

The High Rise & The Slum: Speculative Urban Development in Mumbai

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Introduction

There seems to be a prevailing perception that apart from its southernmost colonial quarters, Mumbai is essentially a schizophrenic urbanscape where emergent islands of modernity are surrounded by an endless sea of informal shacks. This image of a city sharply divided between opulence and poverty is used across the political spectrum to justify redevelopment projects in the name of equality. The intuitive but misleading parallels slum=poverty and high-rise=middle-class, coupled with an incapacity to recognize the variety that actually exists in between these extreme categories, has allowed countless acts of injustice to be perpetuated in the name of slum upgrading and redevelopment projects. In the process, the incremental development of many so-called *slums* in Mumbai has been curtailed, with dramatic consequences for the concerned populations and for the long-term social and urban sustainability of the city. Mainstream conceptions of what a *world-class* city should *look* like and a tendency to understand urbanization from the point of view of *form* rather than *process* have given a free ride to the real estate construction industry. In this chapter, we redefine the conceptual fault-line that runs through the typologies of the *high-rise building* and that of the *slum* and propose a new planning paradigm based on neighbourhood life and local economic activities, including the production of habitats themselves.

While this essay centres on Mumbai, we refer to Tokyo as an example of a city that has blurred many of the categories traditionally used to conceptualize urban space while achieving high levels of urban and economic development. We argue that the potential of many unplanned neighbourhoods in Mumbai has been entrapped in old-school urban planning

practices and categories that are increasingly detached from the reality they are supposed to improve. These include conceptual shortcomings, the incapacity of integrating planning interventions to existing patterns of development, as well as a predisposition to segregate spatial-uses (working, living, leisuring). A more grounded understanding of Mumbai's habitats and the socio-economic processes that generate them, may help produce viable alternatives to the perpetual loop of slum demolition and reconstruction that preclude inclusive and sustainable urbanization.

We first provide a short overview of the cityscape of Mumbai and its diverse habitats, paying particular attention to the *slum* and *high-rise*, seeing them as both, actual urban typologies and ideological constructs. We then discuss the relationship between urban form and development processes in the light of relevant urban studies concepts and theories. Subsequently, we describe how a certain narrative of inequality has been used to justify redevelopment projects that feed into the speculative economy. We refer particularly to the case of Dharavi, a large unplanned settlement that is wrongly known as the largest slum in Asia. This leads us to question the hugely problematic label of *slum* that has been affixed on many of the self-helped neighbourhoods of Mumbai, often making it even more difficult for residents and small businesses to improve their conditions. Notions of what constitutes a legitimate type of habitat are central to this argument. We then proceed to analyse the typology, social meaning and political economy of high-rise apartment blocks, which is systematically presented as the only possible architectural response to slums. This provides the analytical framework necessary to introduce our concepts of the *intensive* and *speculative* city, which reflect the conflicting logics determining urban development in Mumbai. We show how the urban extreme typologies of the slum and the high-rise are ultimately produced by the friction between the *use value* of urban space and its *exchange value* as a tradable commodity. These concepts also emphasise the importance of not satisfying ourselves with reading the city's urban forms, but to also

understand the generative processes producing these forms. In the last sections of the essay we describe how deeply these processes are enmeshed and use Tokyo as an example of a city that has successfully integrated *intensive* uses and production processes of urban spaces to its development. We end with some planning and policy recommendations based on the concrete case of Dharavi. These recommendations address the ongoing urban crisis in Mumbai and beyond, which we argue, is caused by the refusal to legitimize alternative patterns of development. In the conclusion we stress the need to reconcile the fields of urban planning and economic development and open new paths towards inclusive and liveable cities.

The Context of Mumbai

The habitats of Mumbai have traditionally been as diverse and heterogeneous as the city's migratory flows. Coastal fishing villages, vernacular urban structures, grand colonial monuments, contemporary bungalows, working class barrack-like enclaves and modern apartment blocks have jostled for space on this tiny island through the eighteenth, nineteenth and early twentieth centuries. However, in spite of this diversity, Mumbai is usually reduced to three broad urban archetypes: the historical city, the slum and the high-rise.

The historical city, dominated by a mash-up of different colonial styles inherited from the British and neighbouring coastal cities like Surat, along with an even earlier imperial legacy epitomized by the fast disappearing Portuguese churches and villages, have been explored in countless photographic and architectural accounts of the city. They are part of a conservation story firmly entrenched in a past that is officially acknowledged as worthy of preservation but are rarely actually protected. Over and above that, from the 1960's in particular, the city's perception of its habitats have been reduced to a binary, that of the slum and the high-rise apartment block. In fact, Mumbai is often visually represented by the image of low-rise squatter

settlements strategically located in front of a multi-storied luxury tower, which symbolizes the inequalities inherent to rapidly developing megacities.

In Mumbai, the high-rise building, that ubiquitous symbol of modernization and the ultimate architectural affirmation of middle-class status, is typically presented as the answer to the organically developing, unplanned, low-rise, hyper-dense and slum settlements that are said to house 60% of the city's residents. Anywhere between five and thirty stories high, the height of high-rise buildings is relative to the status of its inhabitants. The high-rise, which is synonymous with the mechanization of habitats (symbolized by the elevator), requires industrial construction methods and regulations. It emerges through globally standardized legal, economic and technological protocols, which are also its biggest discursive weapon in as much as it audits space supposedly in the most efficient way, by absorbing more people vertically.

More pertinently, it produces, almost by default, the even more vague category of the 'slum', which becomes self-referential to nearly everything that falls outside the ambit of the high-rise, modern city. Even though the image of the makeshift hut has become the most popular expression of a slum in Mumbai, in reality, many other structures, including older villages that absorbed poor migrant populations efficiently into their local economies, chawls (tenements that were built for factory workers) and many self-financed middle-class homes, have been absorbed in the 'slum' category as well. It is a category that shifts and morphs and today has become all encompassing, especially, as we demonstrate below, when the construction industry uses it to release land into the real-estate market.

Understanding Urban Processes and Forms

The fact that different logics are at work in urban development is no news. Nor is the fact that these logics are often conflicting. Architect and urban historian Rahul Mehrotra has often described India's brand of urbanism as one where two worlds are compressed against one

another: the “kinetic city”, temporary and in motion, and the “static city”, monumental and aspiring to permanence¹. This echoes Kevin Lynch’s own theoretical distinctions between the “city machine” that can be planned and engineered as opposed to the “city as a learning ecology”, which develops locally and intrinsically rather than extrinsically². In the same vein, Tokyoologist Donald Richie described Tokyo as a principally “lived city” in contrast to the “designed cities” of the US³. Anthropologist Hiroshi Tanabe explains how in Japan the “the artisan’s city” was being reinvented within the dominant paradigm of the “architect’s city”, in spite of their seemingly irreconcilable logics. In addition, many authors, including sociologists Saskia Sassen⁴ and Manuel Castells⁵ have theorized the relationship between the “formal” and the “informal” processes within global cities, pointing out to the fact that far from merely coexisting in distinct universes, these were mutually dependent and supportive.

Much has also been written about “top-down” planning versus “bottom-up” processes, especially from an activist point of view, with Jane Jacobs as the charismatic figurehead of a grassroots, people-centric approach to urban development. The debate is now often put in terms of participation and exclusion with, on the one hand, the kinetic, organic, lived, informal, bottom-up city, and on the other hand, the static, machine-like, designed, formal and top-down planned city. The former is the city that is being produced everyday, incrementally and in a piecemeal fashion by the multitude. It is inclusive at one level but also messy, dysfunctional and substandard, often represented as a sprawling slum. The latter is a city planned by experts, efficient, rational, modern but also expensive, exclusive, unsustainable and potentially alienating. Its icons are the high-rise building, the air-conditioned shopping mall and the parking lot.

