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WITHIN THE LIMITS OF SCARCITY

RETHINKING SPACE, CITY AND PRACTICES

Edited by
Barbara Ascher
Isis Nunez Ferrera
Michael Klein

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Working together to finish upgrading the classroom,
Baban Seth quarry settlement, March 2010

#shared spaces
#peri-urban
#informal settlements
#participatory methods
#India

Negotiating shared spaces in informal peri-urban settlements in India.

The role of amenity buildings and the effect of the post-hoc introduction of infrastructure towards the creation of common places

Introduction

The majority of cities in India have grown and developed organically from indigenous origins. Many of these cities have been under colonial rule, and today continue to exhibit characteristics of western influence. Secular ‘public-ness’ and ‘civic-ness’ (Hosagrahar 2005) instilled by the British colonials through the rebuilding of cities such as (New) Delhi challenged the traditional predominantly religious Mughal spaces that had existed before in North India. Today, the definition of ‘public spaces’ in Indian cities is being further challenged by informal urban settlements. Unplanned urban development has led to the creation of new spaces typified by their informal occupation and changing use through the day, month and season. Conditions of these topographies are constantly being redefined with the changing urban landscape and demands of society. The nature of shared spaces in informal settlements can be revealed and understood by first referring to them using more appropriate words that more accurately describe their position within the urban order. Places that are shared or common, invoke a sense of place and belonging more than that of ‘public’.

Informal peri-urban settlements exist at the periphery of major cities and towns throughout India. As rapid urbanisation continues globally and cities expand, some rural settlements are swallowed up and become islands - ‘urban villages’ - within cities. These emerging hybrid landscapes (Davis 2006) often struggle to develop under conditions of scarcity caused by lack of physical and social integration with, and connection to the city. Problems experienced by communities living in these urban fringe settlements include issues relating to clean water and sanitation infrastructure, housing and provision of amenities and services. Whilst government institutions fail to deal with the scale of the problems that need to be addressed, foreign (outside) aid and intervention by NGOs and charitable institutions attempt to alleviate these conditions of scarcity through amenity building and upgrading of settlements. Whilst rural to urban migration is increasing as villagers make their claim to the city, there is little sense of civic space (in the Western sense) beyond the centre of the city.

In his book *Arrival cities* (2010), Saunders discusses the choices people make to migrate from villages to cities, creating opportunities for themselves to better their lives. Saunders believes that the durable clusters created by semi-permanent village migrants are not a reproduction of agrarian living, but a new understanding of home. He supports the positive impacts of mass migration on cities and people,

emphasising that they are not victims, but citizens aspiring towards a middle class¹ world. Davis (2006) on the other hand takes a rather pessimistic view of peri-urbanisation and slum growth, and their detrimental effects on the city.

‘Participation’

There are several toolkits for participatory design in building and urban decision making (UN-HSP 2001, Wilcox 1994). However, most of these strategies focus on community consultation and design prior to building, with involvement ceasing once construction starts on site. Hamdi’s Placemaker’s Guide to Building Community (2010) focuses strongly on participation at the design and decision-making stages and social engagement following a strategy called PEAS (provide, enable, adapt and sustain), but with less emphasis on engagement through making. Within the framework of social sciences, conventionally practiced research methods are well developed and clearly defined processes, offering well-tested formulas for carrying out fieldwork in the fields of anthropology and sociology amongst others. However, when applied to architecture, these methods focus on quantitative and qualitative approaches and used on their own, tend to: “‘flatten’ our ontologies so as to erase the differences between living and those things that mediate the living, but do not, in and of themselves, initiate it” (Ivakhiv 2011).

Well-established participatory methods developed since the 1980s have been adopted as standard practice by NGOs, development agencies and practitioners. Chambers’ (1994) Participatory Rural Appraisal (PRA) focuses on the incorporation of knowledge from local people, developed from Rapid Rural Appraisal (RRA) – techniques that could bring about a ‘reversal of learning’ (Chambers 1983). However, the limits of participatory approaches have been raised with a critical view towards PRA and other similar participatory development methods adopted by NGOs and development agencies (Cooke & Kothari 2003). These views highlight a failure to engage with issues of politics and power, instead creating a ‘technical approach to development’ (Hickey & Mohan 2004). They suggest instead a transformatory approach that addresses citizenship and political capacities within a civil society.

Today participation is widely regarded as the consensus for grassroots initiatives promoting inclusive community engagement in their various projects. The Joseph Rowntree Foundation (Wilcox 1994) proposes a ‘five-rung ladder of participation’ consisting of information, consultation, deciding together, acting together and supporting independent community interests. The process is described as four-phase: Initiation, preparation, participation and continuation, with emphasis on initiation. Five different levels of participation have been identified by Hamdi & Goethert (1997): None, indirect, consultative, shared control and full control. Levels of participation are dynamic and need to be considered throughout the different stages of slum upgrading (as defined by the Community Action Planning model (Batra 2012): Initiation, planning, (shared control) design, implementation and maintenance (involving city and community).

