also necessary to facilitate the project and MHADA took the lead in petitioning the MMRDA to make the necessary adjustments to their Development Plan. MHADA asked the MMRDA for the following changes: to diminish the width of the road leading from Prakesh Pethe Marg towards the sea from 45 metres to 13 metres; to redefine MHADA's land from "transit camp" (which places certain restrictions on development possibilities) to simply "residential"; rezone

Rajak Nagar from “Parade Ground” to “residential;” and to define Ganesh Murthy and Ambedkar Nagar as “residential” (Letter, MHADA to MMRDA, 02/06/04). In response to these requests the MMRDA in its 111th meeting on 06/07/04 changed the zoning of the parade ground and the transit camp. Strangely, however, the Development Plan, current as of December 2009, does not indicate that these changes were made. No other mention is made by the MMRDA of diminishing the width of the road or declaring the two squatter settlements as residential zones.

8.5.4.2 Changes to the high tide line

Sixteen months after Plymouth first informed the UDD and MHADA of its broad vision for the holistic redevelopment of Block VI, in March 2005, the Collector commenced a survey and boundary demarcation of the squatter settlement area as demanded by SRS protocol. During the process it became apparent that the high tide line (HTL), as demarcated in the MMRDA Development Plan, was incorrect as it was shown to pass through the bus depot, which, built in the 1960s, prefigured the drawing of the plan (Figure 8.2). The HTL was originally drawn in 1997 by the National Hydrographic Office of the Indian Navy and was printed at a 1:25,000 scale. The MMRDA transferred this line to their Development Plan, which was drawn at 1:5000 scale and ultimately they made a mistake drawing the line, which was closer to the shore than in the original demarcation. As the MMRDA-defined HTL limits the amount of land that may be potentially developed, Plymouth pushed for the UDD to appoint the Centre for Earth Science Studies (CESS) in Trivandrum to determine the current high tide line. This request was accommodated in June (Letter, UDD to CESS, 02/06/05).

Figure 8.2 Demonstrates the different versions of the high tide line
Source: Centre for Earth Science Studies

CESS submitted their report in August 2006, which shows the current HTL further west, towards the sea, than as had been drawn by the MMRDA (CESS, 2006). CESS argues that the HTL had shifted seaward due to reclamation work that had taken place in the Back Bay from the 1960s onwards. Ultimately, it concluded, part of the land under question for redevelopment falls into CRZ I, while the majority of the land is in CRZ II, and thus redevelopment of the squatter settlements is permissible. However, rather than change the HTL to its current location, which would create more land for construction, the UDD seized upon the CESS assessment that the extended HTL was due to reclamation. The UDD decided that the land between the 2006 and 1998 high tide lines was CRZ I, while the land to the west of the 1998 HTL was CRZ II.

Either Plymouth had failed to fully enrol the UDD, or unknown competing forces were at work to derail the project. The 1998 demarcation of the HTL shows a 90 degree angle, which results from scalar limitations in accuracy. Because of this artificiality, seemingly an

argument could have been made to smooth out the line according to the natural topography, as CESS had indicated, which would have gained more land for construction. Nevertheless, Plymouth may have been sufficiently content that CESS and UDD had ruled that redevelopment could go forward and did not push for more land.

This partial victory for Plymouth, however, was immediately mitigated by the Chief of the Town and Country Planning Division (T&CPD) of the MMRDA, who threw up another hurdle. “The land to the west side of the BEST Depot, Helipad and Parade Ground is shown as ‘Sea’ in the sanctioned Development Plan of the BBR, in view of this the resettlement of slum on the plot under reference can not be considered” (Letter, Chief T&CPD (MMRDA) to UDD, 21/12/05). Exclaiming his frustration with this turn of events, the Director of Plymouth said: “It looked like land. There were houses there and people living in them. They had ration cards and photo-passes. But in the end, this land was not really land” (Interview, 22/12/09).

8.5.4.3 City survey number

Despite the Collector having received taxes from residents living on State land in Ganesh Murthy and Ambedkar Nagar for many years, and despite the government having issued photo-passes enabling residents of these lands to vote in national, state and municipal elections, the land on which residents were identified did not officially exist. Therefore, Plymouth pursued another course of action to normalize the land through the creation of a civic survey number. As such, at the behest of the developer, the Revenue Department of the State sought permission from the Settlement Commissioner, Land Records, based in Pune, to allot a civic survey number. The latter granted its permission in February 2007 and the Revenue Department allotted the settlements Civic Survey No. 658, thus officially recognizing the existence of the land for the first time, almost forty years after the first squatters started living at Ganesh Murthy. Shortly thereafter the Commissioner of the MMRDA allegedly told the Director of Plymouth and other stakeholders of the project that the bus depot, helipad, metro, slum dwellers, and sales portion of the project should be combined, and in October 2007 Plymouth supplied the plan (Interview, Director Plymouth Constructions, 22/12/09). Clearly, actors in the MMRDA were not aligned with the Commissioner following the trajectory initiated by Plymouth with the Chief T&CPD

bisecting it. Other problems also hampered the developer as detailed in the following section.

8.5.5 Competing redevelopment assemblage

In accordance with SRS protocol the Collector is obliged to verify the list of squatter residents furnished by the developer to assess their existence, eligibility for inclusion in the SRS, and their consent to the proposed scheme. To this extent advertisements were taken out in newspapers, and broadsheets were posted in the relevant squatter settlements on March 16, 2007 to notify the public of the list of names and the status of their eligibility. 15 days are granted to object to the Collector's findings, after which a survey is conducted to determine the consent of residents. On March 31st, the Commissioner of the MMRDA received a letter from the Manav Seva Samiti saying the consent of its 600 members were fraudulently obtained by Plymouth and demanding that the members be removed from the scheme (Letter, Manav Seva Samiti to MMRDA, 30/03/07). A similar letter was received by the Commissioner a few days later from the Shivaji Banjara Seva Society (from Ambedkar Nagar) claiming its 1078 members wished to be removed from the scheme (Letter, Shivaji Banjara Seva Society to MMRDA, 03/04/07). Several letters purportedly written by members demanding that they be removed from the scheme accompanied these letters.

As explained in Chapter VI these two CBOs are affiliated with former Municipal Councillor Rathod, and through further investigation by the Collector, it became apparent that the CBOs were trying to derail or delay Plymouth's redevelopment efforts. The Collector established that of the 1678 members put forth by the two CBOs, only 437 were on the list for verification, and of these 171 did not even exist. Further, several of the letters submitted by the CBOs from individual members were found to be written by former members who had expired (PIL 45, 2007). Other members of the CBOs thereafter wrote authorities to complain of the CBOs false representation of their desires. Following, Plymouth requested the Collector to call upon the residents to assess the validity of the CBO's claims. The Director of Plymouth alleges that Rathod worked to block the proposed hearing by arguing with the person in the Collector's office in charge that the hearing was not the right way to sort the problem out and threatened them that no one would show up

(Interview, 22/12/09). The Director also alleges that Rathod argued that the posters put up around the slum to advertise presence at the hearing were not sufficient. Apparently, Rathod said people had complained individually, and even though their names were all on one list produced by the CBO, they should be contacted individually. Thereafter, the Collector hand-delivered letters to the 266 authentic members of the CBOs that had allegedly desired to be removed from the scheme to appear before the Collector for verification. Finally, in June 2007, 165 residents of the 266 called upon appeared before the hearing, where 158 people stated they supported Plymouth's redevelopment efforts while 7 remained neutral (PIL 45, 2007).

The Director alleges that once the MMRDA changed the zoning of the parade ground and transit camp to residential (in 2004) Rathod approached him requesting 25 percent of the profits to be generated from the redevelopment (Interview, 22/12/09). When the Director refused, he alleges that Rathod started to intimidate the residents of Ganesh Murthy with *goondas* and by limiting or cutting off their water as explained in Chapter VI. After the hearing, the Director alleges that Rathod summarily cut off water access to everyone who had attended, after which the Director supplied water via daily tankers for 16 months. It must be understood that tanker water is not the same quality as municipal water. Residents generally drink municipal water without boiling it, which they would not do with tanker water. Further, the Director alleges that Rathod approached him again after the hearing demanding 25 percent of the profits or he would make more trouble for the developer.

