An architectural rendering of a city street scene. On the left, a tall building with a facade of vertical wooden slats. In the center and right, modern multi-story buildings with white and wood-textured facades. The street is paved with dark cobblestones. Several people are walking: a woman in a purple headscarf and orange skirt carrying a basket on her head, a person with a backpack, and others. A fruit stand with various produce is on the right, with a person sitting next to it. A potted plant is on the left. In the background, there are trees and a hilly area with more buildings under a cloudy sky.

RECOMPOSING THE CITY'S FRAGMENTS OF ADDIS ABABA

Physical re-weaving of Addis from a social perspective

Carolina Sánchez Barbero
4930282

Global Housing Graduation Studio:
Addis Ababa Living Lab

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4930282 Carolina Sánchez Barbero

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Global Housing Graduation Studio:
Addis Ababa Living Lab

Tutors:

Design and Research Tutors:
Ir. Harald Mooij (H.A.F.Mooij@tudelft.nl)
Dr. Nelson Mota (N.J.A.Mota@tudelft.nl)

Building Technology Tutor:
Ir. Frank Schnater (F.R.Schnater@tudelft.nl)

Delegate of the Board of Examiners:
Tanja Herdt

Faculty Of Architecture And The Built Environment
Department Of Architecture
Chair Of Architecture & Dwelling

TU Delft
2019-2020

RECOMPOSING THE CITY’S FRAGMENTS OF ADDIS ABABA

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00. Choice of the studio

As Ray Lucas points out, architecture is considered to be a humanities discipline¹

For that reason, I strongly believe in the social role of architecture as an element to enhance and dignify the quality of life of people especially of those who live in vulnerable conditions. Some developing countries have started to include the social perspective in architectural projects improving and creating spaces of inclusion. However, a little has been done to foster affordable housing for poor. So, if housing is the most basic element of architecture, why architects and constructors do not put too much effort to design or at least give some guidelines to provide decent homes for low-income groups? Moreover, why “dwelling”, considered as a fundamental right of the human being, becomes a privilege only accessible for just a few elite growups?. In that sense, I found in the Global Housing Studio the opportunity to work with people that have real needs. Housing should be seen as an opportunity to weave sense of community, making the hopes of hundreds of people who claim for dignity, real.

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SAMI BLDG.



1.

Background

1.1 Demographic aspects

Ethiopia is the second most populous country in Africa behind Nigeria, however it is one of the least urbanized countries in the world. With a total population of 112 million according to Worldometers (United Nations data) in 2019, just 20% of its entire population lives in urban areas. Likewise, the distribution of people living in urban areas is very unequal as only in Addis Ababa, its capital lived 3'352 000 people in 2016, whereas Mekele, the second largest city had 441 991 residents.

However, the improvement in road connections has increased the number of people living within 3 hours of a city of more than 50 000 residents. For example, in 1984 the number was 6.4 million and in 2007 rose to 38.7 million.

Looking at these data is possible to conclude that rural population still prefers to migrate to other rural areas rather than to main cities. However, in a few years this situation may change as Addis will become a node for higher quality education and job opportunities.

Ethiopia has a growing population, and its young population within the age range of 15-40 who represents the active working sector is considered the majority. Ideally, this group represents the engine of the economic growth of a country, but in the case of Ethiopia it is the most affected as the unemployment rate is estimated to reach 19.1% (2018), being one of the highest in the world. The lack of education and unskilled labor force also exacerbate the unemployment, the self-employment and the popular economies in the urban Ethiopia.

Moreover, population under age 15 also represents the second biggest group. Therefore, investments in schools and education should be priorities within the government's agenda, as well as sexual education to control the birth rate.

On the other side, compared to European countries, life expectancy is lower as it is 63 years old, as mortality rate is directly related to a country's wealth level. This means that public sanitation and healthcare system coverage still need to be improved in developing countries. Its precarious healthcare system also makes opportunities for diagnosing diseases late, especially with cancer, being one of the countries with the highest rates of cancer deaths (breast cancer -ranked on place 15th, ovary cancer- 3rd and leukemia-12th).

Other causes of death include diarrheal diseases associated with the lack of connection to safe water, and the influenza and pneumonia, tuberculosis, VIH, measles, hepatitis B and tetanus as a result of the low coverage of basic immunization vaccines.