Organisations such as Architecture Sans-Frontieres (ASF) promote a community-led participatory design approach to building communities. Their recent action research workshop Change by Design (ASF 2011) explored the opportunities and limitations of this approach through concurrent investigations at the ‘macro’ institutional scale, the ‘meso’ neighbourhood scale, and the ‘micro’ dwelling scale.

¹ ‘Middle-class’ is an ambiguous term in the Indian context used in recent literature to describe the burgeoning class driving the bourgeoisification of Indian cities (Ghertner in Rademacher & Sivaramakrishnan 2013: 272).



Participatory Action Research (PAR) practitioners have developed these participatory methods to make a concerted effort to integrate three basic aspects of their work: (1) participation - life in society and democracy; (2) action - engagement with experience and history; and (3) research - soundness in thought and the growth of knowledge (Chevalier and Buckles 2013: 10). PAR focuses on reflexive enquiry and offers researchers a way to investigate the experience of the individual, raising awareness of inequality and social policy issues. However, PAR projects highlight limitations that a small scale investigation can have on bringing about social change beyond the specific project or case study situation and often have little impact on changing policy at higher levels.

What is important here is the forming of relationships, developing of confidence and building of trust between those involved that takes time, leading to a sharing of commitment. Every person involved can learn from another in a formal setting (training) and through informal situations - this is the true nature of participation. The manner of engagement becomes a negotiation of the very nature of participation. Participation should build relationships and the sharing of resources between informed citizens “with space to have a voice” (Appadurai 2007), eventually leading to partaking in self-governance.

Research Through Making

Building/making can be used as a method for generating self-conscious engagement with spatial practice, where judgements made through practice can result in a process. Andrew Pickering in his book *The Mangle of Practice* (1995) discusses a view of the context for practice:

“The dance of agency, seen asymmetrically from the human end, thus takes the form of a dialectic of resistance and accommodation, where resistance denotes the failure to achieve an intended capture of agency in practice, and accommodation an active human strategy of response to resistance, which can include revisions to goals and intentions as well as to the material form of the machine in question and to the human frame of gestures and social relations that surround it... The practical, goal-oriented and goal-revising dialectic of resistance and accommodation is, as far as I can make out, a general feature of scientific practice” (Pickering 1995: 22-23)

Pickering’s ideas of research practice are useful in understanding the notion of research through making. Here the ‘actors’ (taken from Latour’s, 2005, Actor-Network Theory), include the material conditions, the significance of the place in the community discourse between artisans and citizens and officials, each with different kinds of virtue, skills, commitment and generosity.

Sennett (2012) explores the idea of cooperation as a craft and as a way of connecting the community with the outside world. Through understanding patterns of behaviour in collaborative settings, he highlights the difficulties of working together in situations where people are living in conditions of scarce resources, and claims that society is “losing the skills of cooperation needed to make a complex society work”. In his book *Together*, Sennett coins the term ‘dialogic skills’ emphasising the need for listening for intention rather than meaning. In Sennett’s view, the distinction between cooperation and collaboration is the idea of cooperation as something with an end result. Collaboration as a process is different to cooperation, which should not be treated as a means to an end (such as agreement). In his words: “poor skills of cooperation disable collaboration” (Sennett 2013).

Freedom, Democracy and the City

Recent discussions in development economics, such as Sen's (2009) theories of social justice (based on Rawls's (1971) rights-based theory of justice), suggest the opening up of choice, and opportunities, leading to individual freedom and increasing the capabilities of the poor. There is a move towards a focus on how people actually live out their lives (lived experience) and the kinds of opportunities and choices that are afforded to them. In *Poor Economics*, Banerjee & Duflo (2012) tell the story of how poor people live their lives, of the constraints that keep them poor, and of the policies that can alleviate this poverty. Lack of information and incorrect expectations can trap the poor, and Banerjee & Duflo suggest accepting the possibility of error and engagement as part of city life. To address Sen's (1999) insight for the need for 'substantial freedom' to enhance 'the lives we lead and the freedoms we enjoy' the two live projects developed new methodologies for upgrading these informal peri-urban settlements through a series of small scale interventions directly associated with the way people live their lives.

Notions of urban democracy are discussed by Amin and Thrift (2002: 137- 141) who propose a shift from traditional deliberative democracy (of which participation is central) to radical democracy, and Arjun Appadurai (1996) who uses the term 'community of sentiment' to describe communities moving from shared imagination to collective action. In his paper *Deep Democracy: urban governmentality and the horizon of politics* (2001), he discusses reworking urban governance by embodying local practices and values and enabling people to negotiate their own collective localities through the creation of a coalition of interest.

