Urban density is often taken to be self-evident and treated as an indicator or attribute of urban space upon which urban planning and individual planning decisions are made. This article makes the case for thinking about density as a relational and social quality produced by identifiable associations, practices and systems of human interactions, specifically with infrastructural technologies. Based on ethnographic research in Mumbai, the paper will consider several different ‘sites’ at which density operationalizes an incessant sense of temporariness and anticipation within the frame of social relations. These geographies of density yield surprising circumventions of functionality and planning but they also make possible transformation within existing frames of relations. Much of the recent urbanist literature on Mumbai focuses mainly on the slum not only as an empirical but also an analytic geography. Based on the ethnographic work on Mumbai, the article suggests other sites beside the slum for theorizations of the multitude. Doing so might yield new insights into the relationship between built form and urban design as well as accounts of the city that are not trapped either by normative and prescriptive models of the city or by the need to turn to a redemptive reading of chaos and misery.

Thinking through Architecture

Questions of surface and landscape, of design and activity have become central issues for social science in the face of the speed with which today’s built environment is being transformed. Whether through new construction or through heritage conservation projects, the effects are the same – a particular formalization of the landscape as the site of social transformation. In the canonical genealogy of modern cities, thinkers as different as Walter Benjamin and le Corbusier have shown how formal gestures of architecture and urban design play a crucial role as signs of social change. In the dystopian contexts of many of today’s cities, urban designs are being achieved not by using rational principles of planning but by the inadvertent designs perpetrated by speculation or the unintended consequences of self-planned communities. Speculative processes and interventions now take place through reconstruction as much as through the colonization of new territories for development.

Particularly in cities like Mumbai, these processes are becoming increasingly problematic because of the compactness of urban territory and the resulting problems of density. The official urban territory of Mumbai covers a mere 468 square kilometres and is bound by natural barriers as well as poor infrastructural connections to adjacent
landmasses into which peripheral expansion is occurring. As a result, the original island city developments retain a certain symbolic charge as the most desirable urban locations. Thus, speculative investments are directed toward the vertical expansion and densification of historic neighbourhoods. In this context, discussions about density and crowding take on a symbolic charge and become proxies for discussions about the transformation of the city.

While such discussions have intensified in recent years as Mumbai struggles to acquire ‘world-class’ status, iconic images of modern Bombay have always been associated with density and crowding. Consider, for example, the following passage from the Mumbai-based novelist, Kiran Nagarkar’s book *Ravan and Eddie*, set in a stereotypical Bombay *chawls* (tenement housing with shared facilities) with two protagonists belonging to different communities. In an early description, Nagarkar writes:

[Ravan] had reached the Byculla bridge. A local train swept past without stopping at the station. Like a sponge being squeezed, the people on the platform shrank back. There were commuters hanging from the bars of the carriage windows. Some stood precariously on god alone knows what between compartments. Every once in a while a trousered leg or an arm swung wildly but hurriedly got back to its owner when a signal pole of the support of a bridge rushed past. The sides of the train were bulging with the pressure of the people packed into it. (How many passengers does a Bombay ‘local’ hold anyway? Twenty-five thousand? Thirty? Forty?) Any moment now that speeding solid iron shell

![Bombay Development Department (BDD) chawls, central Mumbai tenement housing for workers, constructed in the early twentieth century. (Photo: Colleen Macklin)](image-url)
was going to split open and thousands upon thousands of bodies were going to be flung all over Bombay, all the way to Borivali and Virar, some falling into the Thane creek, others into the Arabian Sea. Almost by rote, Ravan had stuck his head into one of the diamond-shaped openings in the gridiron of the bridge. This was, after all, one of the most exciting places in the universe. (Nagarkar, 1995, p. 20)

The sense of headiness and perverse excitement conveyed in this passage is part of the mythos of Bombay, carried as part of the genetic make-up of its self-image, which feeds the imagination of numerous analyses and creative works of literature, film and contemporary art.

The **chawl** itself – in which the drama of *Ravan and Eddie* is set – is, of course, a classic site in the descriptions of Mumbai as the very exemplar of crowding and lack of privacy. The tiny **chawl** rooms of Mumbai seem endlessly elastic to many observers of life in the city, seeming to accommodate ever expanding, multi-generational families. The sharing of facilities as well as the need to keep doors open in order not to stifle from the sheer numbers of people within the all-purpose single-room tenements, also turns the **chawl** into a particular kind of social world, allowing intimate relations between people not otherwise related to one another. The **chawl** often serves as a backdrop in films and literature for emphasizing forms of community that are not based on kinship attachments (and are therefore seen to be ‘modern’) while at the same time being intimate and trustworthy. These relations are the half-way points between the familiar social life of the village and the anonymity of the metropolis in the worlds of early migrants. At the same time, of course, the very same features could turn the **chawl** into a site of conflict and mutual contempt, bred by closeness and familiarity.1 *Ravan and Eddie* is set in the ‘Central Works Department’ **chawl** number 17 whose floors are divided between Hindus and Roman Catholic families.

As another example, we might consider the statement made by architect Daniel Liebeskind during his first visit to Mumbai in 2004: ‘Mumbai is clearly a city that eludes architects who see the city as a material object. It’s a city where human beings are far more important than brick and mortar, concrete, glass and steel’.2 In the logic of such remarks, Mumbai becomes a place where architecture itself disappears as a material fact, and is substituted by sheer demographic density that constitutes its visual overlay, even taking the more traditional place of infrastructure as its underneath.

This paper explores the phenomenology and iconography of density and the crowd with reference to various sites and spatial formats around which the problem of the city is articulated in relation to the overcrowding and dense packing of social life into concentrated spatial formats. It focuses on Mumbai specifically because of the mythic dimensions that the crowd takes on in the image of the city, and seeks to build an understanding of density as a concrete manifestation of the abstract, conceptual entity that we commonly understand under the rubric of the city. In the conception of the social sciences, the crowd – that *ur* construct of density, massing and spacelessness – constitutes the effective subject and social manifestation of urban density. Yet, as the paper demonstrates, the everyday experience of space in the city and the manner in which the crowd itself is formed – through specific events that produce proximity and juxtaposition of disparate elements – is critical in developing a socially and culturally inflected understanding of density.

