

# STUDENT TYPOLOGY RENEWAL

BUILDING REUSE | THE QUARTER -KILOMETER HOUSING | BE'ER SHEVA | ISRAEL

The project intervenes in Be'er Sheva. Beersheba is also known as "The capital of the Negev and the south" because it is largest city in southern Israel and is considered to be the main town.

Be'er Sheva attracts a large student population thanks to the academic institutions scattered throughout the city, the main one being Ben-Gurion University, because of low cost housing relative to the rest of the country and rich community life.

The number of students studying in the city is about 30,850, whereas in the city there are only two student dormitories that accommodate approximately 1500 students. This leaves us with a 20 students per bed. The students who do not receive housing in the dormitories rent apartments throughout the city, and especially in the older neighborhoods closest to the educational institutions. The percentage of rented apartments in these areas is 52%, mostly inhabited by students and local residents.

The old neighborhoods of Be'er Sheva were built in the 1950s and 1960s, most of which were built as an immediate response to the absorption of new population that came to settle in the city following waves of immigration. Be'er Sheva became a "field of experimentation" for the typologies of residential public housing, and therefore it is possible to locate various residential typologies around the city, which underlie the need to accommodate a new population quickly and simply. Today, these structures are not properly maintained and are mostly in a precarious condition. Currently there seem to be no initiatives to renew these residential complexes, partly because most of the population living in these buildings are temporary tenants.

In the project I am engaged in the attempt of urban renewal based on existing houses from the fifties and sixties by creating manipulations on existing typologies. These manipulations aim to create a new, free and up-to-date type of residence for the needs of the population and the renewable city. These manipulations include both volume and programmatic changes of the buildings.

As a case study, I intervene in the building called "The Quarter-Kilometer Housing" that was built in 1960 by the architect's offices of Avraham Yaski and Amnon Alexandroni.

The building is called this because of its physical characteristics, its length extends to about 250 meters. It was built in a brutalistic style, characterized by bare and rough concrete casting, with an emphasis on formality and functionality. This structure is identified with the Corbusian architecture and its inspiration was taken from the Unite d'habitation Project.

The building stands on double story pillars, with 4 additional residential floors above it. There are 4 vertical passageways and 2 horizontal passageways stretching along the first and third floors. The building was divided in a repetitive manner by a grid of constructive columns at intervals of 5.5 meters, which also divided the housing units.

The building did not succeed its objective to unite the immigrant community and create a community life under one structure. Over the years, the structure was neglected, sporadic building additions were made and balconies were closed. Eventually, the residents were vacated and the building was converted into an absorption center. The fact that housing units are not privately owned allows for easier intervention in the hope that the project will be able to stimulate similar initiatives across the city.

As an intervention strategy, I chose to reduce residential units in favor of opening public spaces and shared spaces. Thus I try to preserve the brutal and repetitive construction of the building whilst "updating" the typology and the program. The subtraction of housing units was made for each floor in a different manner in order to create structural flexibility opposite to the repetitive housing units. and creates an experiential space that combines urban vegetation growth.

These units are planned to retract from the front line, some are partially closed with green walls and others with light aluminum windows to create openings in the repetitive grid and to allow for a balcony and shading from the direct sunlight in the summer. In between the public spaces I created opening in the ceiling in order to allow continuity also in the vertical axis of the building. Around the openings, vegetation that penetrates the cast concrete ceiling is planted

Public units include shared study spaces, common living rooms, offices, work spaces, a café, and a gym. The residential units are suitable for both student housing and public housing and they are suitable for varies of residents. The roof is converted into a public area that integrates urban agriculture into the program. The long continuous proportions of the building and its size, the roof area enables a platform for urban agriculture and also serves as a vital communal element along with the creation of a green urban lung.

Beer Sheva, characterized by hot and dry climates and many sunny days, enables the cultivation of crops that adapt to this climate, such as passion fruits, peppers, tomatoes, aromatic plants and various herbs. These are considerably easy to grow, they can grow vertically and they produce a lot of crop. The produce can be consumed or sold by the agriculture oriented commercial on the ground floor. The ground floor is also converted into a public area based on urban agricultural crops and include a swimming pool and administration area.

The intervention strategy produces an urban initiative for the development of up-to-date and innovative residential typologies based on the existing urban fabric, emphasizing the project's environmental orientation by re-using existing structures.

The rich program and the connections between the spaces are designed to create a vibrant building type with communal life, while also enabling the privacy of the building's residents. The student dormitories are no longer defined as a complex, but constitute a platform for urban renewal in the existing fabric alongside the local community.