David Harvey (2008, 2012, first proposed by Lefebvre in 1967; Lefebvre *et al.* 1996) describes how failures of urban planning and issues of collective 'right to the city' are faced particularly by (migrant) dwellers in informal peri-urban settlements in India. Veena Das (2011) speculates that when capitalism and democracy work against each other, the credentials for rights are built incrementally - around ration cards, water, electricity and so on. The two projects tested the capacity of people to self organise around the creation of shared spaces and the extent to which this engagement enhanced their sense of empowerment and accomplishment and eased their connection into the wider opportunities offered by the city.

Two Case Studies

The two case studies illustrated in this thesis discuss on-going small-scale interventions in marginal settlements in two cities in India – Kachhpura, a rural-to-urban village in Agra, and temporary migrant quarry worker settlements in Navi Mumbai. Both are located at the periphery of rapidly developing cities - Agra, a historical Mughal city that thrives economically on the great demand for tourism; and Navi Mumbai, built as a new planned town in the 70s (Correa 1989) to ease congestion in Mumbai.

The first case study – the Kachhpura Settlement Upgrading Project (KSUP) began in November 2006 with an architecture studio field trip² travelling to Agra to investigate the topography of this urban village, which was one of four settlements surveyed to generate hypothetical student proposals from a study of the physical and cultural context. Collaborating with Indian NGO Centre For Urban and Regional

² The studio operates under the research cluster 'Architecture of Rapid Change and Scarce Resources' (ARCSR) at the Cass Faculty of Art, Architecture and Design, London Metropolitan University (LMU).



Excellence (CURE), we responded to the overwhelming need of the female inhabitants of Kachhpura for sanitation. In summer 2007, as students we installed the first internal household toilet and washing space (figures 1 and 2). We carried out hygiene awareness workshops in the schools and established quality standards, a sound construction methodology and a sustainable maintenance programme. Subsequently, by revolving the funding, more than 200 internal toilets have since been produced.

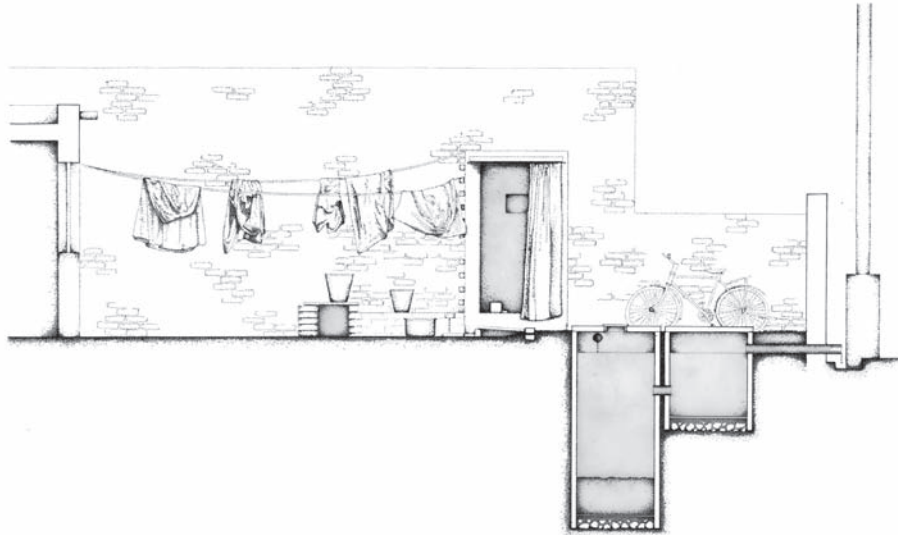


Figure 1. Section through an individual septic tank toilet system constructed in a household yard.



Figure 2. Sunita standing proudly in front of her completed toilet and washroom, August 2007.

From 2008, further investigation and representation of ideas; collaboration and negotiation with residents led to the construction, at the neighbourhood scale, of a Decentralised Waste Water Treatment system (DEWATS) built to clean waste water for irrigation and toilet flushing along a 100 metre long stretch of an existing polluted watercourse (figure 3). Shared common places at dwelling, street and neighbourhood scales have emerged from the interstitial spaces formed by this intervention linking the area around DEWATS to other community facilities.



Figure 3. Completed Decentralised Wastewater Treatment System (DEWATS), Kachhpura settlement, July 2011.

The second case study - the Quarry Classrooms project began in 2008 in Navi Mumbai as a partnering between LMU and local NGO - Association of Rural People for Health and Educational Needs (ARPHEN), stone quarry owners and worker settlement families. In March and November 2009, two quarry classrooms were constructed in the settlements of Baban Seth (figure 4) and Tata Press (figure 5). The approach to carrying out this project was the creation of shared environments in situations of scarce resources, through a process of collaborative participatory design and making to link architectural endeavour with the process of establishing common ground within the migrant workers' community.



Figure 4. Completed classroom building at Tata Press quarry settlement, November 2009 [Source: Helena McDermott].