Following the four-month delay in Plymouth's redevelopment efforts due to assessing the consent of slum dwellers, and some time after the Director's refusal to give in to Rathod's demands, a public interest litigation (PIL) was filed on June 23, 2007 by four residents living in or around Ganesh Murthy and Ambedkar Nagar (PIL Writ Petition No. 45 of 2007, High Court of Judicature at Bombay). The PIL was filed against the UDD, the MCGM, MHADA, SRA, MMRDA, State Housing Department, Revenue Department, Deputy Collector, and Plymouth Constructions, to prevent: "Government lands occupied by the slum dwellers from being usurped by Developers who are hands in glove with several Government officials to make wrongful gains from the said property" (PIL 45, 2007: 6). Plymouth argued in its defence (submitted in October 2007) that the entire PIL was a

fabrication lead by Rathod to prevent the redevelopment from proceeding. As one of the petitioners is a member of Rathod's Shivaji Banjara Seva Society and another is a member of a society led by an ally of Rathod, and considering Rathod's involvement and interest in the squatter settlements as described earlier, it is probable that Rathod was involved in the PIL. According to the Director, during the proceedings at the High Court the judge called the petitioners to the witness stand and asked them each how much they earned. When they responded that they earned INR 3000 per month the judge questioned how they could afford INR 30,000 on Right to Information fees and legal costs. Unable to provide a suitable answer, the plaintiffs lost the case and were each penalized INR 10,000 by the court. Pursuant to this, Rathod, ever intent to delay or derail the redevelopment, brought the case to the Supreme Court in Delhi where in late 2007 the original verdict was upheld (PIL 45, 2007).

The ultimate scuttling of Plymouth's efforts to redevelop Block VI came from a different tactic employed by Rathod: the enrolment of the mass media. On August 25 and 26, 2007 the Hindustan Times published a two part investigative report on Plymouth's redevelopment activities entitled "Mumbai's costliest land – FREE" in the first instance and "Voices against land handover grows" in the second (Upadhyaya, 2007a: Upadhyaya, 2007b). A follow-up article appeared in the paper on August 30 entitled "Cuffe Parade slum now a hot potato" (Upadhyaya, 2007c). The articles were a masterstroke in Rathod's efforts as the articles uncritically reflect his unfounded and incorrect accusations. Rathod is quoted as asking: "How can the government allow development on this land? It falls under the coastal regulation zone and has mangroves" (Upadhyaya, 2007a). The paper failed to inform its readers that development is possible under CRZ, only at a lower FSI than normal. Instead the paper submits that the settlements sit in a "no-development land" (Upadhyaya, 2007b). The paper also asserted that Plymouth had only amassed 413 eligible signatures (Upadhyaya, 2007a). Although Plymouth claimed to have collected 3300 signatures, the fact is that by August 2007, the Collector had not yet established the number of eligible signatures collected.

Further, by quoting the Principal Secretary of the Environment Department as saying they did not receive any proposal from Plymouth, the article suggests that there was intent to

circumvent this step in the process, but there is no proof that this was the case, as by 2007 Plymouth was only at the stage of qualifying the residents eligibility and viability of the scheme (Upadhyaya, 2007b). A quote from a member of an NGO demonstrates how the newspaper failed to place information in the proper context, and merely reflected Rathod's self-interested perspective. A member of the NGO CitiSpace is quoted as saying: "It is shocking that any government could plan this type of destruction to mangroves by redefining the tide-line to suit the builder" (Upadhyaya, 2007b). Certainly the HTL was redefined by CESS as it had been inaccurately drawn by the MMRDA and had changed due to siltation by reclamation objects. However, the updated HTL did not benefit Plymouth, as they were ordered by the UDD to plan according to the previously defined HTL in 1998 (albeit one redrawn correctly).

These newspaper articles reflect a logic derived from historical precedents demonstrating overwhelming evidence that developers and politicians form a nexus to illegally develop land in Mumbai. Rathod thus aligned his logic, oriented towards control of the land for profit, with that of the newspaper to great effect. The articles performed this role by creating untenable associations between the government and Plymouth, from which the government then had little option but to withdraw from. The head of the UDD said (mistakenly) that his agency had nothing to do with changing the HTL: "It was done by the Central Government" (Upadhyaya, 2007b). Similarly the Commissioner of the MMRDA said: "We have not submitted any proposal for redevelopment scheme of Cuffe Parade slums. *We are not the competent authority to do it*" (Upadhyaya, 2007c – italics added). As a result of the articles and the backlash that ensued, the MMRDA-SRA cell ejected the Plymouth file from their offices and sent it to the SRA (Interview, Executive Engineer MMRDA-SRA cell, 18/12/09). However, as of January 2010 the SRA had lost 75 percent of the file (Interview, SRA Assistant Engineer, 16/12/09). Further, the scheme was received by the SRA only after receiving the schemes from Darshan and Sneha, thus giving priority to the latter two.

By 2009 there was still some room for Plymouth to manoeuvre in filing for an infrastructure project that might take precedence over the purely residential concerns of the SRA. Further, the leader of a CBO distributing water in Ambedkar Nagar affiliated with

Rathod confided to me that Rathod might be willing to negotiate with Plymouth (Interview, 18/11/09). However, in 2009 Plymouth's assemblage towards an holistic plan for the redevelopment of Block VI followed an absolute line of flight. The logic aligning MHADA's interests with that of Plymouth's (to create excess flats to sell on the open market) was altered and the MHADA component withdrew and plugged into another assemblage. Just before the national election in 2009, a Plymouth employee alleges that a powerful local politician with connections with the national Congress Party wanted to demonstrate development in the area to garner votes. The politician and the political network of the Congress Party allegedly convinced MHADA to redevelop the transit camp and pushed the MMRDA to approve the new plan (Interview, 12/22/09). As of February 2010, construction of temporary housing in the transit camp was progressing to facilitate the new development. The same year MMRDA allegedly told the Director that they could not accept his 2007 plan, as asked for by the Commissioner, because there was insufficient FSI (Interview, 12/22/09).

8.6 Patterns of behaviour

The Slum Rehabilitation Scheme has the potential to vastly change Mumbai's residential landscape by triggering associations between real estate developers and slum dwellers: associations that were few and far between before the SRS was created. The potential outcome of such associations, manifested in the conversion of unhealthy, environmentally questionable squatter settlements into formal buildings, is life affirming for more than merely squatters, but for an entire city. However, after some twelve years of SRS-triggered developer interest in Ganesh Murthy Nagar, the results have only thus far been life destroying for the thousands of residents affected by resultant patterns of behaviour. Additionally, the SRS has been a site attracting illegal behaviour by various government officials. This section, then, explores patterns of behaviour created by associations triggered by the SRS between squatter residents and developers, state bureaucracies and developers, and competition between developers.

8.6.1 Patterns of behaviour between developers and squatter residents

The SRS follows participatory guidelines by prompting slum dwellers to advance a common cause towards better housing by assembling and then choosing a developer to

redevelop their settlement. However, as demonstrated throughout this thesis, various forces such as fragmentation and the stratification of power work against the formation of inclusive social consistencies. Despite the intentions of the SRS, the contingent set of translating logics that implement the schematic in practice can displace desired outcomes. For example, stratified components of the settlement, following a logic of desire for profit, seized upon the SRS guidelines to approach developers and the majority of developers interested in Ganesh Murthy have been drawn to its basin of attraction in this way. The problem, as described earlier in the chapter, is that the local components never had any intention of redeveloping the settlement. They worked to ensure the 70 percent threshold was not reached so that they could contact another developer and earn more money through finder's fees, fees to work in the territory, and fees collected from assembling signatures. Throughout, residents of Ganesh Murthy may be forced to hand over their documents, sign documentation they do not understand, and risk losing not only access to services, but potentially their hutments in the process. Because of this and other abuses of the SRS many residents of Ganesh Murthy are fearful of builders, despise the various social groups that facilitate the trickery, and have become antipathetic to the whole idea of redevelopment in general.

