

Reflections

Introduction

The chosen site for the graduation project demonstrates how the shortage of affordable housing becomes a problem in the Mumbai, how this issue has been responded, and how these actions affect the living quality. The challenge is how to generate an alternative for the provision of affordable housing by taking into account not only the issue of density, but enhancing the living quality of the dwellers.

The issue of housing shortage which led to the emergence of squatter settlements has been confronted with various approaches by countries around the globe. Many attempts including slum Up-grading and Slum Rehabilitation Program have been endeavored. Currently, the In-situ redevelopment program is seemed as an affordable example in providing affordable housing since it cut down the land cost for the housing provision. Many one-story row houses, Baithi chawls area, have been seen as a potential property to be redeveloped becoming four to five storeys residential building and built on the same footprint. This arbitrary attempt compromises the dwellers to live in an extremely cramped and dense area.

In addition, the site also illustrates the fact that the present housing solution increases segregation among the inhabitant of the area. Rahmat Nagar, an area located on the south of Oswal Nagari in the east Nala Sopara, clearly shows how the attempts in providing housing without any planning and integration between the government, private sector and the local community, can result a great segregation. People from various income groups can be found in the area. However, the urban fabric of this area suggested these people to live separately according to their income status and there is no urban gesture to unite this segregation. Looking at the larger context, this problematic development is also happening in Mumbai city and cities around the globe.

Affordable housing for inclusive development is the theme of the global housing studio. The above-mentioned housing condition illustrate the contradictory instances happening in Mumbai and other cities. Therefore, the graduation project attempts to offer an alternative in-situ redevelopment scheme for inclusive development.

Method and approach

The research was conducted by combining praxeological and typological approach. The study of inhabitant behavior was imperative in designing a dwelling complex for people with different background. It was hardly possible to develop a transformative project by only relying on the users as a bank of ergonomic data. As a praxeological approach, participant observation and visual ethnography have been performed as the fundamental research method. Raising questions regarding the Indian practice of everyday life was essential to devise a project that could accommodate the future dweller's social and spatial practices.

Both approaches have been performed in various methods. It began with literature reviews in the studio elaborating the chronological evolution of housing policy in India and how people in the Global South make use of their spaces. This method indeed built a substantial background knowledge of the larger urban context. While literature reviews were conducted, analysis of the existing built environment are collectively generated and composed in an extensive research booklet. This method was very important as it was analyzed chronologically. It helped to understand on how the urban fabric and the building typologies were evolving. Moreover, it provides background knowledge of the socio-spatial practice in India; how it relates to the built environment and vice versa.

The Field trip provided an opportunity to observe the actual social and spatial practice that has been studied. Observing, interviewing and taking photograph were used as the main tools. Following the global housing studio program, this research was recorded in form of drawings and collected into a book of patterns as a realization of the praxeological approach. These illustrations revealed the dwellers socio-spatial practice observed on the site. Personally, this book of patterns was really helpful for designing the project as it can be utilized as a benchmark and producing new urban and architectural elements that can accommodate the everyday practices of the dwellers. Furthermore, the field trip also provides the opportunity understand on how various typologies are being used.

The relationship between research and design

The proposed alternative in-situ redevelopment scheme was conceived based on the research carried. Many cities have strived for the provision of affordable housing. Given the fact that land carries one of the biggest costs in housing development, Mumbai and Mumbai Metropolitan Region are facing the land scarcity. The chronological research of the existing built environment revealed how India has confronted this problem and showed that in-situ redevelopment program is a way to increase the supply of housing stocks in affordable way by deducting the land cost out of the development process. However, these redevelopment schemes are mostly carried out just for the sake of housing provision and profit. Thus, seeking for an alternative of in-situ redevelopment scheme which brings out the living quality needed by the dweller becomes the topic of the graduation project.

Site visit and the production of book of patterns as the translation of research have vital role in the design development. During the site visit, some projects analyzed in the chronological research booklet were visited. This revealed how is the everyday practice of Indian people, not only in the suburb but also in the city. What do they do for living and working? What do they need? How do they use the available space? And why? These are some of the questions that give ideas on what sort of elements should be incorporated in the redevelopment scheme so that dwelling can fluidly accommodate the dwellers in performing their everyday practices. One of the visits that very useful for me is Dharavi. This place summarizes how people live and work in the same place. Moreover, Dharavi is also an instance of slum redevelopment project developed by NGOs. By this, I could compare the different between redevelopment project carried out by NGOs, private sector, government, and some architects including PK Das. Through the observation and interview, place for working that suitable for EWS and LIG and infrastructure networking are two main components that needed to be emphasized in the design development.