Figure 5. Completed classroom building at Tata Press quarry settlement, November 2009
[Source: Audrey Lematte].

As a result of the classroom construction, ARPHEN secured funding for teachers' salaries, children have a route into state education, adult literacy and women's sewing classes have begun and the Municipal Corporation have provided water taps, electricity and street lighting, new pathways and formalised drainage, consolidating the settlement.

Methodology: Making and Meaning, towards understanding

This research involved direct, hands-on engagement with, and the implementation (through making) of the two ongoing live projects over six and four years respectively in marginalised settlements in two cities, Agra and Navi Mumbai. As a result, a new understanding and interpretation of shared spaces in Kachhpura and Baban Seth, is emerging. These common places are the result of everyday engagements, collaborations, conflicts and negotiations between local institutions: families, neighbours and community groups, as well as longer-term interventions from outside involvement (NGOs, governments, academic institutions).

The methodology developed in this research begins with the exploration of the physical and cultural topography of a place. The case studies emphasize the need for a process of learning on-site, in continual concrete dialogue with the constituents, requiring a building of trust and understanding between those involved. This may lead to a different project than first imagined, therefore a 'loose-fit' strategy (Mitchell 2010) has been adopted that allows for flexibility and adaptability to circumstances of construction and unplanned or unexpected events that do not necessarily result in a directly linear process and is not completely hostage to chance but adheres to the common topic, which allows for collective engagement, together with individual accomplishment.

Investigating physical and cultural topography is the basis for understanding a place, which seeks to uncover the layers of richness in structures of dependency, getting deeper and allowing a more appropriate fit between intervention and context. Hypothetical testing through student projects is followed by testing through making real-life initiatives. Drawing from anthropology, ethnography and philology, this stu-

dy attends to the narratives of particular individuals and of concrete human lives, through the lens of the architect – as detective, author and craftsperson (Mitchell 2010: 38-56). The background to this research is a rolling studio programme, out of which live projects emerge which use local physical and cultural resources to change urban contexts as the vehicle of collaborative self-empowerment. Upgrading incrementally and iteratively using several small projects (dispersed initiatives), gradually raises the discourse surrounding urban poverty issues within the settlement. Insights have been gained and lessons learned through direct involvement in the two case study projects over a number of years, developing academically and professionally through my shifting roles as architectural student, researcher and PhD candidate. The built interventions carried out in this research followed a cyclical process of experimentation developed by Mitchell (1998) as a method for testing through making: [1] Cultural and physical surveying; [2] Provoking through a small intervention; [3] Recording resistances; [4] Making accommodations; [5] Sustaining this process. This cyclic process of experimentation, focused group criticism and modified proposition allows for continual reflection during the act of making that progresses in a dynamic manner, allowing flexibility for adapting the proposed intervention as necessary.

This process of learning through making is focused on the idea of collaboration and collective involvement, understood here as ‘negotiations’. Some participatory theories and methods put into practice can result in a static process, lacking flexibility and adaptability to changing situations. In order to set up the horizons of involvement for praxis, there is the understanding of levels of engagement as a method for creating a hierarchy for involvement at various stages, where hierarchy refers to an intensity of holistic participation.

Emerging Themes

Emergent themes arising from the process of making and collaboration can be identified and categorised as the following: [1] Partnering, communication and contracts; [2] Identifying a site and programme; [3] Coalition of the willing: explicitness and knowledge; [4] Building on the familiar and with the local; and [5] Placemaking: recording change through small details and events. This last one identifies lessons learned, and these themes will be discussed in further detail, and illustrated with examples from the case studies.

1. Partnering, Communication and Contracts

When London Metropolitan University (LMU) began their collaboration with each of the NGOs, a Memorandum of Understanding (MOU) was used in place of a standard form of contract. This is an agreed understanding where both parties have their own agenda (social, academic or project driven) but common interests and a shared vision or goal. These agendas overlap at particular points, and collaboration is achieved through sharing of knowledge and assisting each other where possible. An MOU used in place of a contract, and the idea of partnership allows for more freedom and flexibility from rigid obligations and targets, and a ‘loose fit’ way of working together. In Kachhpura, this on-going partnering has led to a shared ambition between CURE, LMU, residents and the local authority to make Kachhpura the first ‘open defecation-free settlement in Agra’.



A contract (figure 6) was used between householders and CURE for the household toilet project in Kachhpura - this determined the terms of the subsidised loans taken out by residents for new toilet systems and structures. The project funding worked on a subsidised basis with the Water Trust³ providing initial funds for the construction of ten septic tank toilet systems. A revolving Community Credit Fund and Toilet Savings Groups were set up for householders to take out loans for the construction of the toilet and washing structures. Borrowers pay back a small amount every month according to their household income, allowing other individuals to take out loans. This local level loan system is based on established microcredit programmes originating from the Grameen Bank model in 1983. This loan process is continuing into its sixth year, with 235 toilets installed in Kachhpura by 2013.