¹ Alex, Krieger, William S. Saunders, 2009, *Urban Design*, University of Minnesota Press.

² Lynch, Kevin. 1990. *City Sense and City Design: Writings and Projects of Kevin Lynch* (edited by Tridib Banerjee and Michael Southworth, editors), Cambridge MA: MIT Press

³ Richie, Donald. 1999. *Tokyo: A View of the City*, Reaktion Books

⁴ Sassen Saskia. 1994. The Informal Economy: Between New Developments and Old Regulations in *Yale Law Journal*, Vol. 103

⁵ Castells, Manuel. 1991. *The Informational City*. Blackwell Publishers.

There is indeed a long-lasting schism in urban studies between those theorizing the city from the point of view of its spatial organization and structure, and those who are interested in issues of urban justice, economic development and planning. This schism also runs through the list of authors we just referred to. Architects and urban designers tend to focus on physical form, while sociologists and planners usually explore the processes at work in urban development.

When Castells and fellow Marxist planners use the word “form”, they mean it in the sense of social and economic structures rather than physical urban typologies, or morphological responses to the context. Thus the observation of those authors interested in social processes and physical urban form often overlap but rarely merge. This has led to a great deal of confusion in the field of urban studies, culminating in the disciplinary split between urban planning focusing on the social, economic, political and legal aspects of urban development, and urban design that draws from fields of architecture and landscaping. As a result, in spite of a broad-ranging interest in informal habitats, we rarely see theories or design schemes that recognize the validity of the typologies that emerge within them.

The issue of housing for the poor in particular has for long been caught in the fault lines between form and process. While economic deprivation and social exclusion lead to all kinds of creative –even if unsatisfactory- urban solutions in slums, mass-produced housing rehabs are symptomatic of ideologically based political and architectural responses to complex social and economic processes.

An understanding of these processes is crucial to explain why the high-rise is not always a solution to the needs of a highly populated and dense city, (as its spatial logic pre-supposes) but can well become an ideological tool used by a political economy of construction that, at the end of the day contributes to producing a surplus of empty flats alongside a multitude of de-housed people.

Conversely, once shorn of its extreme manifestation as a civically challenged, violence-prone category, the typology of the ‘slum’ can be seen to hide within it a great variety of built-forms, (high-rise, low-rise, high-density and facilitating several creative uses of environment and space), eventually managing to absorb surplus populations better than any mass housing scheme, however counter-intuitive such an argument may appear. This is why we see the question of form, typology and diversity of habitats, rescued from the binary of the slum/high-rise, as crucial to providing practical solutions to the global urban housing crisis.

Narratives of Inequality and Other Binaries

Richard Burdett, chief organizer of the Urban Age Conference⁶, which travelled through Mumbai in 2006, opened his presentation with yet another image showing a ‘world-class’ high-rise building, surrounded by a slum. The building stands like an island of modernity in a dark sea of slum, ready to swallow the structure at the next financial crash, or conversely, ready to be redeveloped into a well-ordered mass-produced housing project. Whether this photo was taken in Mumbai, Sao Paulo, Mexico City or Istanbul is irrelevant. The same cliché has been used countless times in movies, documentaries and articles about the “global south”. The inequalities generated by our global economic system seem nowhere as visible as in the megacities of South Asia, Latin America and Africa, where decades of foreign and domestic investment in real estate have produced globalized cityscapes in parts of the city, while others remain entrenched in supposedly pre-modern living conditions.

Juxtaposed thus, the slum and the high-rise look as if they belong to different worlds, coexistent but irreconcilable. The slum appears anachronistic; a living ruin from a not-so-distant past, when modernization and urbanization in the national context were stuck in a time

⁶ www.urban-age.net

lag, enmeshed in “Third-World” conditions. The juxtaposition is seen as representing two faces of the same capitalist Janus, simultaneously producing poverty and wealth.

The slum and the high-rise have often been described as deadly enemies, whose mortal combat can potentially bring about the downfall of urban civilization as we know it. The most recent and dramatic exposition of this urban fantasy is provided by urban prophet Mike Davis in the dark conclusion of his review of slum literature:

Night after night, hornetlike helicopters and gunships stalk enigmatic enemies in the narrow streets of the slum districts, pouring hellfire into shanties or fleeing cars. Every morning the slums reply with suicide bombers and eloquent explosions. If the empire can deploy Orwellian technologies of repression, its outcasts have the gods of chaos on their side.⁷

This imagery was recently brought to cinematic life in the movie ‘District 9’ where monstrously alien visitors get stuck in a township of Johannesburg. Filmed with a handy cam in a deserted section of Soweto, ‘District 9’ uses the physical reality of slums as well as the politics of spatial control as special effects. Slums, townships, shanties or favelas indeed make for the most potent backdrop against which one can overlay classic gangster plots, feel-good movies, sci-fi fantasies and other political commentaries (think ‘City of God’ and ‘Slumdog Millionaire’). While slummy landscapes work as a visual stimulant for the cinematic industry, which sense vitality amidst their deprived contexts, developers, governments, industrialists and some architects prefer seeing them as the last frontier of wilderness that needs to be conquered and domesticated.

Expositions of urban misery, and its corollary imperative of bold, urgent action, seems to satisfy everyone - from government officials to NGOs, including builders and architects, except maybe a segment of the so-called slum-dwellers themselves and a few angry commentators. The sense of urgency and the need to *do something* has led to countless well

⁷ Davis Mike. 2006. *Planet of Slums*. Brooklyn: Verso Books, p. 206.

and less-well intentioned schemes by government, non-governmental organizations and international institutions to alleviate the condition of slums-dwellers. The most grandiose of which, is doubtlessly the late UN Millenium Project, which aimed “to achieve significant improvement in the lives of at least 100 million slum dwellers by 2020”⁸ and proposed a mix of strategies relying mostly on massive government intervention, market-driven solutions and the involvement of slum-dwellers themselves. On a closer look, however, even socially conscious and seemingly progressive schemes such as the ‘Taskforce’ on improving the life of slum-dwellers have developed severe fault lines, particularly at the interrelated levels of concept and implementation.

Producing Slums

Questioning the category of *slum* is not simply a matter of responding to rhetoric. It has important consequences for the people concerned by slum alleviation, rehabilitation and redevelopment projects, and beyond, including people indirectly affected by the development of new slums in their cities. Countless redevelopment projects across time and in all parts of the world have been justified by labelling neighbourhoods as slums. Here is urban theorist and advocate Jane Jacobs denouncing an urban renewal in the West End of Boston taking place in the 1960s:

I talked to two architects in '58 who helped justify the destruction of the West End. And one of them told me that he had had to go on his hands and knees with a photographer through utility crawl spaces so that they could get pictures of sufficient dark and noisome spaces to justify that this was a slum -- how horrendous it was. Now that was real dishonesty. And they were documenting stuff for it.⁹

⁸ http://www.unmillenniumproject.org/reports/tf_slum.htm

⁹ Jane Jacobs, Interviewed by Jim Kunstler. 2001. *Metropolis Magazine*: Toronto Canada

The saddest part of the story is that the exact same strategies are used today to justify large-scale real estate projects in cities throughout Asia. The most notorious example of this is probably the Dharavi Redevelopment Project (DRP), conducted by the government of Maharashtra, which has for long pioneered the provision of housing to the poor by private developers. The DRP was denounced by a panel of experts appointed by the government itself as a “sophisticated land grab”. In an open letter to the Chief Minister of Maharashtra they write:

