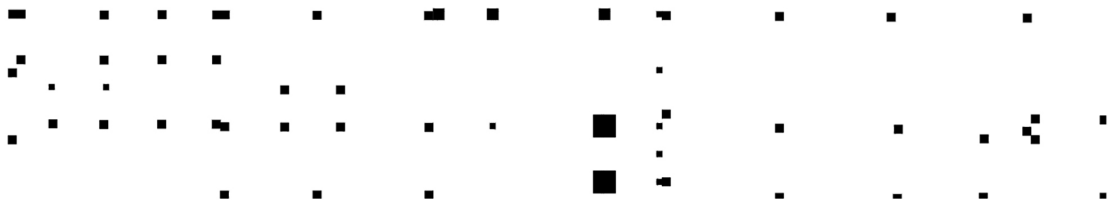


MESS IS MORE

Iterating Dwelling Design Processes For The Urban Poor In New Delhi, India



Reflections

Setting the stage, elaborating relevance and justifying the title

The republic of India celebrated its 70th year of Independence in 2017. In these last seven decades, India as a fairly nascent nation not only had to shed its colonial past but also had to compete with a rapidly globalizing world. The developmental pressure was exerted at an unprecedented rate and caught the nation and its planning agencies off guard. This lack of preparedness is especially shown in its capital city, New Delhi, which took 15 years to get its first master plan or a development vision. By this time, it had already witnessed a surge of migration, which had changed the urban landscape irreversibly. To make things worse, Delhi was conceptualized and planned in an elitist manner as a low-density, low-rise capital, with complete disregard of how the urban poor will be housed. These simultaneous processes rendered the city as a visible patchwork of economic disparities.

The government today, is still driving high on the same elitist development desire to make Delhi a 'world-class poor-free' city. In a series of regressive development decisions, the government has been displacing the poor from their traditional neighborhoods in the city to newer neighborhoods far outside the city. Upon research, these cut-off neighborhoods were found to be provided with a basic site and services plan, however, did not take into account the family and income structure while 'slabbing' people in two rigid unit types. Moreover, the provision of open spaces, which have been observed to be extremely critical for the urban poor to be resilient to the ever-changing socio-economic atmospheres, was completely disregarded.

While these neighborhoods truly reflect the regressive and stringent attitude of the planning agencies towards the urban poor, the process in which this is carried out is equally crippling. The poor are first selected and placed in a unique housing arrangement called 'transit camps' before being eventually relocated. As name suggests, the transit camps are temporary accommodations not just in time but also in its architectural and spatial characteristics. In a strategic manner, the poor are routinely uprooted from their houses, eventually paralyzing their spirit and abilities to sustain within the city.

In this entire process, the architectural discipline is seen maintaining a safe distance whereas it could have played a pivotal role in balancing developmental visions and aspirations of the urban poor. To the discipline, user-generated informal settlements are perceived as seemingly chaotic and 'messy' and have been dismissed for their ephemeral and spatial qualities. This attitude was found to be a key reason as to why the inherent intelligence of the informal settlements was often not recognized and translated into a design vision. This thesis was set within this premise, making a strong case to critically and rationally comb through informal settlements so as to look beyond its 'messy' front. Hence, the thesis is aptly titled as 'Mess is More'.

To Delhi, through Delft

While initially the thesis was approached as the re-imagination of one of the relocation sites, it was discovered early on in the design process that the 'transit camp' as spatial archetype could turn out to be pivotal to this discourse, where not only were they placed strategically around the core of the city but also in close proximity to industrial and economic belts. Hence, it was a design decision to shift the focus to one of the 'transit camps' namely Anand Parbat and reimagine it. The 'transit camp' was picked up for its ability to revolutionize the displacement process itself and in retrospect, the author believes that this key decision could have been reached only because it was conducted through a fresh perspective at a non-native university and its tutors, leaving behind all the prejudices.

Reflecting on Research, design and methodology

The research began with the study of open spaces, which is usually understood as a formulaic spatial archetype. However, the research revealed that in the case of informal settlements, open spaces had their own specific pattern which did not abide by the common annotations rather were quite personalized, in a way that it was hierarchical and patterned so that city, neighborhood and community level interactions could be accommodated in a rather smaller foot print. The thesis identified syntax or logic to these open spaces, which were later, used as organizational elements for the settlement structure.

In this phase of translating research into design, site-visit was strategically placed so as to understand fundamentals of dwelling design. The focus was laid not only on the spatial make-up of the existing designed and non-designed settlements but also at the visual cues on the language of different typologies. Arches as an architectural language was picked up demarcating the more private extents of the neighborhoods. Also, in terms of programmatic language- shop types, cattle houses, tiny houses, multi-generational and shared verandah houses were identified. This process eventually helped the project to scale down from a master plan level to that of the dwelling, so much so that both scales had to be worked on simultaneously.