The core argument here is that a detailed analysis of various sites of density in a place like Mumbai, whose essence and nature are seen to be tied to this phenomenon, reveals the need to analyse the relationship representations, causes and effects of density. In other words, while the problem of crowding, density and elasticity might easily be manipulated to produce an overarching cause for redesign and redevelopment, the social phenomena associated with these
sites might produce a very different sort of picture of urban design and the built environment and their social consequences. In other words, I suggest that rather than the built environment driving density, various forms of density, each with its unique set of juxtapositions and characteristics, give shape to the urban environment by activating shared or familiar meanings amongst residents of a city so vast as to be continually losing coherence in the everyday life of millions.

Various sites iconically associated with Mumbai – such as slums, chawls, ghettos, commuter trains – might be associated with distinct sociologies of density. In turn, the dynamic interactions amongst these distinct sociological situations might be read and analysed to produce new ways of imagining the city and new ways of understanding the direction that the city might take. This angle or point of view is presented as the main thread of this paper. Density is not treated as self-evident but rather in a contextual manner and the paper concludes with some speculation on the need to think about density in this way so as to understand better the impasses of development and social diversity in a city the size of Mumbai.

The Shared City: Density as Social Proximity

The image of the crowd on the ‘local’ (or commuter) train – commonly described as the lifeline of Mumbai, running along the length of the island like a spinal chord – is an extremely useful one in navigating issue of density. The scale and numbers associated with Mumbai’s local trains (or locals as they are simply called in Mumbai) are comparable to very few cities in the world. Jim Masselos (2003) quotes a study from the 1990s, which claims that in that decade Mumbai’s locals carried nearly five and a half million people each day, or roughly half the number of

Crowds emerging from Mumbai local train. (Photo: Rajesh Vora)
people carried by the entire national railway system.

In the above quote from Nagarkar (1995), the local train is seen as a universal and neutral container, the speeding, solid iron shell containing bodies that would be flung all over Bombay. This is an image of an amorphous mass, of bodies without identity, merely sharing a common destiny through a common journey. The imaginary of the mass, which is associated in sociological literature with exceptional states like those of the crowd and the mob, mutates into an everyday reality in Mumbai. If the crowd and the mob are treated in sociological literature as exceptions and are associated with violence, the local train appears as a container for a mass that is in fact peaceable on an everyday basis. This understanding is further spelled out by Suketu Mehta, in his best-selling book on Mumbai, *Maximum City* (2004):

If you are late for work in Mumbai and reach the station just as the train is leaving the platform, don’t despair. You can run up to the packed compartments and find many hands unfolding like petals to pull you on board. And while you will probably have to hang on to the door-frame with your fingertips, you are still grateful for the empathy of your fellow passengers, already packed tighter than cattle, their shirts drenched with sweat in the badly ventilated compartment. They know that your boss might yell at you or cut your pay if you miss this train. And at the moment of contact, they do not know if the hand reaching for theirs belongs to a Hindu or a Muslim or a Christian or a Brahmin or an Untouchable. Come on board, they say. We’ll adjust.

In this passage Mehta adds a more nuanced sociological dimension to the amorphous, pulsating mass described by Nagarkar through the eyes of the child-protagonist, Ravan in *Ravan and Eddie*. Although Mehta’s take on the ‘crowd’ has been criticized by many as romantic, this passage is useful in that it makes visible the fact that a philosophy of ‘adjusting’ is a practice of citizens with distinct identities rather than of modern ‘men without qualities’, to use Robert Musil’s memorable phrase describing the citizens of modern Vienna in *The Man without Qualities*. The ‘badly ventilated’ compartment becomes the site of another drama, that of physical proximity between citizens whose ethos is geared toward avoidance and social distance between castes, communities and classes. The train compartment packed with this seemingly amorphous mass is, in reality, a complex intermingling of otherwise disparate universes. The idea of cohesive densities with common goals is supplemented by a practice and philosophy of ‘adjusting’, which turns out to be a key social practice in the creation of the everyday mass in a city like Mumbai.

In a comment on Ethan Zukerman’s article about Mehta’s book on www.world changing.com, another blogger, Rohit Gupta writes:

> being a Bombay resident, I do not like the crude exoticisms offered by tourists like Mr. Mehta… These hands that pull you upon the train is a particularly interesting case in point. Normally when this happens, it is because you are being pulled by a work-buddy, since you work in the same office/factory, get on at the same station, or whatever, and you do this everyday… When the evening rush hour trains leave from Chruchgate, what people standing near the doors (these are open trains) do is that they create a human door, an impenetrable blockade so that they can at least breathe for the next hour of the journey… What he ascribes altruist motives to are mainly phenomenon found everywhere in social chaos.

These criticisms do not detract from the observations regarding adjustment but rather add another layer to it. Instead of specific motives – such as altruism – guiding the process of adjustment, we see micro-dimensions at work within crowd behaviour that highlight the underlying violence of adjustment.

Ethnographic observation supplements this literary and journalistic sense that orderliness is a hard-won and carefully achieved quality of the Mumbai crowd. Thus, for example, when a recent poll conducted by the popular, international magazine *Readers Digest* voted Mumbai the ‘rudest city’ in the world, there was an outpouring of protest not only from...
residents of the city but also from admirers of Mumbai living in other cities. The tip-over point or the threshold at which the crowd turns into mob is thus a product of careful management, a counterpoint to the image of sheer numbers and the magnificent, terrifying dimension of being caught in the flow of persons in the city. The fragile reversibility of the crowd from the violent substrate of modern society to its quotidian counterpart of ‘adjusted’ differences is a key feature of the local train as a distinct site of density and a shared destiny. Density here becomes a complex phenomenon involving dynamic intersections between the amorphous mass created through the movement of persons across city space and the embedded potential for social conflict and disaster.