The residents of Dharavi have established not just homes but thriving businesses and livelihoods... The residents of Dharavi are being offered free construction and the legalizing of their status, but this is in exchange for (a) shifting into less than half (47%) of their original land area and (b) the destruction of their livelihoods... the land thus released from occupation will be commercially exploited and significant profits are expected to accrue to both the Government and to the developers entrusted with the project. The project is being driven by personal greed rather than the welfare of the residents of Dharavi. ¹⁰

Jockin Arputham, one of the experts in the panel, who is also the president of the National Slum Federation was quoted saying the following about the DRP: “There are so many contradictions and complications. Only 35% of the slum dwellers seem to be eligible for the project and the government has not [surveyed] 35,000 families living on lofts and first floors.”¹¹ To the social and economic destruction that such a redevelopment project implies, one should also add the perverse effect that throwing out hundreds of thousands of people out of their homes and work will have on the city as a whole. In which new slum will people go? Which streets will they be sleeping on? Whose jobs will they compete for?

¹⁰ Open letter of the Committee of Expert to Hon. Shri Ashok Chavan, Chief Minister of Maharashtra concerning the Dharavi Redevelopment Project, July 7, 2009, posted on www.dharavi.org

¹¹ Move to Postpone Dharavi bid opening bids raises eyebrows. July 31, 2009, Mumbai: *The Times of India*.

The inability of policy makers to understand Dharavi's enmeshed residential, productive, trading and community spaces is proving to be severely detrimental to its planned future. The fact that it emerged incrementally ever since the first economically and culturally marginalized caste groups migrated in the 1930s - from the southern regions of the country - to this unused, marshy, mosquito-infested territory adjoining a centuries old fishing village, means that it became a huge experimental space for urban habitats to grow. And grow they did, literally creating wealth from nothing, with no basic credit or help from official sources, and eventually created a diverse and dense locality producing billions of dollars worth of goods and services.¹² It also produced habitats of all kinds, urban villages, dense buildings, mixed-use spaces, 'tool-houses'¹³, and several other forms that satisfied its unique needs and those of the several thousand residents who were part of the city's massive 'informal economy'.

The more than eighty odd community based enclaves that exist in Dharavi are a testimony to the city's social diversity manifested in this neighbourhood. Bringing in rural memories through the migration histories of different communities, their own skills of construction and ability to improvise with new materials, the built-forms of Dharavi reveal remarkable innovation, adaptability and variety. Factors that have contributed tremendously to its unique mixed-use patterns. Of course, while Dharavi did also emerge as a space with an acute shortage of basic civic amenities, it showed remarkable capacity to provide services on its own too. It never lacked initiative and resources, only support and recognition from the city's authorities, for the fact that in its own way, Dharavi has been an intrinsic part of the city's economic and cultural story.

What the official gaze actually did was standardize the entire neighbourhood's experience into a legal argument about invalid citizenship, labelled the settlement as the city's biggest slum and in the last ten years started to unleash a process in which real-estate interests

¹² Sharma, Kalpana, *Re-discovering Dharavi*, Penguin, 2001

¹³ Echanove, Matias and Srivastava, Rahul, *The Tool House*, Mumbai Reader 2008, UDRI, Mumbai.

started to dictate its re-development. A process that is bound to eventually evacuate a good percentage of the erstwhile population and reduce the remaining to a service-based economy looking after the needs of the new middle-class, just waiting to move in.

This extreme case of urban, real-estate abuse, denounced by prominent urban planners, social workers and slum activists in Mumbai, is echoed at a much smaller scale, thousands of times over in Slum Rehabilitation Scheme (SRS) projects, which allows private developers to redevelop slum pockets with the consent of 70% of the “eligible slum dwellers” living in that pocket, in exchange for construction rights in more valuable parts of the city.¹⁴ Unlike the DRP, this scheme has the merit of requiring the consent of a part of the concerned population. However this scheme has also generated millions of square feet of housing of the poorest quality that cannot be maintained by its residents over time. Moreover, the rehabs do little to solve infrastructural, amenities and health issues of the concerned population, as was recently demonstrated in an important study by Amita Bhide of the Tata Institute of Social Sciences¹⁵. Past projects have shown that the poor quality of rehab buildings means that within a few years they start to deteriorate, and in many cases become just as bad as the slum from which dwellers were initially rehabilitated. Finally, it has also been observed that a large percentage of the rehabilitated tenants were quickly forced to sell their new property in exchange for much needed liquidities, and subsequently found themselves with no other option but going back to a slum.

This scheme that lets the private sector produce housing for the poor through incentives by the government has sparked the interest of people around the world. However successful these types of public-private partnership can be at providing formal housing to the poor, the economic mantra of development (*as freedom* or otherwise) through market liberalism has not yet propelled the masses to the nirvana of high-rise dwelling. No matter how eager the

¹⁴ www.sra.gov.in

¹⁵ Bhide, Amita. 2008. *Resettlement or a Silent Displacement?* Mumbai Reader 2008. Mumbai: UDRI, pp. 302-329

developers, the demand for housing seems endless, especially as the city grows with each successive wave of immigration from economically or environmentally challenged parts of the Indian sub-continent. Moreover this scheme relies completely on an economic context of booming real estate prices, where building rights are highly valuable. The incentive would thus disappear at the first economic downturn.

One of the most important problems with the SRS scheme is also one of the least talked about. As the rehab project pretends to improve living conditions, it often disconnects rehabilitated slum-dwellers from their means of subsistence, which in India is often completely dependent on the access to the street. In Dharavi, for instance, virtually every structure with access to the street doubles up as a storefront or a small manufacturing unit. These activities cannot possibly be maintained at the 6th or 7th floor of a high-rise building. Social capital, which is often leveraged by slum-dwellers for income generation or subsidy strategies, has for long been identified as a collateral damage of rehabilitation schemes¹⁶. The displacement (even in-situ) from low-rise, high-density dwellings to more impersonal high-rise, high-density housing has a negative impact on social networks. This can to some extent be mitigated by intelligent design, but design is unfortunately never a priority of low-cost housing. Thus, the move from slum-type structures to high-rise rehab flats comes at a cost, which is both economic and social. Dharavi resident and social worker Bhau Korde expresses it more clearly than anyone else could:

They say they will redevelop Dharavi, but look at what they're doing. These high-rise buildings mushrooming all round us. People who move in are selling and leaving their flats already. They need money because they cannot continue with their livelihoods in these buildings. People living in these high-rises don't know their neighbours anymore.

¹⁶ Anderson, M. 1965. *Federal BullDozer: Critical Analysis of Urban Renewal*, Cambridge MA: MIT press, 1949-62 and Gans, H. 1959. Human Implications of Current Development and Relocation, in *Journal of American Institute of Planners*, 75.

The street life and economic activity will be gone. They say this is development, but it looks just the opposite to me.¹⁷

The High Rise as Symbol

For all their odds, we must acknowledge that many slum-dwellers are not opposed to rehabilitation schemes and it is important to understand why. The most obvious reason is that after having lived in a situation of precariousness, where even the most basic infrastructure and intimacy was missing, the shift to a brand new high-rise apartment, with running water and doors and windows that can be shut is a real improvement in their living conditions. A less obvious but equally important factor is the desire to obtain a legitimate status as a citizen of the city, and of the country. Slum-dwellers are typically called squatters and encroachers by the authorities, indicating that they have no right or status as citizens. Owning a flat means belonging to the city at last. Thus the readiness to move from slum structures to a high-rise often expresses not as much the necessity to fulfil essential needs, as it is motivated by the desire to achieve higher status in relative terms. Status is in turn a function of the social gaze (or “regard”), as Adam Smith observed once¹⁸. The symbolic value of residing in a building, in a city like Mumbai, where 60% of the population is said to be living in slums, is so high that it sometimes prevails over other costs, such as distance from work or the breakdown of social networks.

