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P4 Reflection

BRIDGING

RESEARCH PHASE

The studio "Global Housing" is dealing with the affordable housing shortage problem within the urban context in Addis Ababa, Ethiopia. There are four phases of research. Phase one is mainly about building a collective knowledge base of morphological and typological figures. The central component of this knowledge base will be a research on the Urban Transformation and Housing Figures of Addis Ababa through four time periods from the foundation of the city until nowadays. In phase two four themes related to the housing policies in contemporary Addis Ababa are studied, namely migration, built heritage, infrastructure and mass housing developments. Phase three is the site survey. Based on the knowledge from the previous two phases, site survey can be seen as an in-depth understanding of the city, different housing types and living habits. Last part of research focuses on social and spatial practices. Income generation, building techniques, social spaces and boundaries will be analyzed in this phase.

BIG CONTRAST

From both the paper materials and site survey it is noticeable that Addis is a city with big contrast in many aspects. "The proportion of the urban population living in slums is as high as 80 percent"¹ contrasts with the high urbanism rate of "an average five percent per annum". The central city which is one of the most attractive parts from a migrant point of view accommodates the largest proportion of poorest people. The arrival of the infrastructure forms the border in many people's daily life however its initial intension is to contribute to an easy life. Many of those getting new homes in government-led condominium choose to move back to informal settlement... All these unique contradictions interest me and force me to rethink what I should and can do. Simply designing one cheap house is not problem-solving in a wider context; a higher level of urban strategy which combines and synthesizes both these societal issues is called for.

RESEARCH QUESTION and ON THE CONTEXT

Merkato area as the epitome of these conflicts is also the biggest open-air market in Africa at the same time. The micro-urban context of commerce has mutual effects on infrastructure, housing typology and income generation. The people living here mainly depend on running (formal / informal) business hence the houses are usually partially transformed or mixed used for this purpose. Additionally because of the continuously growing families and new arrivers the living space becomes more crowded. As a result courtyard, the most important social and communal space in slum, is barely existed in Merkato. When zooming out to the whole area, the newly-constructed Light Railway separates two parts even hinders the expansion of commercial activities from east to west sides. Trying to coping with these issues, I raise the research question of "how to provide affordable housing in CENTRAL CITY with high quality while INTEGRATING WITH INFRASTRUCTURE to diminish it negative effects" based on the site of Merkato.

LESSONS FROM PRECEDENTS

Diminishing the inconvenience by infrastructure introduced in architectural way has been explored by many architects before, for instance in the cases of Euralille Complex by OMA and Autobahnbau Schlangenbader Strasse project. Although the scale and complexity is on a much higher level, combining suitable program instead of ignoring it, even taking use of the social opportunities by the high-speed, is inspiring. As for the building complex level, the strategy shifting focus from limited indoor space to outdoor communal life is employed in CIDCO project and

¹ UN-HABITAT. *Situation analysis of informal settlements in Addis Ababa*. 2007:22. <Retrieved from <http://mirror.unhabitat.org/pmss/listItemDetails.aspx?publicationID=2332>>

Community 4 in Tema, Ghana. They use the shared courtyards, gallery and small retail space as the mediator to promote people encounter.

TWO ELEMENTS

The design consists of two elements, one for bridging and another for housing. The bridging element is a “platform” placed above the city road and the network combining commercial and municipal functions. The large amount of people brought by Light Railway provides great business opportunities, while the dynamic commercial activities would attract more people to the “platform”. We can define this “platform” as an over-bridge, a light railway station and at the same time a shopping mall as well. The housing element is the residential blocks fit in Merkato grid.

As the urban strategy these two elements are indispensable to each other and mutual supplementary. Bridging element can be seen not only as the generator of physically connecting both sides, also the “starter kit” to activate the area. The housing element enhances the physical and social fabric by injecting neighborhood livability and communal cohesiveness. The framework can be applicable throughout Addis in similar situation.

DESIGN HYPOTHESIS

Firstly, I redefine the road system according to the gradient of privacy degree, distance from city road and possible users. There are 4 levels, from the arterial roads (1st level) with fastest traffic flow to the last circulation road (4th level) only for completing the circulation. In between there is commercial street (2nd level) and community alley (3rd level). Due to the important role of commerce in Merkato, then different shopping spaces effort to increase the diversity of commercial types, at the same time as a means to guarantee the income generation of different level of population.

The standard housing block takes advantage of the existing 4 meter height difference as the parking space. Along it are the grocery stores for daily life of residents. Two communal gardens are lift above them and surrounded by housing units. This introversion and the “shops wall” as well as “parking foundation” work as the border for the residents to run away from the hubbub of the trade.

AFFORDABILITY

Under the pressure of rapid urbanization and resultant insufficiency of available land, increasing the density is the primary tool to improve the affordability. The current density in Merkato is already as high as 200 DU/Hectare. Decrease of the unit size but emphasis on the communal space enable the project to reach the density of over 300 DU/Hectare while keeping the relative life quality. Besides the easy way of construction and standardization of the building elements also contribute to the low building cost. In the housing part, only 3 types of window frames are used with different combination in façade. The last important method for affordability is the sustainability design. PV panels, rainwater recycling and reduction of mechanism use are integrated in the project, although some techniques may not be available for now.

As the title shows, the brief of the project is to bridge the gap physically and spiritually.