This ethos of adjustment and recalibration also prompts the development of bizarre senses of hierarchy within bureaucratic systems. As an illustration, I offer the following story published in the Times of India and reprinted in the British humour magazine, Private Eye involving a railway spokesman talking to the newspaper about some measures that the railways were contemplating in order to save money.

The official announces that:

… from now on, our first class compartments will be fitted with hundred watt lights, but the second class compartments will only have sixty watt lights. Considering that an average second-class fare is one-third of a first class fare, they ought by rights to be getting only thirty-three watts. So in reality, our administration is being kind and generous in giving them almost double that power, with no matching increase in fares… We have a number of ideas, which will be taken up in stages for implementation. Take the case of fans. The second class already have fewer fans, naturally, but a commuter standing under the fan in second class currently receives as much air as a first class passenger similarly placed. So, to reflect the difference in fares, we are planning to reduce the speed of fan rotation in second class compartments, and our engineering department is currently modifying their design.

The fine-tuning of the mass and its adjustment to various criteria of social difference endows the crowd with social attributes, ones that make it responsive to the processes of producing peace on an everyday basis. Rather than an anonymous crowd, the literature of and on Bombay-Mumbai reveals a highly socialized crowd, existing as a function of where one lives (Borivali, Virar and so on), or of ‘adjusted’ social differences, or fine-tuned class differences within crowds. The very particular phenomenology that emerges from unravelling the ‘local’ as a site of density created by the movement of people across the city thus reveals a complex, intersecting site that engages a variety of social criteria. A key feature of these intersections, I would argue, is the maintenance and production of order. The fragility of this order is the subject of the following section.

Inside-Out: Streets and the Extension of Private Life

While the Mumbai local train serves as a container for the crowd and a site for the placid expression of density, the street occasionally becomes the site for a different sort of experience of density. Apart from gatherings and processions of various kinds that commonly take place in the streets of Mumbai, there have been numerous occasions in the recent past where different kinds of gathering have turned into expressions of a new sort of experience of density. On two recent occasions of what one might call ‘network failure’ – namely, the great flood on 26 July 2005 and the serial bomb attacks on the local trains on 11 July 2006 – we see this new form of density being expressed as an external manifestation of the city itself. In this section, I focus on the July 2005 flood.

On both these occasions, the infrastructure of the ‘effective city’ turned into weaponry, in the hands of inimical forces – forces of nature in the case of the 26th July flood (which I focus on more carefully in this section) and terrorist organizations in the case of the bombings of the local trains on
the Western Railway commuter system. These events revealed the nature and form of the functional and effective city as socio-technical system and brought that aspect to the fore precisely in the context of network failure. More importantly, these events, in their own way, underlined the fact that effective city space exists as a function of movement

Crowds returning home during the Mumbai floods, July 2005. (Source: Indian Express, Mumbai edition)
rather than existing \textit{a priori} as a normative abstraction. Thus, the blockage of passages of circulation extended the private immobile sphere into the street, creating an awesome manifestation of the actually existing city. This manifestation is socially significant in a very different sense than, for example, in a city like New York, which I discuss below with reference to the Blackout of August 2003 which also emptied the city onto the street yet did not disturb the essential interiority of the street.

As any visitor to Mumbai notices, the streets are used for much more than walking and traversing. They teem with domestic and commercial activities normally associated with interior spaces in the modern city. Any number of observers, including tourists and researchers notice that Mumbai’s visual field is characterized by a consistent reversal of inside and outside, private and public. Private, domestic space is conducted entirely on the streets, sometimes either in the open or inside tiny, temporary shacks. Moreover, the pavements can serve as unfurling scenic backdrops as the active, walking subject takes in a variety of activities unfolding in the background, whether these are domestic activities like cooking, washing, bathing or sleeping or work-related activities like shoe shining, welding or general repairing. These forms of extending private space and activities, and of reversing inside and outside makes the streets vulnerable to a kind of living that exposes and calls into question the true meaning of the interior as a spatial and cultural construct. To illustrate this proposition, I turn to a recent literary work – the autobiography of an Australian named Gregory David Roberts, of which Mumbai is the true protagonist.

In \textit{Shantaram}, as Roberts’ autobiography is titled (soon to be made into a Hollywood film), Roberts, a fugitive convict from Australia finds refuge in the city, losing himself in its crowds, by living in a jam-packed slum to escape notice from the city’s police. In one of the early chapters of this massive tome, he describes his walks through the city at night:

For two or three hours after midnight, in an operation known as the round-up, squads of plain-clothes cops patrolled the vacant streets in search of criminals, junkies, suspects, and homeless, unemployed men. More than half of the people in the city \textit{were} homeless, of course, and many of them lived, ate and slept on the streets. The sleepers were everywhere, stretched out on the footpaths with only a thin blanket and a cotton sheet to keep out the damp of the night. Single people, families, and whole communities who’d escaped some drought, flood or famine slept on the stone paths and in doorways, huddled together in bundled necessity. (Roberts, 2003, p. 179)

This classic, night-time image of sleeping bodies on the streets together with the customary exaggeration (‘more than half of the people in the city \textit{were} homeless’) serves as a reminder of the activity and crush of the streets in the day-time. As Roberts describes the night,

The nights, at least, were quiet … the beggars, junkies, and hookers who weren’t already home or hiding were chased from the footpaths. Steel shutters came down over the shop windows. White calico cloths were thrown over the tables in all the markets and bazaars. Quiet and emptiness descended. In the whirl and crush of people and purposes in Bombay’s daylight scramble, it was impossible to imagine those deserted silences. But each and every night was the same: soundless, beautiful and threatening. Bombay became a haunted house (Roberts, 2003, p.179)

It is telling that Roberts uses the metaphor of haunting to describe the reversal of night and day, of purposeful crowding and silence. Night is not, in other words, radically unlike day, rather it is like an afterimage of a street by day, teeming with activities of all kinds, a mixed-use zone in the social sense rather than in the technocratic sense. The extensions of the street, to make space for the slowly moving or even immobile crowds during the two events of network failure that I talk about above, can also, similarly, be read through the idea of haunting. What I am suggesting is that the incessant extension of private and other
lives on the street creates its own texture of density of and on the street against which the crowds created by incidents of network failure might be understood. In other words, the visibility of the middle-class masses, most of them commuters, is made more evident when juxtaposed against the existing social, political and cultural meanings of the street upon which it is superimposed like an afterimage.