An alternative pattern to squatter-initiated associations with developers is for developers to approach residents. Specifically, developers approach the leaders of powerful CBOs to assemble signatures for them, because these groups already hold power over residents through *powertoni* and the control of basic necessities. Plymouth Constructions Ltd. approached the Seva Sangh, and naturally Darshan Doshi Developers approached its CBO allies in Ganesh Murthy and Ambedkar Nagar. In fact, this practice appears to be widespread as confirmed by the architect for the Sneh scheme, and by a partner in Darshan Doshi (Interviews, 17/12/09 and 19/12/09). This nuance in the squatter-developer relationship is important because here the developer takes the initiative and drives the development towards a trajectory that might not be in the slum dweller's best interests. In the case of Plymouth's efforts it is apparent that the goal was to declare the redevelopment scheme as an infrastructure project to facilitate the displacement of the residents of the settlements. In the case of Darshan it appears that the goal was to reterritorialize the land and hold it until a larger developer offered to buy them out. An Assistant Engineer at the

SRA was convinced that both Sneh and Darshan did not have the resources to develop the site, and the comments of a Darshan partner and the Sneh architect appear to support this view. These two instances do nothing to ameliorate the lives of residents and in fact make life more difficult for them as they had to repeatedly face threats and intimidation during multiple processes of enrolment.

The insertion of developer components in the settlement assemblage has had multiple effects on the residents of Ganesh Murthy. In the first instance, the logics driving developers, many CBOs, and some other consistencies in the settlement are geared towards generating profit. Thus, there is an underlying logic that aligns these components, the integration of which has worked to consolidate the power geometry in the settlement. For example, a powerful resident of Ganesh Murthy who is the leader of a CBO composed of local merchants suggests that the committee members of water distribution CBO conglomerates receive INR 1,200,000-1,400,000 from developers for permission to operate in their area. With committees in Ganesh Murthy numbering approximately ten people in average that is INR 100,000 per committee member. However, in the case of Part II, where the secretary of the Seva Sangh holds most of the power, he gets the “lion’s share” (Interview, resident of Ganesh Murthy, 27/11/09). Money also accrues to muscle gangs that are employed to forcibly collect signatures, and two such gangs are known to have been paid for such services. Beyond money, other forms of power such as touch, or the perception of touch, may accrue to those with associations to developers.

However, the integration of developer components in the settlement assemblage has also reconfigured the power geometry in the settlement to an extent as well. Firstly, because developers often work through existing CBOs to access residents and obtain documents and signatures, there has been a proliferation of CBOs in the settlement to take advantage of the potential to make money as explained in the previous chapter. Secondly, documentation procured from the SRA demonstrates that the Sneh scheme was led at the local level by the secretary of the Seva Sangh, the president of Mahila Pragati Samiti, and leaders of the Singh family. Previously, according to records at the Water Department, antipathy existed between the Seva Sangh and Mahila Pragati Samiti. However, the introduction of the SRS realigned these components towards two related common goals. One goal is the pursuit of

money, which they collected from Sneh. The other goal is the contestation of Rathod's very powerful hold over the settlement through his CBO conglomerate. Interviews with residents, members of the Singh family, and members of the administrative committees of the Seva Sangh and Mahila Pragati Samiti revealed a deep dislike and desire to fight Rathod and his assembled components. The SRS and the mobilization of Rathod's assets towards redevelopment triggered the congealing of these various actors. A key component in this new consistency is the Colaba Back Bay Association, with its water network that extends into Part III, because it localizes a territorial point of friction between the adversaries and creates the potential to derail Darshan Doshi. Figure 8.1 shows the contested territory in a map produced by the SRA to geographically locate the extent of both schemes. Rathod, through the collection of signatures and documents for the Manav Seva Samiti, has acquired the *powertoni* to move towards reterritorializing a part of the settlement under the SRS. The assembling of overlapping *powertoni* via the Colaba Back Bay Association, however, creates the potential to contest Darshan. It remains to be seen how this contestation will manifest itself in the actual realm, but nevertheless, the congealing of actors has done nothing to liberate or improve the lives of regular squatter residents.

Associations between developers and squatters also expose latent fault lines in the settlement's social strata. While the opportunity to redevelop the squatter settlement might initially seem universally appealing, there are many people in the settlement opposed to redevelopment. Renters are generally opposed because they are not eligible for the benefits of the SRS, so there is an underlying tension between owners and renters that may be heightened in the sphere of redevelopment. Merchants along the commercial roads in Ganesh Murthy are also not in favour of redevelopment. One storeowner said that, "those with stores along the road are making good money and do not want to redevelop as their economic livelihood will be threatened" (Interview, storeowner, 13/11/09). Other entrepreneurs who profit from the settlement equally do not want to see it redeveloped. The private water distributor, for example, would lose its business, and some landlords who depend on rent would lose their revenue if the land were redeveloped. Finally, CBOs that profit from residents do not want to redevelop. Not only business owners, entrepreneurs, infrastructure administrators, and social work CBO leaders are against redevelopment.

Many people in the settlement oppose redevelopment, or more specifically the idea of redevelopment, because they fear they will lose their homes and livelihoods.

It appears there is good reason behind this sentiment beyond Plymouth's intention to relocate residents. The SRS is premised upon the developer earning a profit, and if there is no profit to be earned there will be no redevelopment. As such, there is provision within the SRS to allow squatters to be relocated if the sales portion is too small to make the project economically viable (State of Maharashtra, 2009). The SRA does not recognize this problem, however. An Extra Engineer for SRA thinks the slum dweller's fear of being transferred is "baseless." "Their complaints of being moved doesn't sit because they sell their flats once they are given them anyway" (Interview, 16/12/09). Further, the redevelopment process is open to a number of problems and initial plans are constantly changed. For example, SRA documentation of the only operational SRS project in Ward A shows that addition of floors, environmental assessments, slum dweller demands, and other factors have led to many changes, all of which delays the process. Unfortunately, as the MHADA "transit" camp demonstrates, many temporary transit camps have become permanent fixtures in the city. One well-informed resident in the settlement absolutely guarantees that whatever builder might be successful in garnering enough signatures they will not provide the current residents with housing at the Ganesh Murthy site. He expresses the concerns of many residents when he says: "People are digging their own graves by attracting builders to the site as they are sure to be removed" (Interview, 27/11/09).

The SRS has triggered the addition of developer components in Ganesh Murthy and this has reassembled contingent relations and orientations in the settlement assemblage manifesting in social fragmentation, CBO associations, increased tensions, and fears. A plethora of illegal and sometimes violent behaviour stems from these new relations as well. For example, water networks, muscle groups, and CBOs falsify records to attract and fulfil commitments to builders. This was apparent when the Collector examined the 1678 member's signatures submitted who apparently wished to withdraw from the Plymouth scheme and found that only 437 were on the list for verification and of these 171 did not even exist. As examined in Chapter VI, water access is used as a lever to convince people to sign with a certain builder, and many people in the settlement have lost their water

access as a result. Further, as examined in Chapter VII people are ostracized, terrorized, beaten, and in some cases murdered for their resistance to being enrolled in redevelopment schemes. This is not only the case when muscle gangs initiate associations with the developers, but is part and parcel of the logic of redevelopment. One resident of Ganesh Murthy asserts, “all builders pay to show muscle power” (Interview, 27/11/09). Further, a businessperson with intimate knowledge of large-scale slum redevelopment schemes explains the tactics used by large developers this way: “They approach slum dwellers at night with two bags in their hands. One bag is filled with money, the other bag is empty and is for their head if they don’t sign. This is how it needs to be.” Thus, although the SRS has the potential to ameliorate the lives for squatters and land-owning citizens of Mumbai, the translation of this potential through the alignment of developers and local stratified social consistencies governing the practical implementation of the policy has the potential to further fragment an already weak and divided squatter society and produce life-destroying conditions that may endure for many years.