Officially though, the argument to move to high-rises is made at a more fundamental level – through the belief that high-rises supposedly absorb more people on a smaller footprint of land, and this tendency is inevitable for a dense, crowded city such as Mumbai. Architect Charles Correa in his seminal work ‘The New Landscape’¹⁹, has critiqued this point effectively. He points out that the mathematics is not as straightforward as it sounds. The higher you go, the

¹⁷ Personal Communication with Dharavi resident and activist Mr. Bhau Korde.

¹⁸ Smith, Adam, *Theory of Moral Sentiments, Part I, Section III, Chapter II* via Wikipedia, http://en.wikipedia.org/wiki/Economic_inequality#Utility.2C_economic_welfare.2C_and_distributive_efficiency

¹⁹ Correa, Charles. 1989. *The New Landscape*. London: Butterworth Architecture

greater proportion of land you need to maintain standards that include open space, the trappings of a higher standard of living (including cars and wider roads) and greater costs of over-all maintenance of the structures. Unless the economy and ecology of the whole city is strong enough, the high-rise structure, if presented as a stand-alone solution to solve the problem of low cost housing is a deceptive affair. It only releases land that is ultimately filled up by more buildings and infrastructure.

Moreover, the higher the building the higher the status and the income of its dwellers, hence the more space they will use. This results in the same density levels as can be found in low-rise high-density clusters of the urban village or slum. The only reason such disproportionate use of land is acceptable is because it yields more short-term gains. There is no justification to use them as a standard typology for social housing projects on the common but misguided assumption that they absorb more people per square unit of land. Shorn of a deeper understanding of complex patterns of spatial use by people of different economic needs and backgrounds, such policies only produce the same dystopic urban forms that have already failed in cities such as Chicago and Paris and many other cities that have attempted to engineer solutions to their own chronic housing crisis.

In Mumbai, there seems to be a necessary trade-off between living in a high-rise and being a legitimate citizen - versus living in a slum and being a squatter. On the one end, status and the provision of basic infrastructure, and possibly (depending on the schemes) access to capital in the form of a property and, on the other hand, economic opportunities, social network and (depending on the situation), a certain freedom to develop one's own habitat. It is our contention that this trade-off is produced by faulty policies, inadequate regulations and vested interests that artificially turn housing into a scarce resource, which create markets for the construction industry and increase real estate value²⁰.

²⁰ For a darker twist to this assertion, but one that is even more accurate, see Weinstein, Liza. 2008. Mumbai's Development Mafias: Globalization, Organized Crime and Land Development

In the 1970s already Ivan Illich rightly criticized the regulatory apparatus that makes it nearly impossible for the vast majority of people to build their own homes, making them dependent on a web of industries and financial institutions for the provision of loans needed for the purchase of living and working spaces²¹. Habitats built outside of any regulatory frameworks may seem like a total utopia to most, but this is how most of Mumbai was produced. This is also true of Tokyo after the Pacific War which had destroyed most of its neighbourhoods²². To imagine the possible future of the slum only in terms of mass developed high-rises is terribly limiting, both in respect to the possible urban typologies that can function as healthy habitats, as well as in terms of the activities that they sustain.

Even without advocating for a world free of regulation, we can see how a place like Dharavi and many slums throughout Mumbai could benefit from an approach that would first recognize the value of what has been built incrementally over generations, including a fantastic network of ad hoc water pipes and sewerage lines. The urban form produced by a piecemeal development process of many settlements from Mumbai to Tokyo, should not be dismissed simply because they have not been master-planned or because their forms do not conform to established perceptions of how contemporary urban neighbourhoods should look like. Many localities in Tokyo have much in common with Mumbai's low-rise high-density residential clusters, though one may, from a Mumbai vantage point, find it laughable to refer to Tokyo's neighbourhoods as slums. If all that separates one from the other are the presence of civic amenities, infrastructure and services, then why should Mumbai's neighbourhoods not be provided those instead?

In fact, Tokyo's low-rise high-density neighbourhoods represent a de facto alternative to the idea that urban development must, or indeed can, be controlled and managed from the top

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²¹ Illich, Ivan. 1989. *Tools for Conviviality*. Heyday Books.

²² Seidensticker, Edward. 1990. *Tokyo Rising: The City Since the Great Earthquake*. Cambridge, Mass: Harvard University Press.

down alone and that habitats must be reengineered to conform to set notions of urban forms. We believe that somewhere in between master-planned habitats and improvised development lie crucial answers to the housing and economic crisis that so many cities face. To understand exactly where in between, we need to understand first the economic forces at work in the production of the iconic and somewhat deceptive forms of the slum and the high-rise typologies.

Use Value v. Exchange Value of Urban Spaces

We observe that in the slum economy, the value of space is maximized by its optimal use as a means of production, which we refer to as *intensive* use, while in the “formal” economy, the value of space tends to be disconnected from its actual use. Instead, value of space increases with its tradability. We refer to this use of space as *speculative*. These two modes of valuation have a deep impact on urban forms and their possible uses. Moreover, they appear to be somewhat in competition, with intensive spaces being aggressively prayed upon by promoters and developers for speculative uses.

The typologies of the slum and the high-rise correspond to extreme versions of intensive and speculative spaces. On the one hand, we have a context where a plot of land in a slum cannot be left empty even for a week before being occupied and used, and on the other hand, we have an industry that can generate enormous speculative value on property by trading it multiple times while leaving it empty. In the speculative realm, empty space is more valuable than occupied space since it becomes more easily tradable. The value of such space is abstract to the extent that it relies on uncertain notions of what it may be worth in the future. It is determined by the broader economic and financial context rather than intrinsic values or the activities it permits. Since it is used as a commodity, the value of speculative spaces is thus contingent on the capacity of traders to precisely define its boundaries. Informal settlements

with their fuzzy ownership patterns and disputed boundaries need to be mapped out and audited before they acquire any speculative value. This is precisely what Slum Rehabilitation Schemes do: They transform intensive spaces into speculative spaces.

The impact of Slum Rehabilitation Schemes on urban form but also on ground-level economic activity can hardly be overemphasised. Turning one's own intensive space into speculative space is the trade-off being offered to slum dwellers who typically accept to move from a ground +1 structure, where they live and run business, to a new 225 sq ft apartment cell on the 5th floor of a building, which is completely disconnected from the street economy. They trade the use-value of a means of production for the speculative-value of a real estate asset. At the level of the city, this means that the process of "formalization" comes at the price of 'de-intensifying' use of space and creating a clear distinction between living space and working space.

This fragmentation is typically presented as social progress. But in real terms it comes down to buying slum-dwellers off their current economic activity and destroying a process of incremental development that has proved its worth by providing employment and housing to hundreds of thousands of migrants to the city. If we are to bring back any meaning to the concept of 'development', it is time we understand the intensive process of urbanization in Mumbai's slums with its successes and failures.