A contrast might be helpful to understand what I mean here. It is generally reported that during the New York blackout of 2003, the crowds that filled the city – residents walking home – were orderly and obedient, especially in contrast with the events marking the earlier blackout in the 1970s. The contrast is a measure of how the city itself has changed during the interim, especially in terms of its demography and the material qualities of its space. Space itself is increasingly privatised both in terms of development and occupation with the withdrawal of the state and the increasing gentrification of mixed and low-income neighbourhoods. Thus, one might suggest that the orderly files of residents walking home during the New York blackout of August 2003 were in a space already transformed and rendered inscrutable to the manipulation of the masses as a political force.

The downpour of nearly a metre of rain on the afternoon of 26th July 2005, led to the sudden flooding of the streets in the northern parts of Mumbai. Blocked storm water drains made it impossible for most of the water to drain into the sea leading to situations where naturally low-lying areas and areas rendered low-lying due to the construction of new roads, buildings and other infrastructure turned into lakes trapping people, animals and vehicles. Almost 500 people drowned while millions of commuters who used the railway and bus system were trapped with no alternative but to walk home from their workplaces, traversing distances of between 10 and 40 kilometres on foot. The flooding in many parts along their path led to a massive slowing down, some people taking as much as three days to reach home. Their paths were marked by the kindness and comforts meted out to them by strangers who opened their homes and passed out food and drink to the walkers. All these actions were lauded by the press, citizens and politicians as exemplary of the ‘spirit of Mumbai’, its essential kindness and cosmopolitanism. According to this rhetoric this ‘spirit’ was manifested in the breakdown of many barriers, with slum-dwellers along the highways helping stranded motorists even as their own homes were sinking, and with middle-class housewives opening their homes to strangers disregarding the usual fears surrounding strangers in the home.

But in Mumbai, the quality and experience of the flood of July 2005 by the masses on the street was also heightened by the contemporary experience of the space of the city as its history – of deindustrialization, ruin and the spectacle of conspicuous wealth – writ large. As the historian Gyan Prakash (2006, p. 78) writes, ‘it was as if the water had forced the city to bring its innards out in the open, exposing its decaying, putrid secrets’. Yet this brief, and for some, all too brief exposure of those innards and secrets was immediately covered up by a discourse celebrating the ‘spirit of the city’, and, more specifically, the unifying effects of the flood on the deeply divided citizenry. A popular news channel, broadcasting flood stories live served up headlines like ‘Dreams of Shanghai are broken’. Such headlines suggested that the flood had exposed the fundamental inability of the city to ‘improve’ or catch up with Shanghai, its most recent role model and ideal. Shanghai dreams were particularly significant from the standpoint of politicians and elites engaged since 2003 in a massive urban renovation project to turn Mumbai into a ‘world-class’ city. The stories of the city’s ‘spirit’ were especially important to sell the idea that these dreams could not be broken even if ‘practical difficulties’ like the flood were a setback.
The generally poignant imagery of the orderly crowds trudging homeward through water and mud, amid floating animal carcasses, garbage and the debris of household goods, and the stories of help received by these unfortunate thousands (many of whom spent more than 24 hours returning home) are subsumed in this discourse of the ‘spirit of Mumbai’. This spirit, of course, became all the more evident when contrasted with the experiences of residents of New Orleans after Hurricane Katrina wreaked similar havoc upon their city. Buried within this discourse about the ‘spirit of Mumbai’ is an image of an orderly density, able to function even in the absence of the ‘effective city’.

The ‘effective city’, in the reading of historian Jim Masselos, is one defined and patterned by the daily commuter journey through which,

every morning, Mumbai redefines itself in an immense collective awakening … the daily commuter journey constitutes a defining moment in urban life; an affirmation of city unity. (Masselos, 2003, p. 31)

This daily commuter movement thus gives a pattern, purpose and destination to the crowd constituting the ‘effective city’. In a startling inversion, the ‘effective city’, formed by movement through the streets ended up occupying the street as an immobile mass, thereby turning the street into a concrete, visual expression of density instead of a conduit for its circulation and dissemination. Network failure thus rendered the effective city into a city on the street and the effective city became a delivery system of victims as infrastructure turned into a weapon against the city.

Thus, we might say, the effective city was temporarily suspended in the moment of the flood. Tales of the flood also evoke a different sense of orderliness and effectiveness, one that is patterned by the floating debris of household goods and shack frames, animal carcasses and human waste whose presence in the water brought to the fore the city’s intimate spatial formation through reclamations of various sorts – of land from the sea, of land from marshes and of land from landfills of garbage and construction debris. All of these reclamations were exposed effectively as the foundations of the city over which the ‘unifying’ commuter communities that Masselos speaks of were formed.

The experience of density in the moment of the flood is therefore qualitatively different from that in the daily journey which I examined in the earlier section both from the outside (through the eyes of, for example, the child-protagonist Ravan) and from the inside (as in the descriptions of Suketu Mehta). The inside and the outside of the crowd – that ur construct of density, massing and spacelessness which constitutes the effective subject and social manifestation of urban density – formed by the flood can similarly be analysed through the lens of the ‘effective city’. From the outside, this mass formation, the manifestation of urban density turned inside out, appears orderly and appears to be following well defined paths, mapped through the experience of countless daily journeys. Viewed from the inside, however, this formation’s sociality can be described through its encounter both with the material debris and with the everyday life-world of the street, both described above.