Figure 6. Householder signing a toilet contract, Kachhpura, July 2007.

In Agra, students worked closely with the local septic tank fabricator and contractor, Vinod Kumar, to improve the concrete mix and reinforcement used in the construction of the pre-cast concrete septic tanks at his yard (figure 7). Vinod was offered an exclusive contract with CURE to construct all the proposed toilets in Kachhpura and nearby settlements under KSUP, and with the moral assurance that he would maintain the high quality of the tanks produced (most tanks produced in the area were of poor quality due to fabricators attempting to maximise their profit at the expense of quality by saving on cement). Vinod was provided with a certificate of quality following cube tests on the improved septic tank concrete mix, which has seen his business grow rapidly in the years thereafter. The idea of a regulated monopoly with close engagement rather than competitive capitalism provided a collaborative approach focusing on the development of care and responsibility that then followed.

³ The Water Trust was set up in 2007 to support the work of the Architecture of Rapid Change and Scarce Resources (ARCSR) research area at London Metropolitan University.



Figure 7. Student and contractors making a pre-cast concrete septic tank, Agra, July 2007.

2. Identifying a Site and Programme

Identifying a site and programme involves looking for opportunities that present themselves within situations where there are limited resources. Students, researchers and professionals come into the picture as outsiders, bringing with them fresh outlooks on situations of rapid change and scarce resources. However, unfamiliar territories require an understanding that can be acquired through looking at the physical and cultural topography. This understanding, together with real insights from those engaged in the everyday workings of the place, are a vital initial stage that can lead to the identification of sites and programmes for possible interventions.

Delhi based NGO CURE works under several general development themes such as sanitation, sustainable urban livelihood, and community based tourism. In identifying a site and programme, the idea of a common topic could be developed. In Kachhpura, the topic of clean places was developed under the general heading of sanitation, that dealt with hygiene behaviour and practices, access to toilets and treatment and reuse of wastewater, common interests shared by both NGO and academic institution.

In March 2007, an email workshop was set up between CURE in India and Cass students in London. The workshop was focused around toilets and sanitation – a theme that had emerged from CURE’s work with the communities, and the student’s field work in Agra that year. Around the same time, a local woman in Kachhpura, Meera Devi, was in the midst of a land ownership dispute with her brother. This dispute resulted in the division of the property where they both resided, and for Meera, importantly the loss of access to a private toilet (figure 8). Meera collaborated with students and CURE to become the first householder in Kachhpura to have an improved septic tank toilet system installed in her dwelling, and soon became an instrumental player in kick starting the pilot toilet scheme. The local press (Bhardwaj 2009) called her a ‘Toilet Missionary’. These chance conditions led to the identification of the first site and programme for an individual household septic tank toilet in Kachhpura village.



Figure 8. Meera's toilet dispute and development of the dwelling, Kachhpura.

3. Coalition of the Willing: Explicitness and Knowledge

The idea of a 'coalition of the willing' can be used as a way of getting people involved in a collaborative process, engaging with a decision at a particular time and stage of the development of the project. In order to engage constituents at various levels of interaction and enable them to take control, it is important to provide knowledge and be explicit throughout the process. Gradual involvement (say with children to begin with) can lead to gradual accumulation of partners/participants that eventually leads to full cooperation (figure 9). A collaborative spirit can be formed through commitment between several parties to achieve something, and only happens when people care and/or are interested in that something, and where goals are realistic.



Figure 9. Working together to finish upgrading the classroom, Baban Seth quarry settlement, March 2010.

An essential part of the process of integrating sanitation infrastructure into the community was the involvement of the residents themselves. In Kachhpura, a hygiene awareness campaign was instigated to inform and educate the community. This involved a basic hygiene workshop with the children of the main primary school (figure 10), and distribution of visual leaflets to every householder in the village that we developed, explaining how septic tank toilets work. The potential of educating children for advocacy in their households became apparent.

Children play an instrumental role in engaging communities in collaborative projects. Local kids get involved right from the start, enthusiastically helping students to survey by holding tape measures and acting as unofficial tour guides, offering hidden insights into life in the community. The friendships initiated can lead to events such as workshops at the local school through children's introductions to their teachers. Below, kids were involved in an exercise to envisage the scale of the proposed classroom building by standing along the marked out perimeter holding hands, thus spatialising the imagined structure (figure 11).



Figure 10. A Hygiene Awareness workshop with children at the local primary school, Kachhpura, August 2007 [Source: Shamoan Patwari].



Figure 11. Envisioning the site through children and games, Baban Seth quarry settlement, March 2009 [Source: Shamoan Patwari].

4. Building on Tradition: Familiarity

As mentioned in theme [2], unfamiliar territories require an understanding of the physical and cultural topography before one can honestly intervene to improve the most basic of conditions of scarcity. Building on knowledge of the existing situation - familiar building methods (skills), materials and structures in the vernacular, as well as familiar ways of living and social institutions - allows for appropriate actions to be taken.