8.6.2 Patterns of behaviour between builders and the State

As Chapter IV demonstrates, the relationship between the State and developers has been an enduring and seminal component in the evolution of Mumbai. Although the logics dictating the development of land for each set of actors are different, there is significant overlap in their desire to profit from the process. Because of this history, the SRS cannot be considered to cause illegal behaviour, however, the above examination demonstrates the emergence of questionable associations and curious cleavages surrounding SRS implementation, and points to the necessity of reorganizing this policy of providing formal housing for Mumbai’s poor.

In the process of engaging with the SRS, Plymouth Constructions assembled several government agencies in its quest to redevelop Block VI. First among those enrolled by the developer was MHADA, which was a key association for Plymouth as MHADA thereafter lead the enrolment of subsequent State agencies. MHADA had been charged with redeveloping their aging transit camps under the Sukthankar Committee with the idea that one-story buildings be replaced by multiple storied buildings with the excess units being sold on the market to generate revenue. Further, their site in the BBRSS had apparently been

selected for redevelopment (Letter, MHADA to MMRDA, 02/07/04). With the desires of MHADA and Plymouth aligned, a productive association was formed such that it was MHADA that pushed for the rezoning not only of their own land from “transit camp” to residential, but also from “parade ground” to “residential,” zoning the two slums as residential and diminishing the width of Prakash Pethe Marg. This requested was made as “it would be desirable to consider the development of the entire slum around MHADA’s transit camp”: curiously and ambitiously beyond the immediate needs of MHADA (Letter, MHADA to MMRDA, 02/06/04: 3). Also curious is that the request was made not by a project manager or someone further down the bureaucratic hierarchy, but by the CEO of MHADA. No mention of Plymouth was made, but the letter was produced by Plymouth in their defence of the PIL launched by Rathod’s associates.

The MHADA-Plymouth association was productive. The MMRDA changed the zoning of the transit camp and the parade ground. This rezoning is illegal according to CRZ regulations, which prohibit zoning changes within areas affected by tidal motions. Perhaps this is why the zoning changes are not reflected by the current MMRDA Development Plan. Also spurious is the MMRDA’s initial willingness to act as the competent SRA for the redevelopment scheme. The MMRDA would legally be the SRA if the project were declared a vital public project under the MUTP or MUIP, as they claimed in correspondence with the Deputy Collector in Colaba. However, there is no evidence supporting the claim that the redevelopment was declared as such. It appears that this legislation was invoked merely to take control of the project, and this argument is substantiated by the Commissioner of the MMRDA who stated unequivocally: “We are not the competent authority to do it” (Upadhyaya, 2007c). The person who initially made these claims with the Deputy Collector, and who facilitated the changing of zoning is the Executive Engineer, SRA Cell, MMRDA. When I interviewed the Executive Engineer in his office about Plymouth he was decisively curt and defensive. He said that he had informed Plymouth that their request to define the scheme as an infrastructure project would have to be assessed by the MMRDA (via a survey and through interviews with squatter residents) and that he informed the developer that the proposal did not go through in 2005, at which point he said he transferred all the documents to the SRA (Interview, 18/12/09). These statements do not add up with his letter to the Deputy Collector where he

asserted in no unspecific terms that the MMRDA was the competent SRA because it was an infrastructure project. Further, an Assistant Engineer at the SRA reports that he only received the Plymouth file from the MMRDA in October 2009, four years after they had allegedly been sent: and only 25% of the file at that.

Another questionable association between Plymouth and a State agency exists with the Urban Development Department via MHADA. MHADA had requested UDD to reassess the high tide line based on a transcription error committed by MMRDA. This request was forwarded from the UDD to the Centre for Earth Science Studies in a letter dated June 2, 2005, wherein UDD writes: “As directed, you are hereby requested to carry out fresh demarcation in 1:5000 scale plan and inform this department at an earliest” (Letter, UDD to CESS, 02/06/05). The transactions appear to be straightforward, which begs the question why the head of the UDD denied that his agency had anything to do with it, and went so far as to misdirect attention to the central government (Upadhyaya, 2007c).

From the evidence in this section there can be little doubt that extralegal associations between developers and State bureaucracies and officials continue to exist in Mumbai. A high-profile example of such collusion came in 2010 when the Chief Minister of Maharashtra Ashok Chavan was asked to resign his post by Congress Party officials because three of his relatives received condominiums in a corruption-riddled real estate project (which just happened to be located adjacent to Ganesh Murthy Nagar) (Daily News and Analysis, 2010). In light of the frequency and range of such collusion it is tempting to suggest that costs of such relationships make redevelopment projects more expensive. Further, and in relation to this, State and local government bureaucracies in Mumbai are dense, inefficient, and often wanting for motivation to engage in problem solving. This density and desire to deflect responsibility occurred in the case of Plymouth being shunted from one agency to the next for an initial opening into the redevelopment project, and this type of obfuscation occurred several times in my attempts to get information. Successfully cutting through this bureaucracy takes power and money. As one resident of Ganesh Murthy asserts, redeveloping slums requires “force, money, political pressure, and takes *johl* [bribes]” (Interview, 12/9/09).

8.6.3 Competition between developers

Squatter residents, local CBOs, and State officials and institutions are all actors that were assembled by various developers under the auspices of SRS projects. Additionally, however, associations between competing developers may emerge. The SRS creates the potential to reterritorialize the land under legal auspices, which essentially adds another layer of value onto the land. Squatter residences have value, and they are rented out and sold according to market prices. This is true for legal, notified squatter residences, and illegal ones as well. This is one layer of value. However, when the potential exists to assemble this land and construct legal edifices on it the value of the land can increase greatly, which has led to a set of tensions in the settlement.

The potential value of the land has attracted ten developers to Ganesh Murthy, who have driven up the price of land with time. Some of these developers may use the SRS to develop the land, such as (possibly) Plymouth and Saporji Pallanji. Others, however, use the SRS to reterritorialize the land in order to profit from larger developers willing to pay them for it. This is almost certainly the case with Sneh and Darshan. As explained by the Assistant Engineer at the SRA, it takes a lot of resources to redevelop a squatter settlement, and smaller firms such as Sneh and Darshan simply do not have these resources. Further, as mentioned previously, Sneh did not even bother to complete the necessary forms, either because they were in a rush to submit, or because they thought it would not be necessary in any case. Other firms seem to make a business of this kind of behaviour. Shree Lekhe Developers filed a scheme to develop Ambedkar Nagar in October 2009, and have filed three other schemes in Ward A with the SRA previous to this. They were preparing another redevelopment scheme proposal in the area when I visited their makeshift offices in the Fort area of South Mumbai in December 2009. In the two years they have been operational they have not undertaken any work beyond submitting proposals to the SRS, and the organization does not appear to have the resources to develop a large tract of land.

Competition between developers for the right to develop squatter settlements under the SRS has consequences that hurt residents in many ways. As one resident put it: “Bring one builder. Do the work properly and do it for the people. Otherwise don’t bring anyone” (Interview, resident of Ganesh Murthy, 15/11/09). Firstly, competition between developers

drives up the cost of the land, to the point where moving to a slum may no longer be affordable for some people. The cost of purchasing a hutment in Ganesh Murthy Part I in the 1990s was reportedly INR 100,000 and in Parts II and III new hutments could be purchased for a fraction of this cost, or sometimes for nothing but the cost of materials if one was willing and able to capture the land. In 2010 the cost of a hutment in Part I is INR 1,400,000: a 14-fold increase. Residents of Ganesh Murthy are aware that luxury condominiums being constructed next to the BEST bus depot are being sold for INR 11,000,000. So, even if lower-cost housing produced by SRS yields units that sell for INR 5,000,000 an INR 1,400,000 investment will produce a 3.5-fold yield. This simple arithmetic has driven up the price of land and residences in Ganesh Murthy to the point where accommodation has become unaffordable, which is unfortunate for expanding families that wish to stay together.