Unfortunately, the government officials, urban planners and commentators are pre-disposed to certain notion of land use and urban form: high-rise structures with multiple, standardized units that have to absorb a maximum of residents at the lowest cost, on the smallest piece of land possible. The process is expensive and depends on the government to audit space as well as on the market for subsidising the redevelopment. It is shaped by the pressure not just to absorb surplus populations but to simultaneously supply more land for the

market. This land that can then be used with no apology for actual spatial use. It can occupy huge footprints or remain unutilized.

In a classic illustration of what typically precedes such a process, in 2003, the consulting firm McKinsey & Company published a blueprint on how to transform Mumbai into a world-class city in ten years time. Among other things it called for: i) dramatically increasing the supply of low-income housing and ii) moving manufacturing to the countryside and turning Mumbai into a consumption centre.²³ The first obvious problem is that low-income housing is typically out of reach of the poorest segments of the population and instead serves the needs of the employed classes. Moreover, moving manufacturing out of the city means depriving millions of dependent self-employed workers of their livelihood and therefore making the provision of low-income housing completely redundant since there is no way they could afford it. Once again, the intensive use of space - typical of live-work conditions of the poorest – comes under attack in the name of providing affordable housing. “Vision Mumbai”, the McKinsey blueprint, was sharply rejected by Mumbai’s activists and politicians. In fact it became politically suicidal to mention the “Shanghaization of Mumbai”, a catchword that was widely circulated in the publicity of the report²⁴. Interestingly, populist politics came to the rescue of slum dwellers under threat from forced evictions in the most visible and politically active settlements of Mumbai.

When the speculative logic prevails, the real estate and construction industries dominate urban development. This comes at the cost of local economic activities, including neighbourhood-based businesses, retails and services. As Saskia Sassen points out, construction is often mistaken to be a marker of economic health, when in fact the construction industry may be contributing very little to the city.²⁵ Real estate development is mainly fuelled by a

²³ Bombay First, McKensey Report. 2003. *Vision Mumbai: Transforming Mumbai into a world-class city*.

²⁴ Tarun Khanna. 2007. *Billions of Entrepreneurs: How China and India are Reshaping Their Futures--and Yours*. Harvard Business Press, 75-76

²⁵ PUKAR Lecture by Saskia Sassen, November 2006, Mumbai

speculative economy, which artificially increases the price of space. Rising costs make it particularly difficult for people who cannot invest but need homes to buy or rent at affordable rates. At the same time this does not stop the mass construction of housing projects that find their markets in the world of investment or luxury. Locked-up homes and empty high-rises next to over-crowded tenements is a common sight in many cities, especially in South Asia, where the speculative city muscles its way through the corridors of urban power.

In fact, the speculative logic is producing empty urban shells around the globe, fed as it is by the same financial markets that collapsed recently under the weight of the bubble they had produced. The skyline of Mumbai is full of spectral constructions waiting to be inhabited by an illusive Indian middle-class. In this respect, Mumbai is indeed following Shanghai's steps, which after years of speculative investment is "full of buildings in search of a city" -as Arjun Appadurai memorably put it.²⁶ The most dramatic example of speculative development is of course Dubai, notoriously competing with itself to hit the sky and producing millions of empty square feet of office space on the way. But this is not only happening in rapidly developing cities. The occupancy of the iconic and ill-fated World Trade Centre twin towers in New York, was in reality around two thirds of its capacity after all these years of existence until the tragedy. The same is expected of the new Freedom Tower under construction on ground zero. Since speculative value is tightly related to status, which is measured in terms of height, investors and developers do not care much whether or not full occupancy is achieved. More floors add value to the building as a whole, irrespective of actual use.

The intensive city, on the other hand, only derives value from actual use. This creates a space that, for better or worse, is optimally occupied round the clock, since it is used as a means of production in a context of economic survival. It is produced out of sheer need by non-professional, non-legal local actors rather than real-estate developers, planners and architects.

²⁶ Personal Communication.

This generates an environment that may be lacking in many aspects of modern comfort, but which is free from the imposition of any spatial ideology –even that sacred injunction of contemporary cities which declares that living and working spaces must necessarily be segregated. It ultimately produces a vivid variety of forms, structures and styles in response to means and needs. It is this flexibility that allows for a higher degree of absorption of populations, especially when they are part of the informal economy or belong to the poorer segments²⁷. Dharavi has produced a typology that we refer to as the ‘Tool-house’ in response to such a need. Taking off from the artisanal house that typically housed spaces of production and storage along with living needs, the tool-house is a physical embodiment of the most intensive use of space possible. Storage and sleeping, cooking and producing, manufacture and consumption often happen within the same footprint of use. Such needs are the main principle through which structures in Dharavi emerge and reveal a collapse of zoning in terms of working and living. A typical extension of such a logic also spills over into notions of private and public spaces where the streets and the homes also mirror functions and uses of each other. The spirit of exchange connects public and private realms and the bazaar becomes a default principle of space as a whole. In most cases, street-scale structures that are low-rise (but can go up to as much as possible – often four storeys high) and high-density are fertile contexts for a proliferation of tool-house clusters, being in easy reach of the street as well as each other. If spaces such as Dharavi are seen through this logic, they are understood better. An alternative way to understand how fairly widespread such a logic is by taking a closer look at such typologies in richer cities with more advanced infrastructure. Several neighbourhoods in Tokyo are an ideal example.

It is vital to look at agents, processes and incentives that produce the built environment in such spaces, to understand the respective logic and potential of intensive and speculative

²⁷ For an elaboration of this point in terms of a specific built-form see Echanove, Matias and Srivastava, Rahul, 2008, *The Tool House in Mumbai Reader 2008*, Mumbai: UDRI Publications

habitats and the way they relate to each other. The contrasting examples of Mumbai and Tokyo show how these cities are typically a mix of these two principles, and how historical and cultural factors affect the degree to which the intensive and speculative logics merge or break away from each other.²⁸ How exactly the interstices and overlaps between these spatial-temporal regimes are negotiated varies greatly as we demonstrate in the next section. In Mumbai, the legacy of speculative planning ideals has produced a sharply divided cityscape –at least at first sight. In Tokyo on the other hand, a more ambiguous and syncretistic understanding of habitats has allowed a new model to emerge where combinations of the speculative and intensive cities coexist at various scales in what could be described as a harmonious mess.

Between the Intensive and Speculative Types

The landscape of the intensive city typically follows a multi-directional logic. It allows for numerous temporalities to co-exist, epitomized in different kinds of economic practices, rural, artisanal, post-industrial or hi-tech. It can tear itself down and build afresh. It does not have fixed templates or business models to follow and therefore is flexible in its approach to construct and re-build. Its built-environment combines residential, productive and recreational spaces often compressed in the same space-time.

Dharavi is perhaps the best example of a settlement developed through intensive processes. Hundred of thousands of actors over several generations have incrementally developed a fully functioning settlement and a vibrant economy. Yet, careful observation shows that the intensive and speculative are not necessarily working in opposition to each other, even in Dharavi. In fact, at a micro level, Dharavi is full of speculative investment by its residents, who see in their houses an important asset that can take value over time.

²⁸ For a historical illustration of the unique patterns of urban growth of Mumbai with regard to speculation and intensity see Appadurai, Arjun. 2000. Spectral Housing and Urban Cleansing: Notes on Millennial Mumbai in *Public Culture* 12, 627-651.

Entrepreneurs are also investing in their stock, speculating on upcoming sales. The incremental development of Dharavi is contingent on a certain speculative bet on the future by all of its residents and entrepreneurs. If anything, the looming redevelopment project backed by the government, for Dharavi, makes it difficult for residents and business owners to invest on their houses and shops. Given the uncertain future, many residents are renouncing improvement projects, focusing instead on the optimal exploitation of existing resources. Thus, in a twisted way, real estate speculation on Dharavi in the form of the Dharavi Redevelopment Project (DRP) is slowing down of another sort of ground-level speculation by the residents themselves.