At Baban Seth quarry settlement, this idea of familiarity was the launching pad for involving community residents in the process of design and construction – and therefore allowing for freedom of choice. Community platforms exist throughout the settlements, providing a political and social forum for collective gathering within a community (figure 12). As a traditional concept, with its origins in rural villages, these platforms have emerged as a stable institution within a transitional place.



Figure 12. A familiar community platform structure found in settlements.

The design of the Baban Seth quarry classroom building began as a simple raised platform, to address issues of monsoon flooding highlighted during initial discussions. Once the stone platform had been constructed, residents expressed a need for a roof structure to provide shelter from the sun and rain (as well as stray rocks from the nearby quarry blasting). A simple lightweight roof was proposed. This process of negotiation with the site, people and evolving building continued through each stage of construction - with the addition of a low wall, building began to change from a platform to a classroom, consolidated with the introduction of the final major element, security. Women expressed concern that drunken men would misuse the building, leading to the addition of steel grilles and a lockable gate, thus securing the building, whilst allowing for ample light and ventilation. The result of this process was a building that had developed from an initial imagined gathering place as a raised platform to a classroom connected to the temple (figure 13).

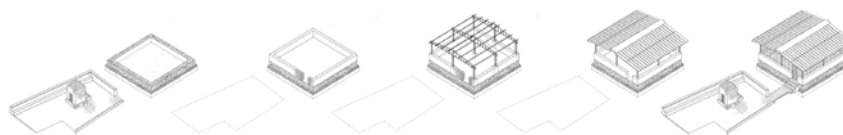


Figure 13. Development of the classroom building, Baban Seth quarry settlement, March 2009.

5. Placemaking: Recording of Change Through Small Details and Events

Placemaking is defined as “the way all of us human beings transform the places in which we find ourselves into places in which we live” (Schneekloth & Shibley 1995: 1). The principal idea of community placemaking to be discussed here is that of taking something and making it your own. Empowering people at different levels and enabling them to have some level of control over their environment is the key to successful (design and planning) interventions in the built environment.

The recording of change that happen around the built interventions enables interpretation through the notion of placemaking. Appropriation through temporary events and small gestures at and around the sites were collected and documented over time. Analysis of these moments has generated ideas and topics about permanence/temporality (*pucca/kuchha*), middle-classness and collective identity - topics that address aspirations and suggest a changing metabolism of the settlement (and interpretation of town).

The introduction of toilets in Kachhpura has led to the changing of daily habits within the household. Meera’s yard with her new toilet and wash area (figure 14) now resembles a Victorian scullery, where the washing up of dishes and laundering of clothes takes place in a wet zone, and extension of the kitchen area. Tidy yards create better-utilised common places within the dwelling, and the permanent infrastructure acts as a catalyst for improvements to communal streets and drains (figure 15). The introduction of informative signage and posters, and the naming of places such as “*Swaachh Gal?*” (“Clean Street”) have given significance to a new kind of public space, represented by cleanliness.

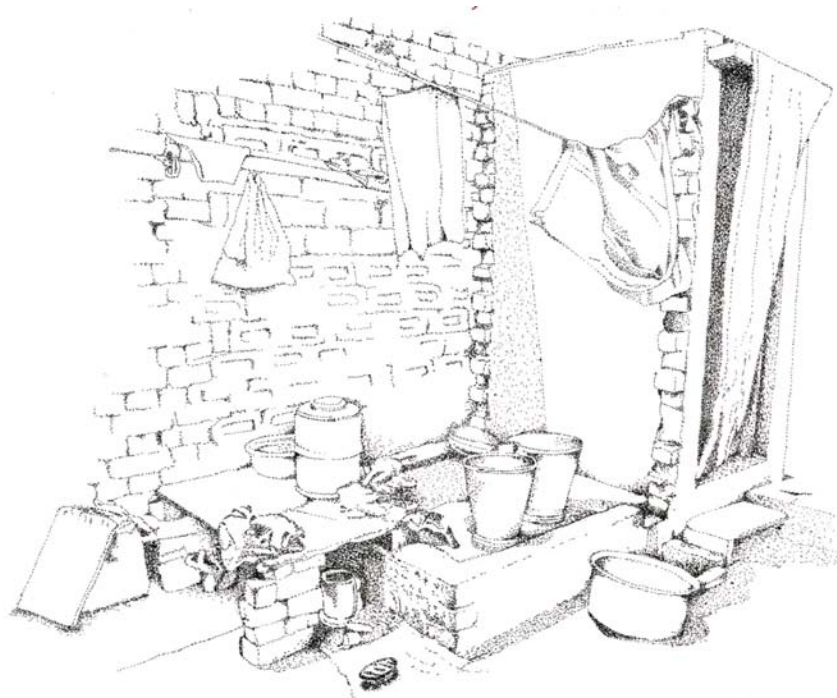


Figure 14. Meera’s new toilet structure and washing platform, Kachhpura.

