

The relationship between the contextual framework and the case study

The third world population is rapidly increasing and, especially in countries where the economy is moving its first steps, cities are put under the most severe stress. Since the second half of the last century up until now they have absorbed nearly seventy percent of the global population increase and they are still receiving an overall number of one million new-borns and migrants each week. Third world nations are not only in need of housing programs aimed at dwelling migrants from the country side, but also to rehouse those families who have been living in slums for decades.

Ethiopia and its capital Addis Ababa is among the countries coping with this issue. In 2004 the government took an important resolution in order to provide new dwellings to the growing population. The mass housing program started under the name "Addis Ababa Grand Housing Program".

Although they were built very recently, it is already possible to weight positive and negative aspects. On one hand, the "AAGHP" grants to create an impressive number of dwellings in short time. This is possible thanks to standardisation, necessary for an immediate response to the housing shortage.

Nevertheless, on the other hand, standardisation did not mean lower costs, because of the importation of most part of the materials. Consequently, the new-born housing blocks did not address low income part of the population, but higher income groups. The result was the further overcrowding of existing slums. The families who were evicted from their land when it was erased by the government were indeed compelled to move to other sectors of the city. Furthermore, it is possible to assert that the newly built condominiums were not shaped in accordance to any of the living habits of their future dwellers. Centrally administered housing forcefully imposed westernized living standards.

Our attention was caught by a zone that still remains untouched by the drastic governmental plans of urban renovation. The Menen is positioned between the Entoto Mountains and the Old Palace, and closely related to the foundation of the City of Addis. It began its evolution during the last decades of the Nineteenth Century through spontaneous informal settlements organized in compounds positioned on the crossing of the most important streets at the time.

Generation by generation the space was filled and slowly, however constantly, transformed till today. The presence of hubs such as the University, the Meeting Hall, the United States Embassy and the Shiromeda Market made this area a crucial nod and meeting point which has densified throughout the years. As a result, residents of different social classes were so encouraged to coexist and to intertwine, in time, precious social connections. Indeed, in the Sefer it is possible to find informal settlements as well big and beautiful villas, which fact reflects the coexistence of both middle income and low income inhabitants.

This privileged stratification of times and coexistence of multiple types of dwellers makes the Menen a highly interesting site in order to study the morphology of the private and public spaces that it hosts as well as the social patterns of the inhabitants.

Research and design challenge

For the above mentioned reasons, our research started investigating the way the Menen developed throughout the last century.

The analysis of historical maps was crucial in order to understand its characteristics and the way in which events, such as the Italian Colonization, influenced the city expansion. In addition to it, we linked each period to the notable building and the related construction techniques: from the mud huts to the mass concrete-based interventions of the last decade.

This first phase of analysis marked the importance of each period in the local history and to what extent each event had an impact on the development of the sefer. The analysis showed that the Menen had the possibility to slowly grow in time, avoiding any quick revolution.

A second phase followed, in which the research focused on the reasons why the Menen had the possibility to remain untouched by the urbanization process that invested other parts of Addis Ababa.

The surrounding areas, characterized by the presence of so-called magnets, such as the University, embassies and the Shiromeda Market gave this place the chance to flourish, develop and improve with time. This was confirmed by the presence of activities on the borders of the Menen located on the routes that connect the site with the surrounding magnets.

Concerning the interior of the Menen, we concentrated on the clusters built by the NGO Redd Barna during the '90s. Forming an opinion based on a handful of photographs and plans of the intervention was fundamental to begin to grasp the positive and negative aspects of this acupuncture yet meaningful intervention.

The third research phase was the field study. Visits to the slum and to the new condominium blocks gave us the opportunity to really see the scale of the new developments and how they do not relate to the ways of life of the local population. It was possible to understand what is conceived as an "historic building" by the population of the capital and, through interviews, it was possible to point out the fundamental lacks as well as qualities that define the Menen. A meticulous cataloguing of many compounds and public spaces through photographs and plan drawings was the starting point for the last phase of the analysis of the social and spatial layers of the Menen.

Once returned from Ethiopia a phase of reorganization of all the material allowed us also to re-examine the ideas we had beforehand. Most of them were confirmed.

The sequence of socio-spatial layers that connects the public space to the inner communal space and finally to the private space of the house, was the crucial quality of the area that came about during the last phase of analysis and what the project aims to preserve.