Meanwhile, at the dwelling level it was important to recognize terrains and amenities, which could be shared. The site visits revealed that residents in Delhi were most comfortable in sharing the space where they eat. Hence, the design approach adopted the eating space and the associated kitchen as the center of the dwelling cluster design. This shared space was given an allocated form and size around which various dwellings were organized to form 6 variations of clusters.

Effectively, the project was able to achieve 2200 dwelling units as opposed to 1600 dwelling units that exist at the site today. The proportion of open spaces planned was increased by 3 times than the existing scenario.

At this point, the project faced a polarity in operative spatial scales. At the progress review 3, it was recognized that the middle scale tying the master plan to the dwelling

was missing. On reflection, one realizes that with dwelling proposals the identification of operative spatial scales and simultaneous work at each is imperative.

Being from an Indian background, the author had preconceptions about the rigidity of the grid as an organizational principle. Especially in the case of informal settlements, which often have a very organic spatial organization, the straightforward grid is rarely chosen as the first choice. However, in this process, where the spatial nature of informal settlements was translated and also effectively rationalized in various stages, it was realized that 'grid' was a far more feasible option. The grid nuanced the design by not only providing but also projecting iterations when the human agencies would come at play. Not only did it add flexibility, it also accommodated an order for infrastructural services that would help the settlement sustain in its projective years. Thus, grid became the instrument of the design to make it into a projective realm as it would help to replicate the vision of this proposal at various other transit camp sites in the city.

In parallel, this Indian background also made the author aware of the conventional design approaches and methodologies used to house the urban poor. It made the author privy of how vernacular techniques and traditional aesthetic is often used to reflect the dwellings for the urban poor. A conscious decision was made to stray away from the 'traditional aesthetic' and instead respond to the fact that India is a rapidly growing economy and the upward mobility in the poorer classes is a rather fast paced process. Thus in terms of materialization and design aesthetic, elements were chosen to place the poor in a rather aspirational image of the urban India. Thus, modern materials such as steel, glass and labour intensive processes such as arches and terracotta shell roofs were made part of the design. Cost effectiveness was also an important parameter where the material usage was fine-tuned and made efficient so that overall building costs are similar to the ones provided at the moment, without compromising the aesthetic choice. In the case of India there is availability of abundant labour and the thesis aims at tapping into this potential.

Innovating through material

The attention to cost-effective techniques evoked a need to use a sustainable and locally available material. The first choice was towards earth and mud architecture, however it wasn't suitable for the climate of Delhi, which has sporadic diurnal changes. The next was of using bricks as it was easily and readily available but would result into increased per dwelling building costs. Hence, a new material had to be conceived for this situation. The author focused on tapping onto the biggest portion of the waste produced from an Indian household, which is kitchen waste to fabricate a material. This was tested and prepared in collaboration with the faculty of civil engineering and eventually, two forms of kitchen-waste based bricks were created. The project in this manner was able to innovate in the field of building material where now an argument could be made to not only research into but also application of more sustainable and cost effective material other than what is conventionally available. Due to the limited time and resources, the brick could not be tested for its strength and hence has not been applied for structural components of the proposal. Nevertheless, a wide range in terms of color and porosity was achieved and thus, the material is fit to be used as a landscaping and surface treatment for pedestrian and majorly pedestrian pathways. The cost saved for surface treatment would instead cover up the increase costs of building with traditional bricks. In addition to its functional nature, the brick making process itself ties the various communities and user groups expected to inhabit the site and can become the very threshold, which induces collaboration, participation and community building. In this way, the project taps into social capital as a mean to bring about resilience in the community.

Exploring with Explore Lab and conclusions

This project is a result of collaboration between different disciplines – Architecture, Urbanism, building technology and civil engineering and was spread across multiple-scales. In hindsight, explore lab as a studio was able to provide the environment in which this collaboration could be achieved and hence, it was a befitting choice. Throughout this entire process, a diversity of drawing mediums and expressions were used as tools to bring out the phenomenology associated with informal settlements in India.

In conclusion, the thesis has revealed that informality in India is not only increasing exponentially but also forms the larger market base for the discipline. This calls for newer research methods and fresh theoretical framework that can, as this thesis has, look beyond the 'messy' front. In Delhi, 73 % of the population is found to be living in sub-standard informal typologies. This reassures that creation of public goods for the urban poor is relevant today more than ever. While looking for strategies and proposals, one should look beyond the traditional and nostalgic architectural impressions so as to respond to the progressive sentiment of the urban poor, which in any society would be the most progressive or at least aspiring to be the most progressive strata. This can potentially open pathways into the research of newer materials, which are sustainable and cost-effective, and at the same time assimilating the spirit of urban India.

Synecdoche
Reading the new Anand Parbat

As I draw the interior of the housing block, I understand how they are heavily mediated by courtyards and enveloped with a rather mute facade. In this way, the courtyard becomes the nucleus of domestic spaces and its possible extension whereas the commercial activities punctuate the facade with a dash of activity.