The reverse is also true, as the speculative economy generates its own slums, which often become permanent and relatively autonomous. For example, countless informal settlements have been triggered directly by the formal construction industry. In Mumbai, makeshift structures where construction workers stay accompany every construction site and become the starting point of a slum housing a population that serves the residents of the new buildings. The development of shelters and spaces, and the presence of services and commerce are conjoined economic activities in their own right. In fact, construction often triggers other economic activity in very direct ways. It generates services, sales of goods for homes and for domestic needs that then become integral to the locality. This process is typical of construction projects in many developing cities. For instance, in his classic study of the urban development of Brasilia, David Epstein observes how construction workers developed the first *favela* of this perfectly planned city. They had nowhere else to go and were able to find economic opportunities in the new capital²⁹. Interestingly, the improvised settlement of Brazil are reportedly much more alive than the master-planned capital can ever hope to be.

Invariably, unplanned settlements appear to be deeply connected to the metropolitan economy around them. Far from being parasites, marginal or self-sustained, they are constantly

²⁹ Epstein, David. 1973. *Brasilia, Plan and Reality; A study of planned and spontaneous urban development*, University of California Press.

servicing the city. This relationship is usually recognized and valued by businesses and private employers since it constitutes an indirect subsidy of their activities. Such a relationship of mutual dependency between large businesses and the local provider is again not unique to Mumbai nor found only in the context of slums. The speculative city is full of cracks and contradictions within. Saskia Sassen documented how dependent Wall Street firms were on a deep web of local businesses operating in the shadow of the skyscrapers, providing printing, cleaning and food services essential to the good functioning of the financial industry³⁰.

At the street level also, the integration of the informal and the formal is done through trade and services. In cities with a high level of tolerance to street activity and bazaars, such as Mumbai and Tokyo, local economic operators play a major role to facilitate and support the overlap of these spaces and activities in such neighbourhoods. Tea stalls, fruit vendors, tailors and ironers are a fixture of Indian cities and can be found at every corner of middle-class neighbourhoods in Mumbai. They occupy leftover and in-between spaces and cater to the needs of the residents at discounted slum prices³¹. The same relationship exists inside the homes of middle-class households employing illegal immigrants as house-workers, carpenters and cooks³².

The Tokyo Model

A conscious acceptance of the type of mixed-use habitat produced by intensive processes of urban development is a rare occurrence in contemporary cities, mainly because the form it generates is typically seen as messy and irrational within a mainstream urban planning perspective. The case of Tokyo, however, provides an outstanding example of the potential of

³⁰ Sassen, Saskia. 1994. *The Informal Economy: Between New Developments and Old Regulations* in *Yale Law Journal*, Vol. 103

³¹ For a description of the overwhelming preponderance of the informal economic context in Indian cities see, Alter Chen, Martha. 2003. Rethinking the Informal Economy in *India Seminar November 2003*, # 531

³² The 'Web' provides the latest channel through which the informal economy penetrates the homes of the middle class, from the sharing of music and movies to cyber sex and casinos.

incrementally developing neighbourhoods. Tokyo is at the same time high tech, futuristic, artisanal, traditional, mixed use, “world-class”, low-rise, high-rise and high density.

Tokyo is possibly the most efficient, urbane and sophisticated city in the world, and definitively the most populated. Yet except for its historical core of Edo, could well be described as one gigantic incrementally developed slum. The process of literally carving out space, or making it grow bit by bit was crucial in the development of post-war Tokyo, just as it is central to the evolution of habitats in informal settlements all over India.

The history of the incremental development of Tokyo after the Pacific War unfolds in the shadow of the skyscrapers that have come to symbolize Japan’s economic miracle. This shadow actually stretches over 100 kilometres around the city’s historical core and largely dominates its landscape just as informal development dominates the landscape of greater Mumbai.

After the war, Tokyo was left almost totally flattened Residents had to rebuild their lives from scratch. In this process neighbourhoods became the fertile grounds from which the Japanese middle-class emerged. They built upon a tradition of self-help that the Ministry of City Planning had produced by default in terms of incomplete urban plans since the 1920s. The pressing needs for economic redevelopment and shelter, the lack of financial resources, and the absence of legal mechanisms for land acquisition by the state, ensured that the urban plans were never implemented. The government focused instead on industrial and infrastructure development to support the economy, leaving the reconstruction of residential and commercial areas to local actors, who rebuilt the city on its ashes.

What has been overlooked in the story of Japan’s economic success with its egalitarian income distribution is the essential role of incremental development. Incremental urban and economic development processes are completely interconnected in the history of Tokyo –just as they are in Mumbai. Tokyo and Mumbai are similar in the sense that their suburbs have improved gradually over a period of time and many settlements have emerged through village-like histories. They show a high level of economic activities that are sustained by local factors such as family labour, artisanal skills and

mixed use of space, interdependence of consumption, production and exchange practices. Although the persistence of the local economy is arguably under threat in Japan, with the aggressive advances of franchised retail businesses which found ways to penetrate the neighbourhoods' intimate fabric, it is still very much alive. These local activities are facilitated by the typology of housing forms characterized by familial and community inputs in the incremental growth of each structure and its adaptation to specific needs, both social and economic.

There are indeed striking similarities – in terms of the visual landscape – between suburban Tokyo and Mumbai's many informal settlements.. Below is a photoshopped montage of Dharavi and Tokyo – which brings to life some of these.

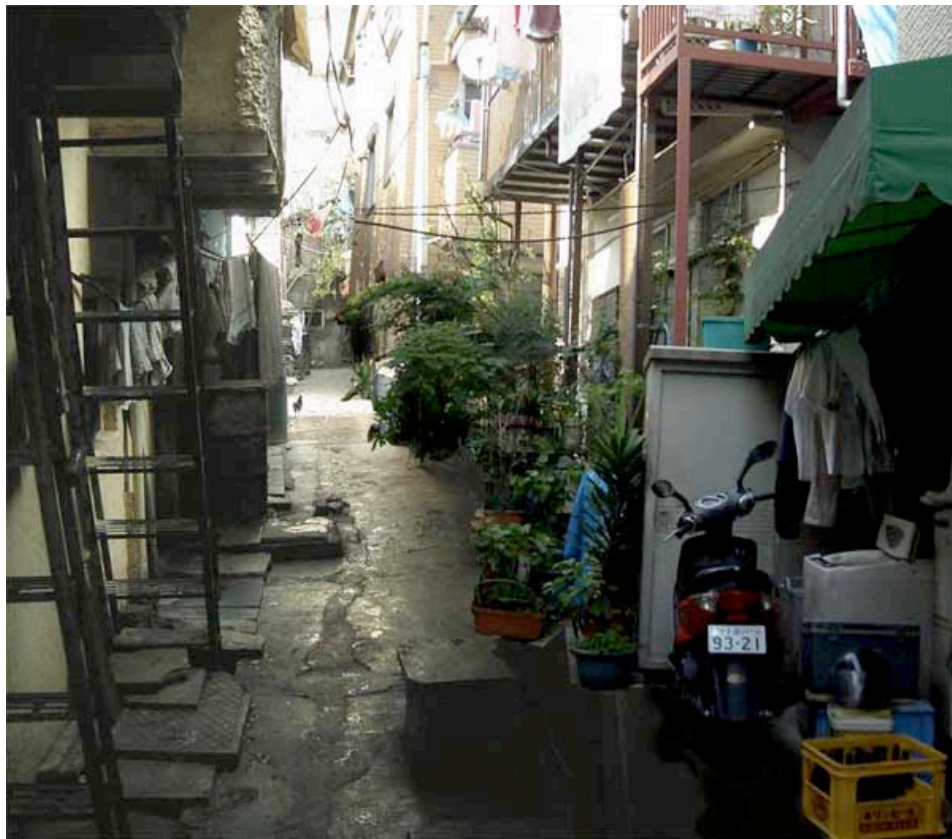


Photo-montage: On the left side Dharavi, Mumbai and on the right side Shimokitazawa, Tokyo.