Through an objective examination of the spaces encountered, it was possible to find the patterns that govern social life in the Menen and enrich this site.

The last steps of the analysis brought to formulate a clear research question.

How can the different socio-spatial layers, that characterize the fabric of the Menen, be reinterpreted into a low-rise project able to reach the same density of the Condominium blocks? How can the project be feasible and promote itself as flexible standardized system?

Methodological approach and the benefits of team working

The attention was directed to reinterpret the value of the site through a system able to compete with the prototype of the condominium blocks. The design started with the research of an approach that would have been both replicable through standardization and flexibility, in order to cope with the different needs of its future dwellers.

For this reason, some case studies were fundamental to form a base for designing. They all tackle the question we posed under different aspects.

Belapur Housing by Charles Correa was a crucial reference concerning the importance of a sequence of spaces that could lead the inhabitant through a spectrum going from the public to the private sphere. The clusters are arranged around intimate community spaces. At the smaller scale, seven units are grouped around a courtyard of about 8x8 meters. Three clusters combined form a larger module of 21 houses surrounding a wider open space of 12x12 meters. The spatial hierarchy continues until it reaches the scale of public amenities. Indeed our project defines a sequence of spaces that range from the intimacy of the compound to bigger neighborhood blocks.

Carrieres Centrales, designed by Michael Ecochard in 1958, constitutes a perfect example of a system created by a unique small cell. Through a process of multiplication, mirroring and rotation of a single unit, Ecochard formed bigger neighborhoods able to relate to different scales of streets and public spaces. His project helped us in defining the importance of a hierarchy of streets and to design each neighborhood reacting to its surroundings.

As a reference of flexibility in relation to the owner's needs, the *Superloft Houthaven* by Marc Koehler Architects, gives a valuable example of internal incrementality. Each superloft is double-storey high; residents are free to choose how the mezzanine will be built and its layout. This project gave us a different perspective from which to think of incrementality. The internal incrementality allows the residents to double the floor surface without risking to compromise important aspects of the common outer space.

Different case studies provided a base to tackle the problem on different scales and connect them in order to form a consistent strategy rooted in the context.

In our opinion, the project reacts to our initial research question with a successful system that is capable to compete with the prototype of condominium blocks.

Working in couple allowed us to work on the concept as well as to develop a project that is actually feasible. In parallel to the translation of the concept into a design, an analysis of the materials and techniques brought to the development of two construction methods: one using concrete and one using rammed earth as main materials.

The research upon the price as well as the time required to build the two solutions made it possible to make them as essential as possible in order to give a valuable alternative to condominiums under two points of view. The project could be built faster using concrete, or could be cheaper and more sustainable using rammed earth.

Our project does not stand purely as a statement that tries to give a solution to the problem of affordable housing in Ethiopia, but it is a feasible solution that gives an alternative to condominium blocks, through design qualities and under an economic point of view too.

In a wider sense team work allowed us to constantly have preliminary discussions between partners and, consequently, to have deeper discussion with our tutors. Especially during the design phase, the fact that every issue was discussed by the team before every tutoring made it possible to receive richer feedbacks. This was of great help in the process of making the project both more essential in the construction and well-fitting with the initial concept. Furthermore, we think that the possibility to have both teams and individual students in the studio could surely trigger to achieve higher results given by discussions and comparisons among projects on different levels.

The project in a wider social context

The Global Housing Graduation Studio deals with the great problem of housing in the Global South. Even though our project is addressed to a specific site, it deals with issues that are common in many cities in Third World Countries. We believe in the importance of an approach that starts from understanding the social and spatial patterns that govern a place and the crucial need to defend them during the necessary process of renovation.

Our project could give its contribution in the current dialogue about the top-down approaches that are now spreading in a number of countries affected by housing shortage. We hope that it could help to propose a serious counterpart to the omnipresent condominiums which are currently erasing layers of history in Addis Ababa as well as in other cities.

Finally we know that looking at the design under the point of view of feasibility in terms of price and time constituted an highly important aspect in the progress towards the completion of the project. We think that showing that a design solution is not only valuable in an academic context, but also capable to compete with real and experimented solutions would help future students to reach higher achievements, in particular inside the Global Housing Studio.