1.2 Historical and social structures

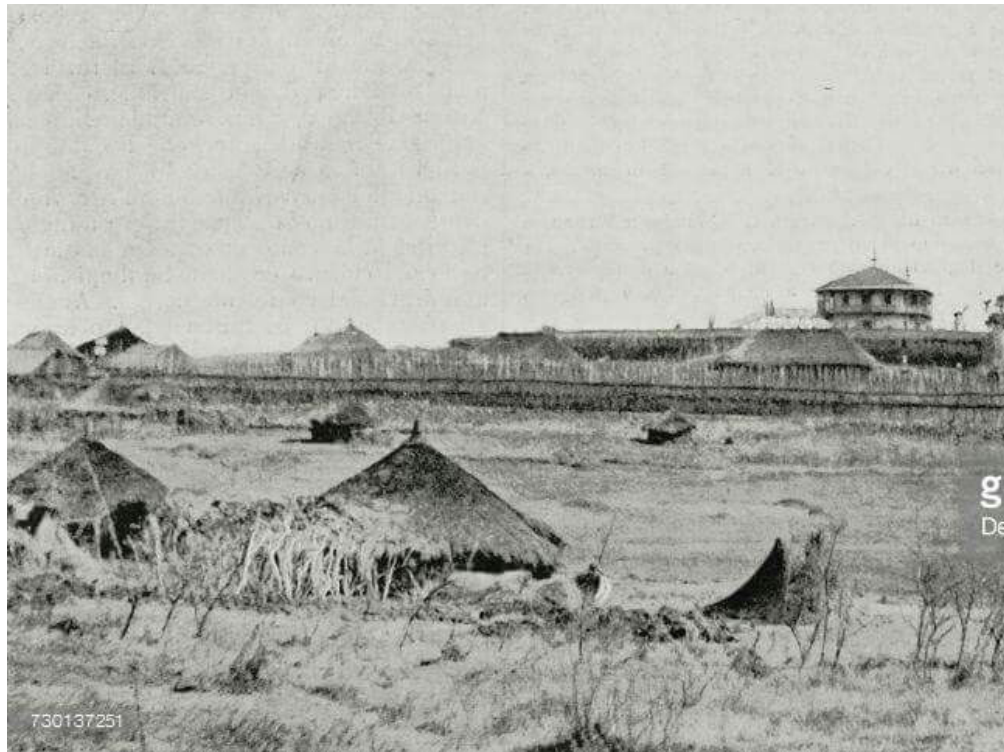
Ethiopia is known for being the birthplace of mankind and its records date back around 200000 years. Its society has passed through numerous dynasties and political structures, standing out four main periods based on religious and political powers. However, it is in the XX century where most changes in their political and social structures occurred.

The four main periods are: dynasty period, the Italian invasion, the communist era and the emergence of democracy.

On the other side, its social structure has also changed throughout these four main periods. However, religion has been the most important factor in social relations, especially during the imperial regime; whereas ethnic and cultural differences have exacerbated class distinctions.

Even though the imperial regime did not impose orthodox Christianity within its territories, Muslims and other minor religions were not held in high positions in government and usually were treated in a below position.

During the imperial period social relations were defined by a landholding system that was replaced by a hierarchical system based on the political power and influence during the Derg regime as the rural and urban lands were nationalized. After Ethiopia's liberation from the Italian invasion until these current days, the emergence of a new social class of educated young professionals as well as bureaucracy have played an important role within the new hierarchical positions and political influences.



View of Ghebbi and the
Imperial Palace.
Photograph: L. Traversi. 1897

1. 1880's

Pre foundation of Addis Ababa

Founded by the Emperor Menelik II in an attempt to unify the territories. The first settlement was a military headquarter set up on the Entoto mountain which was also chosen in the XVI century as the capital of the Shewa empire. However, the harsh climate conditions made that Menelik II moved the capital to the lower slopes

2. 1890

Taitu Plan. Foundation of Addis Ababa

Menelik II was attracted by the mild climate, and the fertile and well watered land of the finfini (plain) to settle the new capital.

Topography was used to create a hierarchical structure. On the higher elevation was placed the royal palace also known as the Ghebbi; the safars (housing warlords) instead

were placed in strategical locations for the defense of the palace; and in between them the servant and lower classes dwellings were dispersed.

The Taitu Plan is known for being the first master plan Of Addis, whose growth expansion was characterized for being spontaneous.

3. 1892'-1929

The Flourishing city

After the Battle of Adwa and its subsequent famine that forced hundreds of people to migrate to Addis, the city experienced a fast urban growth, and with it a significant increase in the use of eucalyptus trees and imported corrugated iron for roofing.

A large amount of public constructions and infrastructure were built such as schools and hospitals, and other prestige buildings such as the Taitu Hotel and the Bank of Abbisynia. The foreign influence from Europe with its neoclassical style as well the Indian style marked the architectural language of Addis, as well as the introduction of new small-scale industries like brick factories, furniture shops and bakeries.

During this period was consolidated the center of the capital in the area in between the Ghebbi, Ghiorghis Church built in 1911 and La Gare, the rail station in 1929.

4. 1935-1941

Italian occupation

Italians introduced the first master plan of Addis Ababa based on the principle of social and racial segregation through an orthogonal grid ignoring the organic layout from that time. In the west part of the city were relocated the natives as they were evicted from their lands. Instead, the expansion of the city was southward where were placed the commercial and political axis, whereas in the southwest was created the industrial zone near the railroad station and the residential native settlements. This master plan shows principles of the modern urban planning by Tony Garnier in which the city was divided by functions (besides the emphasis on the social hierarchy).