Increased competition has also driven up costs for the developer, which will likely be passed on to the eventual residents of the new buildings (Nijman, 2008). Developers offer incentives for signing with them in Ganesh Murthy. Signing prices have increased from a couple hundred rupees to thousands of rupees, televisions, and include finder's fees for those able to enrol other residents in the developer's network. Developers also appear to ameliorate their residential offerings, but this may be just a sham. Competition to develop Dharavi has led to increased carpet area above and beyond that demanded by the SRS, and now residents in Ganesh Murthy are asking for similar terms. This would be a positive development for residents except that developers are doing everything they can to promise more but deliver less. Communal space and even the area of balconies may be factored in to the floor space equation, which accomplishes nothing for squatter residents.

Competition between developers can become destructive and costly as well, as demonstrated in the ongoing battle between Darshan and Plymouth. Rathod has contested Plymouth's bid to redevelop Ganesh Murthy and Ambedkar Nagar, not for the good of the residents or the environment as he has espoused on several occasions (Upadhyaya, 2007c; Interview, Rathod, 05/01/10). Instead, Rathod's intent was to delay and derail Plymouth until his own firm, Darshan, was able to file its own scheme with the SRS. The Collector's office was thus forced to hand deliver letters and convene a hearing, all of which takes up

public resources. Similarly the court cases brought before the Bombay High Court, and the Supreme Court of India utilize public resources.

The most harmful outcome of this competition between developers falls upon the residents of squatter settlements. Through repeated demands for their signatures, residents are confronted with intimidating tactics involving physical threats, curtailment of infrastructure access, and more. Further, residents may be caught in the crossfire of competing developers, as was the case with Darshan and Plymouth. Residents were requested to go to court, write letters, and otherwise act on behalf of the developer. All of these activities take time, and place the resident in awkward positions that contribute to a sense of fear and vulnerability.

8.7 Conclusion

This chapter examines the SRS and related components contributing to Ganesh Murthy as a settlement assemblage, and thus contributes to a more holistic account of the settlement and its potential in the future. The SRS is a policy intended to redevelop slums through participatory guidelines and market mechanisms. The former intends for slum dwellers to participate in the process, making it more responsible and responsive to their needs. The latter is intended to decrease costs to the State and engage market efficiencies. Diverse interests and their respective operating logics drive the policy. The outcome is theoretically positive for all stakeholders: squatter residents achieve new housing, developers realize profits, and the government may be credited with reducing slums and facilitating formal housing.

The examination of the implementation of the SRS in Ganesh Murthy, however, reveals a far more convoluted and erosive process, which results from the translation of the policy through various components acting in accordance to their own logic, which reconfigures the policy trajectory along emergent lines. The participatory component of the SRS is actually captured by stratified CBO conglomerates and their associates that pursue a profit-motivated logic, not a logic of common beneficence as presumed by the policy. Even if democratically oriented social consistencies emerged to approach a developer, how could they assemble 70 percent of the settlement to agree to the plan? Powerful factions within the settlement would demand to be included, which would reassemble the consistency and

alter the trajectory. On the level of slum dweller participation the policy cannot be effective outside of a space not yet inhabited by stratified levels of power. Do these spaces even exist?

Developers, driven by profit, may well be unwilling to work with weaker sections of society and prefer powerful local partners that can assemble signatures. The alignment of desire for profit also enrolls State employees and politicians manifesting in behaviour that often contradicts their ostensible purpose of serving the public for the greater good. Profit motivated developers will take measures to increase their profits, whether through purchasing hutments, purchasing new flats and reselling them on the market, and relocating residents, all of which contradicts the aims of the policy. Further, competition between developers may not result in increased efficiencies, but in unethical and underhanded tactics that exact a price from society at large, and from slum dwellers in particular.

Chapter IX

Conclusion

9.1 Reflections on outcomes

This thesis aims to understand how inequalities and injustice emerge and continue to evolve in Ganesh Murthy Nagar. To do so it examines the emergence, organization, and socio-spatial morphology of the settlement to better understand how various indigenous and exogenous components of the settlement assemblage align to produce emergent relationships and sociospatial configurations. The need for this research is based on the global proliferation of slums and their attendant social, economic, spatial, and political inequalities. Concurrently, however, slums may demonstrate many positive attributes, and the thesis strives to recognize these factors and build upon them towards developing more sustainable communities. To this extent I have been mindful of emergent conditions that contribute either to a slum of hope, where life-affirming relationships reduce vulnerabilities and facilitate improved livelihood conditions, or to a slum of despair, where life-destroying relationships erode self determination and negatively affect possibilities for improved livelihoods.

To address the general aim of the thesis I follow three main investigative lines of inquiry. The first is to identify components of the settlement that facilitate its existence as a residential enclave and trace their emergence and evolution in time. The second line of inquiry I follow is to map the constitutive associations inherent in the ordering of these components both in the settlement and beyond its borders to State, civil society, and private actors. The third line of inquiry seeks to determine how these components interact with each other to determine their constraining and enabling effects. To investigate these lines of inquiry the thesis adopts a methodological strategy that addresses three perspectives from which data is mined: an ethnographic political perspective in which local relations of power unfold; an historical perspective through which the settlement and its functional components emerged and evolved; and a developmental perspective which stems from outside the settlement, yet which plays an important role in the settlement's existence. The aims of the thesis, the lines of inquiry, and the methodological strategies adopted are thus at once broad and deep, and this presented opportunities and challenges for the intellectual representation of the settlement's dynamics and for the collection of data that informs the analysis.

The choice of assemblage theory is well suited to represent and address the broad dynamics inherent in the settlement and within the larger context of the city. From an ethnological perspective the existence of slum dwellers is one of assembling. At a basic level, materials are assembled to create land and build hutments. At a more politically overt level, materials, signatures, funding, and permissions are gathered to procure infrastructure and other municipal services. So, from this basic standpoint the gathering process inherent in assemblage theory has a direct convergence with the reality of the settlement's inhabitants.

Further, the importance of historical precedent and processual emergence inherent to assemblage theory melds well with the evolution of the settlement over forty years and provides theoretical space to incorporate these ideas into the present functioning of the settlement. The historical perspective of the study, which investigates and combines various processes contributing to the settlement's evolution, demonstrates moments of positive emergence but also identifies moments when processes become corrupted. Generally, the historical evolution of the settlement shows that policies enacted towards the ostensible betterment of slums and their inhabitants ultimately contributed to negative outcomes resulting in a fragmented society with limited capacity to reverse its trajectory towards despair.

Understanding the city as an assemblage of assemblages provides a potent model for representing and understanding the settlement within a larger developmental context. Political assemblages, NGO assemblages, developer assemblages, and settlement assemblages are each composed of diverse components that are gathered together in a dynamic hierarchy and made to operate according to the convergence of different logics. Components of each of these assemblages and the logics that drive them plug into and plug out of other assemblages, thus gathering, holding stable, rupturing, and reassembling a given assembly.

There is a distinct sense of fluidity attendant to social groupings and the built environment at Ganesh Murthy Nagar, and assemblage theory is well attuned to this flux. The theory is oriented towards emergent conditions in an evolving context and this contributes to the representation of a nomadic settlement that is not subject to the same rigid regulations and their enforcement over sociospatial processes as compared to more State controlled parts of

the city. That being said, the study demonstrates how State and nomadic tendencies migrated; resulting in emergent patterns of hierarchy and centralization of power in the nomadic settlement, and illicit or informal tendencies in policies, politics, politicians, and bureaucracies. These informal/formal mixtures have been investigated before, perhaps most adroitly in an Indian context by Roy (2009) and her examination of informal tendencies at the Bangalore urban planning department (see also Benjamin, 2008; 2005). This study adds to this line of inquiry and advances it further by connecting nomadic and State tendencies and exposing the transference of tendencies throughout related assemblages. At Ganesh Murthy this potent mixture contributed to the conditions that pushed the settlement towards a slum of despair by giving rise to a liminal space where the war machine, a metaphorical term for an assembly that aggresses upon the State, becomes a literal force that is turned upon its own people.