Far from being anecdotal, the typological similarity between unplanned areas of Tokyo and Mumbai reveals a complex story of economic development – involving the informal sector, mixed use of land and space, the presence of street-level shops, pedestrian path networks and the use of the house

itself as a tool of artisanal production and commerce as mentioned above. In Tokyo, the older and traditional pattern of urban organization too reflected a similar experience. The roots of Tokyo's economic development are the bazaar economy, the informal street-markets, the family retails, neighbourhood-based services and the local construction industry. These still are very much part of Tokyo's economic fabric today and they are also explain Tokyo's urban typology: Low-rise, high density, mixed-use, small-scale neighbourhoods that constantly changed and evolved to produce what is today incontestably a modern, high-tech city – that continues to grow and evolve in newer ways.

In Tokyo, the intensive processes generating such built forms and street patterns were never seen to be illegitimate, irrational or dysfunctional – quite to the contrary. This was in line with traditional township management strategies and communal organization. In the post-war redevelopment effort, neighbourhoods relied heavily on traditional construction and habitat management methods. For a long time “traditional Japanese urban development and management strategies were still widely practiced and quite effective”³³. To this day, most neighbourhoods in Tokyo have committees of residents overseeing their internal affairs and communication with the authorities.

This explains why Tokyo has both; one of the best infrastructures in the world and a housing stock of great variety. What emerges are different forms– a cluster of villages, low-rise high density urban settlements connected by transport networks and a combination of diverse housing typologies co-existing (including high-rise structures). These settlements contribute hugely to the cities and urban systems of the region as a whole to the globally connected economies of Tokyo and Mumbai.

While Tokyo's architecture has been incrementally upgraded, the urban typology is still very much informal and messy-looking, with extremely narrow and labyrinthine streets, shack type structures built with metal sheets and wood. What can be mistaken for an urban mess by

³³ Sorensen Andre, 2002, *The Making of Urban Japan*, Routledge, Japanese Studies Series p.149

the casual observer is actually a highly efficient and complex urban organization. Tokyo's leniency towards mixed-use has allowed small-scale family type businesses to exist in one of the most advanced economies of the world. Interestingly, it also prevents the high degree of residential segregation along income lines that one finds in the US.

What distinguishes the urban evolution of these two cities are that in Tokyo the process of incremental evolution of settlements, their contribution to the larger economy and the presence of mixed-used forms was accepted, allowing for these neighbourhoods to become modernized and well equipped civic spaces. In Mumbai, these processes were considered illegitimate and thus were deprived of any support.

Reconnecting Forms & Processes

The relationship between urban and economic development is not simple or one-dimensional. This becomes very obvious when these typologies are celebrated instead of being rejected. Narrow pedestrian streets, low-rise structures and lively street activity in village-looking urban contexts are glorified by conservationists and sometimes reproduced artificially and perfected in an urban plan. Medieval European towns and villages have become role models for many "new urbanists". Unfortunately, they usually end up as gated communities or cute-looking themed neighbourhoods devoid of any economic substance. This is because after all the impulse and processes that produce new urbanism townships are those of the speculative city. Houses are produced in bulk and sold as commodities. Their value is that of its market price. They do not support much economic activity within nor generate much use value beyond that of being comfortable residential spaces. As hard as they try to imitate the form generated by intensive processes in European old towns and villages, in fact these townships belong to another urban and economic history all together.

We need to question both, the superficial and speculative reproduction of a certain urban typology, as well as the dismissal of neighbourhoods that are produced by intensive processes as backward. We cannot accept the form and reject the process. When the copy is preferred to the original, and reproduction is elevated to the status of an art form in itself, the whole point of understanding urbanism as a complex interplay of forces gets lost. There have been many glorious attempts to capture the “nature” of vernacular urban order, including of course the magisterial and life-long work of Christopher Alexander³⁴. However, the processes that energize such orders have often been vastly ignored by architects and theorists of urban form, leading to a soulless “new urbanism”, which is only as ‘new’ as a copy can be.

What would be genuinely new is an urbanism that acknowledges the invaluable contributions of local actors in the developmental process, and doesn’t judge the quality of urban space on its appearance alone, but also recognizes the social, cultural and economic dynamics it sustains, and which in turn sustain it. The Tokyo ‘default’ model is here to attest that if these urban processes are recognized and validated, they give rise to environments that can be as developed, functional and technologically advanced as any modern city can be, and perhaps even more so. The case of Tokyo represents a counterintuitive notion of urbanism that over turns the simplistic categorization of urban habitats in terms of slums and modern cities – the way Richard Burdett presented it at the Urban Age Mumbai conference. It’s vital to see that his categorization produces self-serving notions of urban habitats since they directly feed into the production and sustenance of speculative cities themselves.

An approach based on the legitimization of intensive processes can liberate thousands of urban neighborhoods in Asia, Africa and Latin America from otherwise being condemned to being referred to and treated as slums. It can break through Mike Davis’s apocalyptic vision that weighs under its own predictions and a weak conceptualizing of the category ‘slum’, which

³⁴ Christopher Alexander. 2001. *The Phenomenon of Life: Nature of Order, Book 1: An Essay on the Art of Building and the Nature of the Universe*. CES Publishing

creates a devastatingly circular logic that traps millions of the urban poor into a situation of forced victimization.

Conclusion and Planning Recommendations

We believe that the ongoing growth, development and transformation of unplanned settlements such as Dharavi can be better achieved by allowing their internal energies, resources and skills to take over, just as happened in post-war Japan. So far, Dharavi's own logic was never acknowledged and could therefore never be incorporated into visions of its future. It was invalidated on legal grounds because it was part of the *informal* sector, because the marshy land on which it grew was government property, making all residents of Dharavi de facto squatters. It was also invalidated on architectural grounds, on the belief that its typologies and structures are dysfunctional urban forms because they did not correspond to a certain idea of what a *world-class* city should look like.

A cynical eye on the situation would immediately recognize the mark of greed and corruption. After all Dharavi sits on prime real estate in the centre of the Mumbai metropolitan region and a few hundreds metres away from Bandra-Kurla Complex, the new financial centre of Mumbai. The government is simply playing the game of real estate investors and builders and calling the residents of Dharavi squatters in order to takeover the land and sell it. This land grab is nicely sold to the general public as a social project, which will provide decent housing to eligible dwellers and liberate land for the middle-class. The classic image of a kid walking on water pipes over a sea of garbage, which is in fact not at all representative of the general condition of Dharavi, supports the official narrative better than anything else. The master plan is presented as the polar opposite of this dreadful reality: a clean, rational, modern and middle-class landscape of roads, motorways and shopping malls.