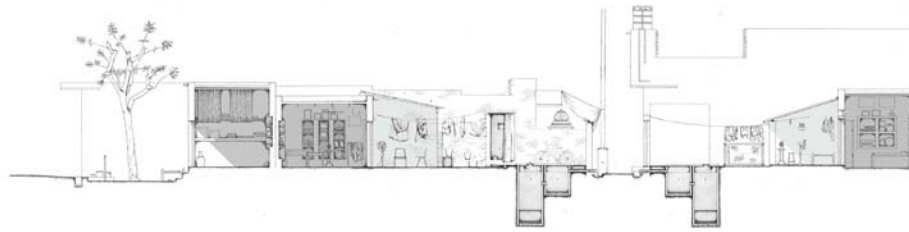


Figure 15. Section through Swaach Gali (Clean Street), Kachhpura.

The architecture of the DEWATS has created a new identity for the former waste-filled edgeland of Kachhpura village. Brijesh's baraat (ceremonial wedding procession) proudly passed along the area that used to be the nala, taking foul water away from the village. The notion of the DEWATS as a clean setting has encouraged appropriation of the area by nearby residents for important functions such as a marriage celebrations with the erection of a temporary colourful *pandal* (tent) structure (figure 16).



Figure 16. Marriage pandal (tent) erected adjacent to the completed DEWATS, Kachhpura, November 2011.

Long-term Kachhpura resident, Bhajan Lal's new house (figure 17) is an example of the shift towards a middle class lifestyle, represented through the design and layout of the dwelling. *Pucca* materials (glass, concrete, bricks) are used throughout the building, with a strong emphasis on security. The tradition of multi-functional spaces typically found in most houses has been replaced with individual rooms for sleeping, cooking and entertaining; even the furniture is different (more mass-produced than hand-crafted). With Bhajan Lal's new house, the rejection of the former traditional village lifestyle common throughout Kachhpura suggests aspirations towards a higher class of living, akin to Saunders's idea of middle-classness (2010), and is a reflection of his children's success (educated with well-paid jobs).



Figure 17. Bhajan Lal's new house along the DEWATS 'street', Kachhpura, November 2011.

At Baban Seth quarry worker settlement, the sacred centre of the *Mandir Chowk* (Temple Square) represents the collective values and beliefs (just as the dwelling represents the centre of individual identity) of the migrant workers at Baban Seth quarry settlement, and brings them together as a community (figure 18). The proximity of the new classroom with the existing temple space and the conscious decision to link the two at the centre of the settlement has created an extension to the *Mandir Chowk*, bringing together sacred and secular places (figure 19). The classroom building creates the notion of a public setting to which the community can commit itself, and, in turn, discover itself as a collective with a shared political voice and opportunities beyond subsistence (Tang 2012). Today, the extended *Mandir Chowk* (shrine and classroom) is a respected central place for social gathering, worship, education and empowerment of the community as a whole (figure 20).



Figure 18. The Mandir Chowk (Temple Square), Baban Seth quarry settlement, November 2009.



Figure 19. New classroom building and connection to the Mandir Chowk, Baban Seth quarry settlement, April 2010.



Figure 20. Section through the new classroom building and Mandir Chowk, Baban Seth quarry settlement, April 2010.

Working Re-definitions

A discourse around, and an analysis of the evolving process and methods adopted for this study lead us to new understandings of commonly used terms in the field of community development in the built environment. The re-defining of certain terms within a local cultural context can offer a more profound and useful meaning, arising out of direct negotiations in a particular setting.

1. Informal Peri-Urban Settlements and Urban Villages

The term ‘slum’ here has intentionally not been used to describe the case study settlements being discussed. Kachhpura is officially now an urban village. The quarry worker settlements in Navi Mumbai are identified as different to established ‘slum’ areas in the same region.

‘Peri-urban’ locates these settlements at the periphery of the city, more part of the urban than the rural, but with connections to the villages. ‘Informal’ describes their low-income, incremental growth as settlement colonies. Peri-urban areas are characterised by uncertain land tenure, inferior infrastructure, low incomes, and lack of formal recognition by governments.

With the rapid urbanisation of the world's cities, rural villages are gradually being swallowed creating a new category band/belt of peri-urban settlements - the phenomenon of the urban village. An example of this is Kachhpura settlement in Agra. In addition, the growing migration of workers to the cities creates new settlements in these edgelands. The stone quarry worker settlements in Navi Mumbai are marginal communities situated at the foot of a 15km long stretch of hillside actively being mined for road stone. The nature of these clusters of small settlements evoke a temporal sense of rural living in a harsh urban context, in a way much like a village in a city (or urban village).