The networked and rhizomatic character of assemblage theory, as employed in the thesis, incorporates many of the essential components of the settlement in a holistic fashion and demonstrates their interconnections and emergent outcomes. It shows that land, water, hutments, alleys, infrastructure, policies, politicians, slum dwellers, real estate developers, muscle gangs, NGOs, CBOs, bureaucracies, State employees and others are ambiguously and irreconcilably entangled. The empirical and intensive orientation of the investigation into the processes that connect, constrain, and enable these actors has contributed to minimizing reductionist and over-generalized pitfalls.

The opportunities to understand a squatter settlement from the perspective of assemblage theory are thus considerable because of the open and relational nature of the analysis. However, this also poses certain challenges within the time and cost limitations of doctoral research. Figuring out which assemblages, groupings, or trajectories are most important to the settlement, rather than predefining these terms takes a good measure of faith, patience, and time. Further, because the interrelations of assemblages in the city are nearly limitless, it is challenging to know where to draw investigative boundaries. I would have liked to pursue certain investigative trajectories further like the gendered dimension of the settlement, muscle gang consistencies, and political and NGO assemblages more thoroughly.

The pursuit of these investigative trajectories, however, impinges on the methodological strategies that I employ to gather data. Deciding to not predefine specific components for research (e.g. infrastructure, political affiliations, etc.) as far as possible within the limits of my own being was a choice I made based on Latour's (2005) insistence to allow actors to demonstrate what is or is not important in an assemblage. The socioeconomic survey was paramount in helping to specify which components of the settlement were important to residents and therefore which components the thesis should concentrate on. From there, I pursued another methodological maxim of Latour's, which is to follow the actor along a performative chain of action that ultimately results in the functional component in question. Assemblage theory methodology is based on fine-grained empirical study involving a deep descriptive narrative of how things come together. This has important implications in the rhizomatic nature of the fieldwork I pursued, which involved sitting in on meetings of gangsters, visiting far-flung districts all over the city, meeting with important State officials, and plumbing the depths of many archives, besides spending a lot of time in the settlement learning from residents through interviews and participant observation. The nature of this methodological strategy is wide open, and again allows for opportunities, but creates challenges as well.

Overall, in attempting to allow residents of the slum to define their reality to the greatest extent possible is an overwhelmingly positive aspect of the strategy because it does not immediately limit or pigeonhole observations or concerns into predefined categories, which may not adequately represent the local situation. On the other hand, there are challenges with pursuing this strategy, and I would like to relay three of these. Although I had engaged in a broad range of readings about slums in general and slums in Mumbai in particular before commencing field studies, while "following the actor" I encountered many other aspects of slums that I was not adequately conversant with. The limited nature of my knowledge on these issues required long hours of reading every night to better understand the dynamics involved in a particular area of enquiry to allow for a more substantial engagement with these issues the next day. Thus, a more narrowly defined and targeted research agenda would facilitate fieldwork, but it may also mitigate against potentially discovering and representing important aspects of reality. This relates to a second associated challenge that manifested as investigative dead-ends. After discovering a line of

performative ordering, and pursuing it to the greatest extent possible with various kinds of research, occasionally the investigate trail would end abruptly, with traces no longer apparent, or would simply end without bringing much more to bear on the larger aims of the investigation. This is a necessary component of following the actor, but it can be discouraging and is time consuming. Finally, in following the actor, I made decisions that led to my feeling uncomfortable in some situations. There are a lot of illegal activities that take place in Ganesh Murthy, and in order to understand processes involving service delivery, redevelopment, or local enforcement of regulations for example, it is necessary to investigate illegal or informal elements. Safety and security are paramount, but occasionally following the actor brings a researcher into contact with insalubrious actors that demand a heightened sense of caution.

Thus, to conclude my reflections on the outcomes of this research, I feel the thesis has been by and large successful in investigating the reality of the settlement's functioning and understanding how potential realities may have been actualized to produce a more equitable and just residential enclave. The application of assemblage theory for this research is positive and presents a promising way to better understand the functioning of slums within the context of other urban assemblages and their co-constitution. However, there are challenges associated with the theory and its application concerning the breadth and depth of analysis, and although methodological strategies can mitigate some of these challenges, there are certain pitfalls to be avoided here as well.

9.2 Summation of key findings

Mumbai has been in existence for centuries, and from the colonial period onwards, the driving motivation behind the city's development has been a desire for land. The alignment of this desire in governance regimes and business interests forged the city's present peninsular form from seven distinct islands. Mumbai's urban planning assemblage, dominated by politicians, state and municipal bureaucracies, and business interests, pursued the reclamation of land in the Back Bay for over a century, despite the best interests of the city and her residents. However, various other components plugging into the planning assemblage, including NGOs, the Bombay High Court, citizens and central government bureaucracies, each with their own logic governing their actions, were able to delay and

finally derail the complete reclamation of the bay. The assemblage of actors ordering the city's urban planning, together with the bay's built components and natural processes created not land, but its potential in the form of a marshy mangrove forest from which Ganesh Murthy ultimately emerged.

The potential for land at Ganesh Murthy Nagar in the 1970s coincided with a city system increasingly far from equilibrium between demand and supply of formal housing. Migrants were drawn into the incipient settlement's basin of attraction by employment at Cuffe Parade and Navy Nagar and motivated by the potential for land held out by what was then a marsh. Currently, the settlement is composed mainly of these migrants and their families that hail from three countries and eighteen different states in India. This regional heterogeneity is mirrored in the religious, employment, and economic diversity in the settlement. The diversity of residents in terms of regional origin, occupation, and salary, and the absence of strong familial connections established by the socioeconomic survey points to a loose and tentative meshwork of informal consistencies, rather than any kind of unifying thematic or identity.

These residents contributed to three intensive processes that acted as the engine of the settlement's growth and its morphological evolution: the processes of moving to the marsh, reclaiming land there, and building hutments. These nomadic processes, occurring outside the norms of the State apparatus, informed the logic behind the settlement's existence, which is oriented towards the self-organization and creation of affordable lodging for migrants coming into the city in search of better opportunities to improve livelihoods. Under this logic the nomadic settlement was successful not only in creating a sense of community amongst residents, but also, through the distributed, heterarchical, and redundant structure of this engine, land was successfully reclaimed that housed increasing numbers of people where government and private actors failed in this endeavour. However, despite initial thoughts to the contrary, as reflected by the hypothesis, emergent relationships between the State and the nomadic settlement incrementally shifted this slum of hope to a slum of despair.

It is apparent that this shift was triggered by changes to the logic of the State in the 1970s from one that sought to negate slums through demolition, to one that was more tolerant of

slums as possible housing solutions. The changing logic of the State manifested in programmes to provide water at Ganesh Murthy via four elementary standpipes. Later, the State again altered its logic for providing services to slums from a supply-driven model to a demand-driven paradigm that incorporated participatory components. New policies adopted by the State triggered the formation of social consistencies in Ganesh Murthy to procure water and other services, which altered the operating logic of the settlement itself.

The nomadic settlement, which had largely existed outside of the State apparatus, being neither planned, sanctioned, or regulated, thus became partially reterritorialized under the State, which manifested in the segmentation of the settlement into Part I. The mixing of State and nomadic tendencies also altered the logic of the social space of the settlement towards a more hierarchical society with administrators of CBOs gaining centralized power derived from the power of attorney signed over by residents and through influence with local politicians. As the nomadic settlement continued to expand geographically and demographically the State incrementally incorporated portions of it resulting in Part II, Part III, and Part III Backside, and concurrently triggered more local social consistencies with hierarchical effects on social organization.