In order to respond to this, we must first step back and how an incorrupt government could respond to Dharavi. If it is true that Dharavi's land belongs to the government, then we can only hope that principles of social justice and democratic governance will prevail and allow its hundred of thousands of residents to keep on improving their lives with the support of the city. However, a misreading of Dharavi's urban form as inadequate may lead even a well-intentioned government to destroy one of the most impressive living examples of self-developed and self-improving urban ecology anywhere in the world. Therefore, we must understand and explain the natural ecology and find means to intervene within it without destroying its internal dynamics. This implies explaining why it is both inexact and potentially destructive to reduce Dharavi to the sole condition of a *slum*. Such reduction deprives many settlements of any sense of legitimacy and therefore lessens its access to services and infrastructure granted to other parts of the city. To this effect, we must go beyond an analysis of urban form alone and understand form in the context of the processes that generate it. This means that we have to change our initial assumption, and understand the neighbourhood not just as a physical space occupied by people (which can be surveyed in a two-dimensional inquiry) but as a multi-dimensional spatial-temporal experience produced by communities, individual histories and productive activities.

The challenge is to understand urban forms of certain neighbourhoods not as objects in space, but as the living expression of productive processes generated by the users themselves. If we could appreciate and communicate this simple idea in our studies, designs and plans we would be closer to solving ongoing urban and economic crisis in Mumbai and many other parts of the world, including perhaps in "first-world" cities.

Any study of urban form in incrementally developing neighbourhoods from the point of view of generative processes, necessarily includes an economic/productive dimension. This is particularly evident in the example of the *tool-house*, which is a residential space as much as a

tool of production, meaning that upgrading it also improves one's economic condition.

Similarly, any construction activity is always necessarily an economic one in as much as it involves productive skills, labour force, purchase of material, land-use and so on. When local actors get involved in the process of construction, the wealth generated by this economic activity is typically recycled in the local economy. In resource-deprived contexts, mutual help often becomes the currency of exchange for the local production of habitats. When this process intensifies, the local exchange and production of resources, skills, labour and material give rise to the most improbable urban achievements in the form of Dharavi or Tokyo's suburbs.

In order to achieve this we must make the overlaps between urban planning and economic development more explicit.

It is important to understand that cities are variegated spaces with differing economic activities which have evolved in distinct historical contexts. These different economic functions have as many distinct spatial needs that support them. If offices and financial centers that are connected to global markets need segregated office spaces with a high level of connectivity, informal manufacture and local trading need their own special physical expressions and typologies. Mumbai, has a large informal sector that includes manufacturing, trading, hawking and consumption for a population with a low level of income and expenditure. This informal sector keeps the prices of services in the city globally competitive. The sector can only evolve and grow into providing a better support system to the city as a whole when it has a physical context that can satisfy its needs. If one looks at the economic activities as well as their necessary physical structures as dysfunctional, then the whole parts of the city can be destroyed with no particular loss to the official, formal city. However, the truth of the matter is the so-called informal sector is intimately tied to the so-called formal sector. The large labour force that it yields, from semi-skilled office staff to inexpensive food providers, or as subsidised

producer of goods for the formal sector – makes the so-called informal an integral part of the official urban economy. If this is recognized then the spatial needs of such an economy too have to be recognized. Such recognition will only make way for a productive transformation of a significant sector of the city's economy into a more dynamic one. Following Tokyo's experience, at least for the moment of its transformation in the post-war period, will reveal that such dynamism is something that transcends specific cultural and historical explanations of economic growth and may well show the way to many Asian cities if not others where the 'problem' of informality has become an integral part of a city's story.

However, to examine this interconnections between spatial forms and economic activities one needs to follow a kind of city-survey approach that goes beyond mere physicality but sees it as an embodiment of economic forces at work. For such surveys we don't have to move from the space of urban planning to that of anthropology. Instead, we could go back into history and learn again from one of the most farsighted urban planner of the twentieth century, who incidentally happened to spend a part of his life in Mumbai.

Patrick Geddes, who taught at Bombay University from 1919 to 1925, is well known for his defence of what he called regional surveying methods. He believed that good planning relied on good surveys, that would incorporate the ecology and social processes. For Mumbai he proposed a planning approach that would preserve and enhance human life and energy and would not try to imitate the aesthetic of European cities. Today, more than 60 years after independence his recommendations remain as valid as ever, especially in the context of rapid urbanization fostered by speculative development on the one hand and intensive urban development by Mumbai's immigrants on the other.

The detailed surveying of sites destined to be redeveloped in particular has not been given the importance it deserved. This was clearly demonstrated by the last demographic and physical survey of Dharavi, which ignored everything above the ground floor, excluding tens of

thousands of families de facto from the scheme³⁵. A real survey would not simply produce an enumeration and a map of existing structures. The survey as understood by early followers of Geddes, including Lewis Mumford, was much more than an audit of people and space³⁶. It was about understanding how to connect existing topography and milieus with urban development. The same wisdom applied to these parts of the city that have developed through intensive processes, outside of any master plan, processes that could allow the city to capitalise on existing local organization and development patterns, instead of clearing them. This would not only insure a more diverse and vibrant urbanism for the city, it would also preserve the economic and cultural life enmeshed within these neighbourhoods.

The type of survey we are envisioning for Dharavi, one that would enhance its transformative potential, is impossible without the active participation of the concerned population. It involves a deep understanding of the communities, productive activities, social networks, migration patterns, construction methods and material, ad hoc infrastructure, communication systems and so on. It is only such a detailed inquiry, which would constitute the basis of any meaningful and constructive intervention of the government. This kind of a survey is impossible as long as we do not accept the impossibility of reducing urban complexity without disrupting social networks and economic processes embedded in the urban fabric. This sort of open and inclusive survey, relying on existing local institutions and community organization, would be much more than documentation. It would in fact constitute a real intervention in so far that it would render legible places that have hitherto been regarded as impossibly messy and dysfunctional. At the same time it would identify interlocutors of the government in each part of the city, who would be best suited to identify needs and means, and follow up with the implementation of any possible plan.

³⁵ Nauzer Bharucha. *Move to postpone Dharavi bid opening raises eyebrows*. The Times of India, Friday July 31, 2009.

³⁶ Law, Alex, 2005, The Ghost of Patrick Geddes, Civics as Applied Sociology in *Journal of Generalism & Civics - Issue VI*

Another aim of this deep survey would be to make a social and economic cost-benefit analysis of any redevelopment project. The benefits of selling the land on which many have settled over the years should be weighted against the cost of destroying that very economic base. Similarly, the cost of in situ infrastructure upgrading should be weighed against the benefits of embedded infrastructure into new housing developments. The benefits of redevelopment for the eligible slum-dwellers should be evaluated against the cost to ineligible dwellers, and to the city as a whole, which will need to absorb them one way or the other. Only then can a proper choice be presented to the interested population and the taxpayers, to political parties and elected representatives.

Such approaches can help provide an alternative way of looking at the ongoing processes of urban development and take it away from its present tendency – of seeing it as a question of a physical transformation divorced from a complex and variegated set of economic activities. This disconnectedness only serves the interests of a speculative logic that treats built forms as an abstract category, connected to either aesthetics or simple housing solutions – solutions that are further disconnected from economic needs and functions. On the other hand an understanding that is forced to negotiate the connections of space and function places the whole question of housing needs into a different realm – what we refer to as the concerns of intensiveness. So far the only acceptable choices that have been made have pushed for the speculative logic in an extreme way. It would be worth trying a more nuanced and complex interplay which places the intensive city at the centre of the process and then builds up towards a more evolutionary logic combining the two. This way builders and real-estate developers will not tyrannical leaders the urban age, but fellow participants, contributing their skills and resources along other private, institutional and civil society players.

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