In sharp contrast to the reports in the media, some have described the fear they experienced during their nightmarish journeys home. This fear was not just of being electrocuted by a stray live wire or of falling into an open drain (as did happen) or of being trapped in one’s own car and drowning, but it was described as a fear, specifically of strangers. The very strangers with whom accommodations or adjustments might be made in a train compartment despite suspicions harboured, are the ones who were feared out on the streets. Youth gangs roaming the streets, ostensibly extending a helping hand, were doubly suspect. Their mischievous, violent and dangerous abandon, an extension of their ‘normal’ behaviour – interpreted sometimes through
the concept of *masti* – was also in evidence as their everyday life-world in the street was temporarily extended by the flood to include people normally considered too respectable to share in their own, dystopic and violent experiences of the city.

Journalist Dilip D’Souza wrote in his column on *Rediff* a few days after the flood,

I found myself accosted on the flyover by a gang of drunk toughs, laughing but faintly threatening as they demanded I take a photograph of them. ‘You didn’t take it’, said one belligerently when I was done, ‘you just looked at us through your lens!’. ‘Yeah, yeah, go on’, said another, with a hint of menace, ‘you’re going to show the world how dirty Bombay is! (D’Souza, 2005, p. 28)

This idea of being looked at through another’s lens is clearly intriguing for a whole social group of disenfranchised youth who know that their own experiences are made available to the public only as emblems of the city’s problems while the suppression of their voices and images is necessary for anticipating the city’s future.

Predictably, such encounters within the crowd, between, for example, youth gangs and walkers, normally removed and protected from such encounters with the faces of violence, brute, masculine physical strength and hooliganism, were quickly suppressed in favour of more ‘celebratory’ stories of the indefatigable spirit of Mumbai. This spirit itself is considered the means by which the poor and disenfranchised citizens of Mumbai are expected to pull themselves into the emerging ‘world-class’ Mumbai shaped by dreams of Shanghai. Viewed from the inside, the flood orchestrated multiple encounters, juxtapositions and proximities amongst groups normally carefully separated and socially distanced despite their physical proximities. We might thus say that the experience of density is, therefore, not just about physical proximity but the social engineering of proximate distancing.

Two days after the flood, rumours of a tsunami directed only towards the poor in slums, caused a stampede in Nehru Nagar, a slum colony that was already very badly affected by the flood. But such events only served quickly to re-establish the social distance as they reinforced the views and stereotypes held by the rich about the poor, by the middle-class about migrants and squatters and by the poor about the elite, and by pushing all against the awesome wrath of nature. The close brush between classes and groups that had occurred as people sheltered wherever they could only served to highlight actual distance even though many, if not most, slums intimately share physical space with more ‘permanent’ structures, through the practice of packing housing into every available open space, through sanction or aggression. Nehru Nagar, for instance, is packed up against more prosperous western suburbs like Santa Cruz and Juhu. Many middle-class families in these areas, for instance, were dismayed to find the families of their household help sheltering in the public spaces of their buildings as their shacks were drowned or washed away even though these people had intimate connections to their everyday lives and entered and exited their buildings freely as household labour. Thus, the undifferentiated mass of those making up the ‘effective city’ in Jim Masselos’s terms, can be further distinguished by the nature of these encounters that reinforce what we might call the experience of proximate distance as a social diacritic of urban density.

Similarly, one can analyse the encounters of the crowd with the debris described above, each of which might be read as fragments of a social history of existing in the city. The mattresses, pots and pans, the television sets, radios and armoires, the corpses of animals kept at the abattoir or at home, the tarpaulin, sticks and tin frames from which the temporary architecture of the city is fashioned and the abandoned bicycles, cars and scooters, marooned buses and trains stopped dead in their tracks – are all turned, in the moment of the flood, into ephemera, material ruins through which the
life-world of the city could be grasped by its weary masses. Here, the phenomenological experiences of adjustment encounter those of aspiration and achievement, through the life and death of objects that may have been discarded anyway through the cycles of personal histories of consumption or may have been picked up as debris by others too poor to consume except the trash and debris discarded by the better off.

**Expendability: Toilers, Toxicity and Infra-Spaces**

Turning to a very different site – one of settlement rather than transition – I would like to think more carefully about another dimension of density – as juxtapositions that permit and make systems workable. Specifically, I will describe a different kind of density, perhaps not unique to Mumbai but certainly crucial to its infrastructural organization. My own visual research documents the close proximity between settlements of rag-pickers and the 110 hectare municipal dumping ground at Deonar in north-eastern Mumbai. In the life-histories of these rag-pickers, proximity to the site is a critical factor in surviving the city as well as for the city’s survival. For over 30 years, nearly two-thirds of Mumbai’s garbage – nearly 4,000 tonnes out of a total of 6,000 tonnes – is dumped at this site everyday. Over the next few years, this dump will be crammed with so much garbage that it will not be able to take any more. It will die a natural death, its capacity exhausted (Ghoge and Iyer, 2004).

Shacks inside the Govandi municipal dumping ground, at the edge of a river of garbage. (Photo: Deepak Dhopat)
Picking at its edges everyday as the municipal trucks roll in with the garbage, the ragpickers of Rafique Nagar – the slum adjoining the dump – are crucial to keeping the dump alive as their work incessantly renovates the space of the dump. The dump as a living, breathing entity is a piece of urban nature or, in other words, of naturalized technology. The dump is infrastructure in the sense of the classic definition of infrastructure: ‘an underlying base or foundation, especially for an organization or a system’ (American Heritage Dictionary). The system or organization for which it serves as foundation is what we might view as a system of workable densities. In other words, the dump is not merely a facility, but a foundation for a system for making density work as well as density being the condition of possibility of its functionality.