The logic governing the acquisition of water (and later other services and amenities), and the processes involved in gaining the service required the incorporation of another component in the settlement assemblage: the politician. Instead of directing the provision of services to slums through a locally removed and more objective authority, it was directed through local politicians that would fund projects and steer them through the State apparatus. The logic governing Mumbai's politicians, to acquire and maintain votes and make money, came to be aligned with the profit-oriented logic governing the administrators of CBOs in charge of water distribution. Both administrators and politicians relied on each other to meet their needs. Further, the mixing of State and nomadic tendencies affected the positionality of the politician such that they sought an existence beyond the strictures of the State.

The insertion of the politician component into the slum assemblage and the subsequent alignment of the politician's logic with that of CBO administrators facilitated a line of flight from the State-designed water distribution model. The new model captured the

potential of water in suction tanks, thus transferring the power over water from the State to the administrator. The new model also compliments the nomadic tendencies of the settlement in the sense of escaping State regulation through evading water meters, procuring more water from the system through booster pumps, and more fluidly moving out over the territory through private connections and incorporating an increased customer base. Nomadic water distribution systems facilitated the growth of the settlement by providing more water to more people, which concurrently generated more revenue and consolidated the power of the CBO administrators. Such people could now pay to enrol other components such as State employees in charge of regulation and enforcement, and muscle gangs that had previously maintained a more nomadic existence outside the scope of infrastructural components of the settlement.

The confluence of politicians and administrators within the context of State efforts to capture parts of the settlement all contributed to the ongoing fragmentation of society, which, because of its diversity, never benefited from a unifying logic in the first place. What emerged from the alignment of politicians and administrators, operating in an increasingly fragmented social milieu, is a liminal space that is composed of residents and State elements, but which equally isolates these actors from each other. Together with muscle gangs, a veritable war machine emerged to dominate this space of inequality and injustice, where residents pay too much for too little water, have little recourse to redress their situation, and are confined in their everyday actions by fear and distrust. Politicians, administrators, State employees, and muscle gangs all work together to hold stable this liminal space because it is mutually beneficial. Further, because State actors and residents are isolated from each other there is very little potential for an ameliorated space to emerge.

Further, the liminal space carved out by politicians, administrators, State employees, and muscle gangs acts as a strong basin of attraction. New CBOs that emerge to procure or provide access to other services are either sent on a line of flight by the war machine or are reassembled through their incorporation in CBO conglomerates. Also, new programs initiated by the State to improve or introduce new services are steered towards CBO conglomerates by their political allies. Even the Slum Sanitation Project (SSP), that purposefully circumvented local politicians and was knowledgeable of certain power

relations in the settlement, could not prevent the capture of toilets by one of the CBO conglomerates. The SSP at Ganesh Murthy, organized by the World Bank and operationalized by SPARC, follows a logic of demand-driven participatory practice towards mobilizing communities and creating a sense of community ownership. However, a CBO conglomerate was able to use this logic to create the antithesis of the desired outcome.

The most recent components to plug into Ganesh Murthy are developer assemblages. These components were introduced to the settlement through the Slum Rehabilitation Scheme (SRS) that is founded upon progressive thinking to reduce the proliferation of slums, neoliberal logics of introducing market mechanisms to devolve the role of the State, and by participatory logic. The developer assemblage, driven by profit, is not subject to the policy logic, and therefore developers actively try to limit competition, invert participatory guidelines to infiltrate settlements, and employ local war machines to collect signatures. In the case of Ganesh Murthy, where developer assemblages, CBO conglomerates, and muscle gang components align in the pursuit of profit, little progress has been made in the advancement towards stated policy goals. Instead, more fear, more violence, and more fragmentation of society has ensued.

The analysis of Ganesh Murthy's evolution over forty years demonstrates that there were many opportunities for potentially positive outcomes to emerge from State and multilateral initiatives to improve the quality of life in the settlement in terms of providing access to services and building communal assets such as a sense of ownership over facilities, educational benefits from participatory efforts, and the mobilization of communal identity and unity. However, weaknesses with policies, their translation into reality, together with the powerful mixture of State and nomadic tendencies, conspired to profanely invert the positive potential of interventions. The emergent result of these factors is a slum of despair with unequal and unjust relations, pervasive feelings of fear, and a fragmented populace with seemingly little capacity to marshal a counter force against the nomadic war machine. Given this situation, the following section examines the implications for slum policy in Mumbai and its implementation.

9.3 Implications for slum policy and implementation

The analytical dimension of assemblage theory is useful to understand policy creation and implementation, because both processes may usefully be conceived as the assembling of components wherein the alignment of desire and logic produces emergent trajectories that may have the force to reorient intended purposes. If desire and logics governing the actions of actors in an assemblage are sufficiently known, properly assessed, and accounted for it is my contention that emergent relations may be, to a certain extent, planned for. This knowledge may thereafter be marshalled to adjust components towards better targeting intended outcomes.

The first part of this assessment is to analyze the desire and logic of individual actors involved in policy making. For example, the state government of Maharashtra, an important stakeholder in all slum-related policies, adopts a position of being pro slum dwellers with public notices like: “Slums have constituted an integral part of Mumbai’s cityscape for several decades... It is imperative to enhance their standard of living” (SRA web site, <http://www.sra.gov.in/>: accessed June 13, 2011). However, recent comments by the former Chief Minister of Maharashtra that slums stand in the way of development, together with increased demolitions of slums, point to other priorities. These priorities have been shown to favour economic development at the expense of slum dwellers.

Another important actor in Mumbai’s development agenda is the World Bank, which is currently funding many major infrastructure projects in the city, and was the key sponsor of several projects for slums such as the SSP and earlier attempts to integrate infrastructural arrangements. Through these programmes the World Bank has demonstrated its pro-slum dweller credentials, but goals to improve the lives of slum dwellers may be mitigated by a well intentioned but sometimes ill-fitting need to incorporate participatory elements and by neoliberal economic paradigms that reduce the role of government in favour of market and cost recovery mechanisms. It is important to realize that communities are not homogenous and policies must be flexible enough to accommodate emergent patterns. In the case of the SSP there should have been latitude to consider better-suited sanitary solutions for Ganesh Murthy Nagar such as the introduction of individual domestic toilets.

Other actors that are a part of the slum development dialogue and increasingly involved in policy-making decisions are local NGOs and civil society organizations. Rights-based development organizations function primarily to mobilize communities and reduce their vulnerability. However, the logic informing how this may be accomplished is changing within an evolving developmental landscape, and this can prompt changes in desire. NGOs must consider not only their primary constituents, but also their ability to attract funding, maintain their visibility and place with the developmental landscape and act within the *realpolitik* of contemporary urban planning. The sometimes-conflicting desires of NGOs can result in lost opportunities to fulfil their primary function.

Another policy making actor examined in the thesis are real estate developers that are motivated by profit that operate according to a logic that employs any means possible to acquire land inexpensively and sell as much of it as possible at the highest price possible. Finally, politicians are ostensibly elected to represent their constituents towards the formation of a more equitable, just, and democratic society, but the desire of the politician may also be tainted with a desire for re-election and a desire to make money. The logic informing the latter two desires has been shown to generally trump the logic towards the desires of constituents, thus manifesting in relationships with slum dwellers characterized by dependency and domination.

Within this set of policy making actors, potential alignments of desire and logic may be skewed away from genuine efforts to improve the lives of slum dwellers. Historically and into the present day urban policy in Mumbai is aligned along the desire of government and private developers to bring more land into the formal market for economic development. This is the overwhelmingly dominant trajectory of urban planning policy from early manifestations of land reclamation, to the Back Bay reclamation fiasco, to the current policy of slum redevelopment. What is needed to align the many disparate stakeholders in Mumbai's development assemblage is strong leadership that has heretofore been absent in the city. Strong leadership must identify potential emergent relationships and leverage these to advance a fair and just vision that is mutually beneficial and fosters common understanding and cooperation. This is a tall task, but one that is realizable, as demonstrated by the successful combination of State, market, and civil society

organizations in the creation of toilet blocks in Pune led by the former Municipal Commissioner of Pune Ratnakar Gaikwad and SPARC (Burra, 2001).