In the design, findings from the whole range of research were tried to be incorporated. According to some research on the literature reviews including 'How the other half builds' by researchers in McGill University and 'Building and Dwelling: Ethics for the city' by Richard Sennett, there is a need of flexible spaces in the Low-Income Group living environment. The flexible spaces are meant to be place for working, socializing, and other various activities. During the site visit, I discovered that open space is lacking in the current redevelopment scheme, which is contradictory with the literature review. Moreover, this lack of open space situation is supplemented with the idea of gated community in the current practice which results a great segregation. Supporting this, the case studies reveal that streets within the residential complexes become a crucial element that have to be incorporated in the development of affordable housing. Streets could be used for mobile hawkers, socializing, open space network among buildings and clusters, playground that close to the house, extension space for working. Therefore, streets become a key element in the proposed alternative in-situ redevelopment scheme.

The relationship between the graduation (project) topic and the studio topic

"Mixing Mumbai: Affordable Housing for Inclusive development" is the title of the Global Housing Graduation Studio which suggests the inclusiveness of the dwelling development is the main goal of the design assignment. The proposed graduation topic attempts to provide an alternative process of in-situ redevelopment which currently unplanned, segregated, lack of connection in the urban context, and does not adequately accommodate the dwellers everyday practices. In the proposed scheme, inclusive development has been researched and applied in various layers. In urban context, the scheme suggests infrastructure development as the main element to connect Baithi chawls areas which currently located far from the main roads and amenities. Not only connect the location to the main infrastucture, the scheme also suggests the connection across the area. In the clustering principle, streets are to be used as an open space element accommodating various activities required to be carried out by people from various income groups, genders, and ages. In addition, spaces for amenities are devised in every cluster in order to multiplied the points of activity. These strategies are used in order to enhance socio-economic networks both within the project area and in relation to its direct surroundings.

The relationship to the wider context

The problem of land scarcity and the lack of affordable housing stock has become public discussion, not only in architecture discourse, but also, social, economic, and political discourse. On the other hand, people from the Economically Weaker Section and low-income Groups keep struggling to survive and end up building houses for themselves which called slums. Adding to this fact, people are seeing the emergence of slums as distraction of the city and searching ways for demolishing the area to make a better image for the city. Responding the aforementioned realities, In-situ redevelopment scheme can be considered as a solution of using the land as resource. In the typological level, the scheme addresses issue related to the discussion of segregation in form of gated community. Personally, I think architecture can be used as a means for dividing people and gather diverse people. The proposed alternative scheme tends to bring people together by means of infrastructure and building layout and façade.

Ethical issues and potential application of the results

Designing a dwelling is very different compared to other architectural project, considering its complexity to accommodate various dwellers needs and limitations. Summarizing from various dictionary, 'dwelling' is essentially a place to 'live' which means it should accommodate the people inside the area to be capable in sustaining their life. However, in the real practice, people easily disregard this essence and produce a dwelling complex just as a place to stay. In my opinion after doing the research, a place to live is not merely a house or a shelter. This shelter should be integrated to various spaces that can maintain the continuance of people's life. For instance, dwellers are not only need stay in side a shelter, they need to work, socialize, weaving a network both for social and economical purposes, contact with natural elements including sun, wind, greeneries. In contrast, many factors including economic, politics push the creation of dwelling to be a place to stay.

The main issue and dilemmas have been encountered while doing research is the issue of density. This issue is always contradicting with what is needed, open space, especially for Economically Weaker Sections and Low-Income Groups. Given the incapability to own a large dwelling unit, open spaces become a very essential urban element for them to extend their living space. Moreover, it also gives the flexibility to the dwellers for practicing informal income generation activity. Developments carried out by private developers or even MHADA as government institution shows how dwellings just become a project to increase profit and tackle the issue of density. Researches show that it is essential to have a balance between tackling the issue of density and providing urban and architectural element for accommodating the needs of the dwellers. Therefore, in establishing a dwelling complex there is an urgent need to have the community involvement to obtain a clear understanding of what the future dwellers need. This practice has actually implemented by the NGOs in Dharavi while undertaking the slum redevelopment scheme in 1980s. The scheme implemented the unit drawn by the pavement dwellers generating a new typology of redevelopment project.

In conclusion, I believe this research project has helped me to thoroughly fathom what is needed to devise an inclusive dwelling complex. The problem and possible solution presented in this research could raise awareness of the importance of an integrated urban development and flexible open spaces to accommodate the dwellers need. With an ever-increasing demand of affordable housing stocks, it is essential to take care there issues in more holistic and collaborative manner in order to achieve an inclusive development.