In its informality, this relation between the huge dumping ground – on the surface of which garbage has carved out a distinct topography of rivers, hills and valleys – and the settlements around and perhaps even within the ground are embodiments of density as a manifestation of intersections characteristic of what urbanist Abdou Maliq Simone calls ‘cityness’. This juxtaposition of densities of bodies, infrastructures, and affects makes possible incessant intersections that characterize the ontology of the informal. These intersections, or this ‘cityness’, in turn make possible the continuous engagement of the excluded majority with the city. The ‘formal’ sector in turn is formed by its ability to shield itself against these intersections, in other words, through its locking out the potential of these juxtapositions.

Here, the density of the human-nature-technology intersections reflects, as does a shape, the particular processes, money and actors mobilized in keeping the city alive, as a living entity. For the city’s breathability depends upon keeping its waste fields alive through the very human activities of picking, sorting and recycling. The faintly menacing competition that exists amongst the rag-pickers is mobilized on a daily basis at the points at which trucks dump the garbage where the rag-pickers, mostly dalit (‘untouchable’) and Muslim women migrants from all over India but largely from drought-prone districts of western and southern Indian states, wait for hours for the trucks to unload collections from all over the city.

Time in this locality is structured by the experience of waiting for the trucks. The inability to be ‘at home’ or, for that matter, even to engage in the indulgence of separating the domains of home and work conditions feelings of insecurity about leaving the home unattended. In turn, the experience of ‘home’ is intimately tied to the next generation, to its exposure to life amongst debris and eventually themselves entering the dump as collectors either on a part-time or a full-time basis. The architecture of home is also anchored by articles collected from the garbage heaps and to collected piles waiting to be sold as scrap. Further, the scrap business itself is defined by its invisibility – ‘very few scrap traders pay income tax, sales tax or octroi’ (Katakam, 2001) – thus rendering the business invisible from the regulatory point of view. The invisibility of the entire business connects intimately to the invisible nature of the work of keeping the dump alive while remaining under the radar of city-planning. Yet, as ‘methods of collection and disposal of garbage are becoming increasingly crucial for city planning’, and, therefore, increasingly the efforts of self-conscious planning are mobilized to map out the potentialities – financial and environmental – of these activities, the levels of insecurity amongst this population continue to rise.

During the massive slum demolition drive in December 2004 and February 2005, the Rafique Nagar slums in particular became exposed to a different kind of attention. In its haste to beautify the city and make it world-class, the State government had in fact dismantled a workable set of relations based on the dense juxtaposition of waste and human settlement. It brought into view...
not only the abject conditions of this community but also density as infrastructure, as ‘underlying base or foundation’ for the organization of a system. Maximizing the potential for relations amongst things and people as objects of urban development through the densities created by juxtaposition, the dumping ground represents a working infrastructure, made possible by this juxtaposition of people and garbage. The insecurity experienced by the community as a whole – both due to the toxic work environment and the many scarcities defining their lives – ties these poor urban localities to the city and indeed shows how this insecurity that defines the relationship between these localities and the city as a whole is constitutive of the city itself.

It is this logic of the ‘productive sacrifice’ of these individuals, as a ‘superfluous population’ that is constitutive of the city. These ‘toilers’ (Pendse, 1995), whose existence in the city is underwritten by various forms of degraded and destructive labour, thus produce the city through the density of their interactions with the dump – as both site of work and site of living. These interactions in turn work at the margins to try to turn this dense juxtaposition into a potentially productive labour of keeping the patient (in this case the dump) alive until another and better system can be found to take its place.

Thus, for example, new plans for revamping garbage collection and disposal through privatization both recognizes the role of these long-term professional rag-pickers while also actively making them invisible by excluding them from various forms of protection available only to ‘properly’ employed workers. Yet, because the existing scrap dealing businesses themselves tend to be extra-legal and invisible, there is little chance of being attached as an employee to them. Organizing themselves into interest-groups and trade unions as a way of securing their entrance into the new system may be the only option available in the near future.

The demographic transition inherent in the new plans for garbage in the city is also underwritten by chipping away systematically at the density of the existing population of rag-pickers in their relation to the dumping ground. Without dismantling those thick connections, the danger of their congealing would threaten the incessant flow of the city itself. Intersecting with various histories of efforts at ‘substantiating the presence of low-income residents in cities’, these densities of infrastructural connection are being transformed into speculative densities, which I will touch upon briefly in the last section (Simone, 2006).

People as Currency: Speculative Densities, Modifying the Landscape

In this final section, I will turn the focus back to architecture, away from the phenomenology of density as it is experienced and literally shaped by various sites to the functional uses of density as nodes through which architecture, infrastructure and the redevelopment of land are increasingly being used as new instruments to assess the sorts of developmental strategies to be adopted by cities both to survive financially and to substantiate the presence of increasing numbers of the poor. This explains the increasing volume and speed of circulation of real estate capital evident in the rapidly mutating built forms of a large number of cities, especially in Asia but also in Latin America and Africa.

In post-liberalization Mumbai, the manipulation of physical form has become the organizational site of speculative strategies. A new informational order is behind the radical changes to the urban landscape of the city. An idiosyncratic skyline is the physical manifestation of various attempts by the State and the market to realize profits while simultaneously providing social housing to the poor. State officials and developers have been experimenting with the city’s planning roadmap and with zoning and other regulations as they work out algorithms.
that will provide satisfactory solutions to the housing crisis while creating a profitable market in real estate.

The underlying currency of contemporary speculative activities is thus development rules and regulations on the one hand and people on the other. The juxtaposition of different forms of housing – slums and chawls especially adjoining middle-class, mid-rise and high-rise housing – create nodes of density that in turn give shape to the idea of availability of urban space, albeit in the dense, decaying and degraded form of slums, chawls and other forms that are not commensurate with ‘modern’ housing. In another paper, I have shown how this kind of juxtaposition of forms in Mumbai creates the contexts for making arguments about the need to transform urban space to confirm to modern norms. These contexts become the occasion for positioning self-built and other, non-vertical forms as temporary, both in the sense of inevitable decay as well as in the sense of being slated for erasure on the way to a more uniform urban design, represented by the vertical forms of the modern high-rise. In turn this discourse makes available such nodes of density of built form for speculative, investment activities, as incipient objects of speculation.