An assemblage analysis can equally be brought to bear on the implementation of policies. Policy is translated into reality by diverse actors that come together to perform their roles according to overt and covert desires and logics. The emergent relations that form from the alignment of desire can greatly affect how policies are realized locally. Policies aimed at reducing slum dweller vulnerability must clearly find a way of better integrating local politicians with infrastructure delivery programs. Current slum infrastructure policy implementation guidelines do not necessarily have arms length funding mechanisms and therefore require slum dwellers to form relations of dependency with local politicians. This, of course, is aligned with the desires and logic of politicians to maintain office and make money, but it does injustice to slum dwellers and facilitates hierarchies in slums that further erodes democratic principles. That said, representatives of the local populace must also be part of the process. Here there is clearly tension between maintaining local self-governance and democratic ideals, and the possibility of their capture and abuse.

In terms of implementing participatory programmes, the thesis has demonstrated that every such programme in Ganesh Murthy has failed to meet broad goals of community mobilization and increased responsibility. Participatory programmes have triggered State-oriented centralization of power and social hierarchies, and together with politician interference, have facilitated the emergence of a defensible liminal space that does injustice to both the State and slum dwellers. The participation of local actors is theoretically a positive element of policy frameworks, but to be successful, participatory interventions must be accompanied by a robust understanding of the local power geometry, and a significant commitment to early and ongoing community mobilization to create and maintain consensus. Where SPARC was able to mobilize communities through their partners in the Alliance, the SSP toilet blocks were relatively successful. In the case of Ganesh Murthy, however, where the NGO had few connections with the settlement, their lack of knowledge and inability to mobilize the community, only reinforced existing patterns of domination.

Finally, in terms of slum redevelopment, with the potential to realize large profits from redeveloping Ganesh Murthy, developers may do whatever they can to gain control over land through the SRS. This includes enrolling powerful State actors to rezone territories, alter tide lines, and define projects so as to remove or limit the amount of slum dwellers to be relocated on site. Developers will also enrol community leaders and muscle gangs to force the consent of slum dwellers. The alignment of desire and power in the realization of slum rehabilitation schemes at Ganesh Murthy has been shown to have had a disastrous affect on the community, and on the lives of individual slum dwellers.

Perhaps, instead of disregarding the potentially emergent trajectories that result from the alignment of desire, power, and logic, these elements may be conceived to constitute the potential that policy implementation should be designed towards. For example, the entrepreneurial logic of CBO administrators could potentially be marshalled into market-based water distribution schemes. Alternatively, unwanted patterns of behaviour that emerge from policies must be avoided. For example, slum dwellers reliance on politicians for moving projects through a dense and unresponsive bureaucracies signals the necessity for improvement or arms-length administrative mechanisms.

To better frame policies and improve their implementation requires time and effort to develop extensive knowledge of specific localities. More than this however, it takes strong leadership with the political will to improve the lives of slum dwellers and the land they live on, which is not sufficiently in evidence. Instead, slums like Ganesh Murthy Nagar are reminiscent of Aravind Adiga's rooster coops. For Adiga in his dark novel, *White Tiger*, the rooster coop is a pen that limits the actions of its inhabitants, preventing them from reaching whatever potential they may have, without the necessity of outside regulatory surveillance. Instead, "the coop is guarded from the inside" (Adiga, 2008, 194). Ganesh Murthy is similarly a coop, with a handful of residents conspiring with outside actors to prevent the population at large from claiming their basic rights of equality, justice, and democratic choice. Residents of Ganesh Murthy live with fear, violence, and life-destroying relationships in a slum of despair. They need better relationships with State and corporate partners to design and implement policies to regain their hope.

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Appendices

Appendix A

Questionnaire for Socioeconomic Survey

I am a university student from London, England conducting research on informal settlements. This questionnaire is designed to understand living conditions in Ganesh Murthi Nagar. I am not affiliated with any governmental body, nor with any NGO. The questionnaire is confidential and anonymous. It will not be shared with anyone. Do I have your consent to proceed with the questionnaire? _____ Signed. Date:

Location:

Social Questions

1. What religion are you and your family?
2. What caste are you and your family?
3. Your family is from which region in India?
4. How many people are in your household?
5. How long have you been living in the settlement?
6. Where did you live before?
7. Why did you move to Ganesh Murthi?
8. Who are the main people you rely on in times of difficulty?

Economic Questions

9. How many people work in the household?
10. Where do they physically work?
11. Doing what?
12. What kind of house is it³⁶ – Pucca, Semi-pucca, kutcha?
13. Is there electricity?
14. What is main source of drinking water?
15. Does house have a toilet?

Network Follow Up Questions

³⁶ Pucca: Flooring, roof & walls should be cemented

Semi-Pucca: Temporary roofs: could be with cemented floor & wall or any one of it.

Kutcha: Plastic roof, plastic walls, on stilts with wood floorboards.

16. Do you belong to a CBO?
17. Do you belong to a political party?
18. Are you active in temple/church/mosque activities?
19. Do you like living in Ganesh Murthi?
20. Why or why not?
21. Would you mind if I came back and did a more extensive interview?

Appendix B

Interview Guide for Semi-Structured Interviews with Ganesh Murthi Residents

I am a university student from London, England conducting research on informal settlements. This questionnaire is designed to understand living conditions in Ganesh Murthi Nagar. I am not affiliated with any governmental body, nor with any NGO. The questionnaire is confidential and anonymous. It will not be shared with anyone. Do I have your consent to proceed with the questionnaire? _____ Signed. Date:

Location:

Personal questions about Ganesh Murthi

1. Do you like living in GM?
2. What do you like about it?
3. What do you dislike about it?
4. Where would you prefer to live?
5. Do you feel frightened that you will have to leave someday?
6. Do you know anyone who has had their house demolished here?
7. Where do you think threats to the settlement come from?
8. What can be done/what is done to fend off these threats?

Political questions about GM

9. Do you own your house?
10. Could you sell your house if you wanted?
11. Do you pay rent?
12. Do you pay taxes?
13. How are decision made to fix infrastructure?
14. What happens when electricity stops working?
15. Where does the money come from to fix infrastructure?
16. Does anyone make money from residents living here?

17. Are there any thefts in GM?
18. Is it safe?
19. Why is it safe or not safe?

Geographical questions about GM

20. How is GM different from other settlements in the area?
21. How are these settlements different from others to the north of Colaba?
22. Are there any connections between the settlements in Colaba?
23. How is the relationship between GM and Geeta Nagar and Ambedkar Nagar?
24. What are those two nagars like?
25. How does it affect the settlement to be right beside Navy Nagar?
26. Can you use their resources? Are there any benefits? Are their drawbacks?
27. What is it like living so close to the sea?
28. What is it like living so close to the World Trade Centre?
29. What is it like living close to rich people in Cuffe Parade?

Personal questions pertaining to group

30. What is the name of the religious, community, or political group you belong to?
31. How long have you been a member?
32. How were you introduced to the group?
33. Why did you decide to join?
34. Do you have friend/family in the group?
35. If so, who?
36. What position do you hold in the group?
37. Are you affiliated with other groups in or out of the settlement?

Group questions

38. When was the group started?
39. How many members are there?
40. Where do you meet?
41. How often do you meet?
42. What is the purpose of the group?
43. Who controls the group/how are decisions made?
44. Does the group work towards ameliorating Ganesh Murthi (GM)?
45. Is the group affiliated with other groups?
46. Would you introduce me to other members of the group? Especially prominent members?