2. Shared Spaces

This paper addresses shared spaces in the local sense, as opposed to 'public space'. Public spaces, as defined in the West (with roots in the agora, forum or commons), do not exist in informal peri-urban settlements in the sense of formal civic places such as park or squares in cities, or even such settings as the agora or forum. Instead, the informal places that emerge out of daily routine and formal institutions are created by tradition and culture. In contrast to Western cities, shared places in Indian cities are generally seen to be dirty, noisy, smelly, crowded and poorly managed.

The city was filled with a collection of both religious and secular spaces, each offering a different kind of place for social interaction amongst the residents. Like the church in medieval Europe, religious institutions such as temples and mosques formed the focus of the communal life in Indian cities. The courtyard of the main mosque was one of the largest open congregational spaces in the urban fabric, whilst the *bazaar* (market) street formed the main commercial spine. Shared spaces were traditionally associated with trade and sacred/secular-ness, but were not political arenas (like the Greek agora).

Migration from rural areas to the city for livelihood opportunities requires adapting to urban living, which often results in a sacrifice of the life left behind. In *The New Landscape - Urbanisation in the Third World*, Charles Correa (1989: 32-33) describes urban living as a series of spaces operating within a hierarchical system, under Indian conditions that appear to have four major elements: private space for the family (for cooking, sleeping, storage); areas of intimate contact (front doorstep for interaction with neighbours; children's play spaces); neighbourhood meeting places (water tap or well for connection to the community); and a principal urban area (for example, Maidan used by whole city). The lack of connection to the city, physically, socially and legally leave urban villages, such as Kachhpura, though situated within the city landscape, sitting as islands amongst the urban fabric.

Reflections on Spatial Practice: Collective Architectural Making as a Catalyst for Community Self-Empowerment and Social Change

The two projects/interventions discussed in this paper aim to bring about social change, by giving more meaning, identity and place in newly-empowered people's perceptions and experiences (endowed with a civic consciousness), towards a new interpretation and development of public spaces. The ongoing development of these projects is the result of conflict, mediation and negotiation, and of sharing through collective making. The notion of negotiation can be viewed in this context, as a practice of collaboration, participation, engagement and dialogue; and of finding a way through (resistances and accommodations).



The evolutionary character of the methodology has developed through a journey of continual learning by reflecting on making throughout the process. Understanding the cultural and physical topography (Architect as Anthropologist) through a narrative lens (Architect as Author) and through spatial practice (Architect as Crafts-person) is a cyclical process. These modes of interaction, and the nature of this practice can be represented through understanding the resources in a place and making appropriate interventions that build on understood traditions and respond to individual and group aspirations. This is an on-going gradual process that is adaptable and empowers people at different levels (through placemaking and appropriation of the new places), leading to open-ended interventions that follow certain traditions but also invite meaningful change through practical responses to current (modern) demands. This process has allowed me to derive insights into the nature of shared spaces in the two case study situations.

The notion of negotiation is viewed in the context of this study as a culmination of cooperation, participation and engagement. We should encourage a culture of learning from making, shifting the focus from decisions made at the top or from the outside. The project and partnership cycle offers a flexible programme - neither case study project followed the exact same process or involved the same levels of participation. Proposals usually developed at the start are then modified to take into accounts resources available - materials, skills, labour and time. Everyday limitations caused by conditions of scarcity are overcome by transforming places through improvisation – what Sennett (2012) calls ‘users’ art’. Dealing with physical conditions of scarcity releases immense resources of creativity within the people. A cyclical process of negotiation, adaptation, resistance and accommodation, as opposed to problem and solution, can be used to find and sustain a good fit between places and people. The notion of scarcity can begin to be addressed through the idea of fit with topography.

At stake is a more concrete and nuanced understanding of the nature and settings of what is too-often generalised as ‘public space’. The provision of amenity buildings and of such post-hoc infrastructure as purification drains creates situations of negotiation with constituents, who in turn develop a civic commitment and solidarity in the course of the work. These negotiations depend upon subtle and rich cultural contexts, which become evident during the course of the project, and which properly characterise ‘public’ in this non-Western culture. In this way the projects are vehicles of research and understanding, not applications of a theoretical approach divorced from the concrete conditions.

Embodied in the topography is a social change from which a new kind of public space and town is emerging, that is situated somewhere between traditional order and urban modernity. The conflict between traditional order and urban modernity exists somewhere between custom and reason, that address and accept certain traditions but also practice responses to current pressures. In her study of changes in the social and physical environment of Delhi taking place during the colonial era, Hosagrahar (2005) calls these conditions “indigenous modernities”.

The mixed world of tradition and innovation from new partnerships between NGOs, academics and students, and communities address notions of capacity building and empowerment. In situations where the primary order is rooted in tradition, the introduction of small-scale interventions have involved setting the horizons of involvement beyond survival (subsistence) to a situation that alludes to capacity-building (Sen 1999) and participations within democratic capitalism or free market democracy, eventually leading to meaningful change.

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