We have seen this process being played out with respect to the chawls of the island city inner wards where 1991 census figures show population densities varying between 48,000 per square kilometre at the low end to 111,000 per square kilometre at the higher end. Slums located along infrastructure installations – like water pipes, railway tracks, storm-water drains (nullahs) and other such facilities – have also become targets for relocation projects via new infrastructure initiatives, making the land on which they sit...
available for redevelopment. These spaces in transition exhibit what we might call forms of speculative densities.

These poorly housed masses are routinely being displaced into transit camps from slums and dilapidated housing stock that has been neglected for decades in order to make land available for redevelopment. Speculation in the redevelopment of the city is largely channelled through the manipulation of regulations and land-use reservations and through the availability of vast amounts of cash flowing through shadowy, transurban commercial activities outside the ambit of multinational, corporate capital.

The formulation of complicated regulations in which the displacement of people, the redevelopment of the land they occupy and the promises to re-house them by turning the rights they created by squatting or other forms of occupation and settlement into an equivalent amount of square footage per person are some of the complicated schemes aiding real estate speculation in contemporary Mumbai. In the face of all this spatial speculation aided by masquerades of populist justice, entangled in the aspirations of the poor, the city is undergoing a massive transition, which might be read as an experiment in an old fashioned sense. This is an experiment involving the empirical manipulation of the physical fabric, creating patches and pathways for the circulation of global capital. These activities closely intertwine information as the underlying medium of speculation with the unstable situation of residents, turning people into the currency through which real estate capital circulates. The symbolic capital of displacement in the name of 'making over' the city is producing an experimental landscape that sets Mumbai territorially apart from the rest of the country.

Such spatial transformations make the
High-rise construction in the frozen-rent districts of south Mumbai; in the foreground old housing stock and narrow lanes. (Photo: Bart Orr)
The question of density, surface and landscape and how we view them extremely important. In a city like Mumbai, the phenomenology of density – of juxtaposition and crowding that assaults the senses – is the ground for the relationship between architectural form and spatial imagination. The imagination of what constitutes appropriate urban design is dominated and oriented by understandings of what density signifies. For a writer like Mike Davis, for example, the architectural expression and arrangement of slum settlements exemplifies density that can be read discursively as the creation of a ‘surplus humanity’ by a system of neo-liberal governance. In other words, the form practically dominates the imagination of the underlying system (Davis, 2006).

The kind of architectural renovation and rearrangement of densities – that is currently underway in Mumbai under the auspices of the ‘Mumbai Makeover’ initiative – creates the sense that the foundational logic of the city of the future is based on the assumption that the rights of the urban poor (created within the broader, functional framework of citizenship – that is, created as a consequence of claims and needs) are a kind of wealth that can be lavishly spent in the process of creating the market for space. The wasted lives of the poor, their expendability and degradation constitutes the foundational logic of the future. Here, we might raise the question of what is the specific phenomenological state created in the present by this highly speculative manipulation of the physical fabric? As the various planning instruments – like floor space index (FSI), the transfer of development rights (TDR) and so on – have become ‘weapons’ enabling constructions, we see bizarre mutations of the built landscape. Defying all possible logic in terms of infrastructure and therefore of sustainable living, these buildings have become a new...
symbol of the ‘politics of verticality’ which makes legible changes in the nature of urban citizenship if one juxtaposes the daily life of the citizen and his/her struggles over space, both public and private, against these mutations of the built fabric.

The verticalization of the island city (see above, note on the redevelopment of the chawls and the frozen rent buildings of South Bombay) has added a three-dimensional twist to the drama of hierarchy, exclusion and dispossession. Juxtaposed against the existing built fabric, these new structures transform not only the social and cultural life of the city but equally, the representational order within which space is conceived. From the point of view of the market, they render existing built and yet to be built space – the space of slums, of the rent-controlled buildings, the factories, warehouses, the salt-pans, the mangroves, urban villages, and industrial housing stock – ‘inefficient’ and ‘obsolete’ in their present condition. These spaces, in other words, are turned into spaces of severely diminished exchange value by this process. This emerging vertical city thus renders these landscapes obsolete by the sheer force of juxtaposition against this fabric, now perceived as one of dereliction.

Navigating a precarious territory between populist mobilization and corporate profits, these changes are significant as acts of speculation and also for serving as the speculum, or mirror, within which the future might be viewed. The city of the future is a floating world which is being built on space that has to be created by being unlocked from a labyrinth of regulations. This floating world goes with a floating population of persons subject to displacement – categories of persons who could be moved in order to make urban space more ‘efficient’. The
most evident of these categories is the urban poor – massed together in nodes of densities like slums and thereby recognizable as poor – who serve as an instrument, the counterfeit currency for urban improvement. In the case of Mumbai the ‘culture of congestion’, to use Koolhaas’s phrase, renders visible not wealth but immense poverty. The poor stand both as signs of the failure of the current development process and as the vehicle, a resource to be deployed in the reconstruction of the city by elites and politicians.

Rights to shelter in the city are thus not, by any stretch, rights to propertied citizenship. Rather they are rights that reduce residence to remaining, as remainders, as an effectively mobile population. The nature of space inhering in property can be read as a relationship to various forms of transitoriness and obsolescence. The ideology of flexible planning takes time to be a purely temporal fact, not a social fact, implying a static and homogenous notion of future time. However, the sort of flexible and ‘speeded’ up landscapes that I have been describing are suffused with a sense of time in suspension, with the sense of suspension that is the social prelude to displacement, relocation and transience in general. Indeed, in defending the rights-based development schemes such as those offering ‘free’ housing and rehabilitation to slum-dwellers who could prove the occupation of their shanties from a certain date in the past (which itself keeps shifting) in exchange for development rights to private developers, a prominent housing rights activist declared publicly that the scheme was agreed to in order to protect slum-dwellers from the threat of demolition. Where demolition is a constant and imminent threat, the various slum redevelopment schemes suspend the slum-dweller in a space of constant anticipation, sometimes lasting an entire lifetime.

Thinking through Density

The various sites in which density has been considered in this paper are both expressions of density in the physical sense as well as nodes of dense intersections between the social and phenomenological experiences of the city on the one hand and processes of urban planning, design and urban environment creation on the other. As I mentioned in the introduction, I have been trying to unpack the relationship between these phenomenologies of density and the processes by which urban planning and design are actually taking place and how they connect diversities (or homogeneity) at the level of the built environment to the tolerance of social and cultural diversity as an ethical value in urban life. I am suggesting that these ethnographic forays into the experience of density and the phenomenology of everyday urban life might suggest the emergence of new ways by which urban designs are being achieved, outside the ambit of self-conscious, technocratic planning. Such achievement is always provisional and based on the exploitation of the potentiality embedded in situations of density by individual subjects. This potentiality is, as I have tried to show through various examples, the result of the intersections between complexes of prior knowledge, new insights, shared meanings, shared effect and authoritative discourse that take place in situations of proximity and spatial condensation.

The deployment of density as an image with which to decipher the city thus yields a rich ethnographic layer of the ways in which the city makes itself felt through the forms of the crowd, of its infrastructure and through the abstract algorithms calculated to transform and renovate the city. From the mid-nineteenth century onwards, the earliest literary and ethnographic accounts of the city – such as the classic Marathi text, Mumbaichya Varnan (A Description of Mumbai) – various texts of urban flânerie, emphasized density as an experience and insisted on its salience for understanding the city. While that might be true of any modern city, I have tried to navigate through some of the classic sites of
density, historically particular to Mumbai – including the train, a post-traumatic crowd and the slum.

This study is an exploration rather than an explanatory exposition. In the classic manner of ethnography, the idea is both to provide a sense of the objects of observations and to draw some conclusions about the object of inquiry – namely, urban density. Through this exploration, we navigate specific social consequences of density in particular shapes – the production of everyday peace, the creation of superfluous populations specifically necessary for the production of working, infrastructural foundations of the city and the creation of sensations of the future, perhaps not especially a hopeful future, for substantial groups of people engaged in everyday struggles to survive in the city. This last consequence, the creation of sensations of future is especially interesting in understanding how formations of densities might convey sensations and create differential understandings of one’s place in the city even whilst being part of an enormous and anonymous crowd. As the example of the youth defiantly staring into the lens of the journalists’ camera during the breakdown of the city in July 2005 shows, the sense of the future is always dual – recognizing the need of the other to categorize one as a ‘problem’ as well as recognizing the strategy of the other to suppress one’s voice in order to get on him or her self. The navigation of densities – both in experience and in analysis – thus provides a fertile ground to be further unpacked to reveal a phenomenon that is no longer as self-evident as it first appears, to reveal sites where extremely fine-tuned and fast-paced calibrations are taking place in the production of everyday urban life.

NOTES
1. Chawls were constructed by a number of private textile mill owners in the nineteenth century to accommodate the workers and therefore were often in close proximity to places of work. They were also constructed by the city’s housing board or by communities who formed co-operative housing societies, thus choosing their neighbours from amongst familiars. Most definitions of the chawl – a form of housing particular to Mumbai – agree that chawls might be identified by their lack of private toilet facilities. Generally chawls in Mumbai tended to be one room tenements arranged in a linear fashion with a common open balcony running along one side of the building. Tenants shared facilities though most had a plumbing line for kitchen purposes.


5. As Jim Masselos points out, ‘The effective city is not necessarily… that area delineated by finely calculated precise boundaries but that defined by the movement of people within it... The movement of people to and from work represents the life flow of the city and joins two critical elements: the places where people live and the places where they work. In linking the two kinds of place, such movement signals the extent and spread of the city, its effective limits as tracked through those who work and live in it. In other words, the daily passage of people to and from work defines the effective space of the city rather than what is determined by legal definitions or government authorities’ (Masselos, 2003, p. 34).

6. Which broadly means mischievous behaviour as well as behaving with reckless abandon.


8. For a fuller discussion of these notions of productive sacrifice and superfluous populations see Mbembe, 2004, p. 16.

9. Such organizational work is actively being supported by NGOs like Stree Mukti Sanghatana (or, Women’s Liberation Organization) in Mumbai (see http://www.streemuktisanghatana.org/), whose activities include a comprehensive support system for women garbage collectors, under the aegis of their project Parisar Vikas.

10. This argument is made in my introductory essay in a report presented to UNESCO titled Heritage, Habitat and Diversity. I take diversity in the built form as a point of departure and compare the transformation of built form under
the regime of new flows of speculative, real-estate capital investment to the more widely studied ‘cosmopolitan decline’ of the city. The essay argues that it is equally important to treat diversity in built form as a value worth preserving and not treat it as a matter to be ‘taken care of’ by development. Rather, matters of diversity must also encompass more mundane matters of development (Rao, 2004).

11. These figures about density in different wards of Mumbai are taken from http://www.demographia.com/db-mumbaiward91.htm. Shirish Patel (2005) provides a succinct account of the politics and forms that such redevelopment takes in Mumbai.

12. The lack of availability of housing for rent in Mumbai is well known. It is related to the decades-old rent control bill from 1948 that froze rents at the then prevailing rates and made tenancies heritable. As a result, since the sixties, there has been virtually no development for rental housing. As Shirish Patel – a prominent structural engineer and city planner – has pointed out, this policy is directly responsible for the growth of slums and for the fact that many middle-income families are also forced to reside in slum colonies and settlements due to lack of availability of affordable rental stock.

13. Arjun Appadurai has used this formulation – ‘weapons of mass construction’ – on several occasions in his public lectures to characterize and compare the situation in post-war Baghdad with that in post-liberalization Mumbai where construction related activities are among the chief economic forces for speculative wealth creation.

REFERENCES


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