Moreover, social structure was also present in housing. Each social group had a specific form and materiality. Casa Popolare were apartments for military and officers; the INCIS housing were offered to merchants and workers; and finally, the vernacular houses imitating the tukuls were for the natives.

It was during this time that major developments in infrastructure and accessibility by air (Lideta's airport) were carried out.



5. 1941-1974
Imperial Regime

After the liberation from the Italians, Haile Selassie became emperor. His regime prioritized the modernization of Addis as a diplomat city symbol of the African independence, upgrading the country's institutions rather than tackle social issues such as the shortage of housing and the inequality of the urban land.

As the previous periods, little was done for upgrading the living conditions of the natives and its emergent urban growth. By contrast the chosen master plan designed by De Marien (1965) emphasized the monumentality of the public institutions and the new infrastructure. These features may remind similar ideas and architectural styles (modernity and brutalism) from the newly capital of Brazil, Brasilia built in 1960 (the National Bank, the City Hall, the Ministry of Foreign Affairs)

6. 1974-1987
The Derg Era

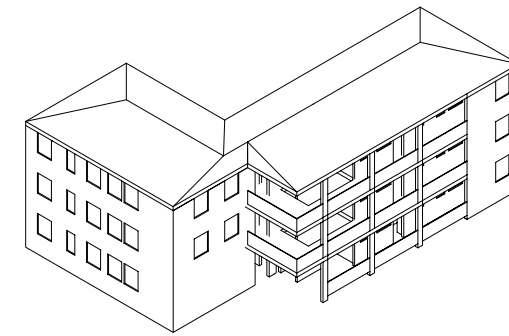
The revolutionary ideology of socialism abolished the monarchy and with it the private property. The nationalization the rural and urban land and housing leaded housing bring down the cost of rental and being affordable for all. The authoritarian regime encouraged housing cooperatives especially to accommodate the urban poor by implementing site and service projects within an orthogonal grid. The creation of the Kabele system was the agency for the management of the rental housing whose dwellers gained less than 100birr/month , that in the beginning also served as the neighborhood defense squads. Nowadays, kabeles are the smallest administrative divisions of Addis.

The proposed master plans for Addis from the time could not be implemented due to the lack of funds, the slow development, the constant civil wars and famines . However, some redevelopments were carried out to exalt the power of the regime (Mezkel Square), and others were slowly developed causing the fragmentation of the urban layers and the emergence of unplanned settlements.

7. 1988-present
The new urbanization

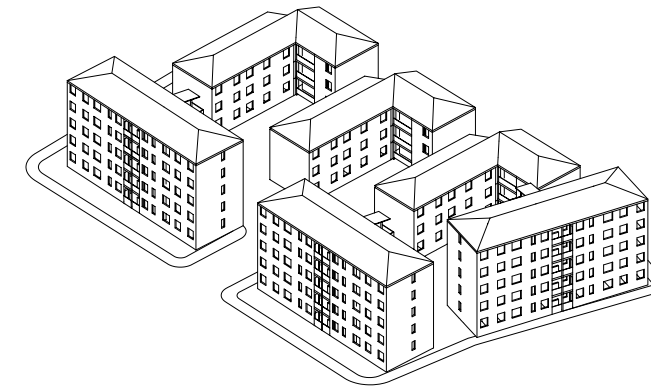
As Addis Ababa started to experience a rapid urban growth, social problems became visible: homeless, unemployment, urban decay and a stock of the basic public infrastructure. Housing shortage also became a main concern as started to affect all social classes. The Ethiopian-italian master plan developed during the Derg Regime in 1986, was taken as the base of the new sustainable urban development plan. The area of expansion maintained to the southern mixing the industrial use with the residential use.

Densification in height started to emerge and with it the idea of condominium as an attempt to solve the shortage crisis. Together with the German Technical Cooperation (GTZ) launched the Grand Housing Program in 2005. The Bole Gerji was the succesful pilot project that introduced a new material technology reducing costs while maintaining high urban and construction qualities. (condominium article)

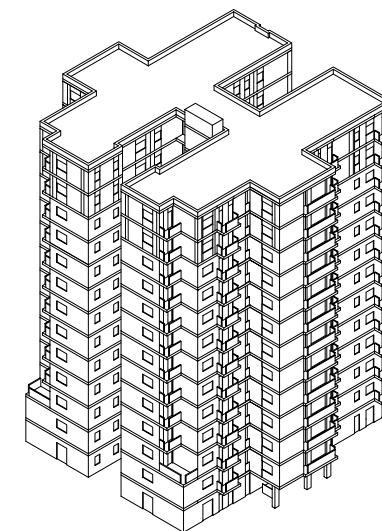


Apartments 10/90

- Two-story blocks
- Studio typology
- Households of 4.5 members (average)



Apartments 20/80



Apartments 40/60

1.3 The new Housing development in Addis

The Integrated Housing Development Project (IHDP) initially called The Grand Housing Program is a governmental program which aim is to increase housing supply for low income groups and its goal was to clean all the slums in Addis Ababa by 2030 (condos) (clearance). Likewise, the program attempts to create job opportunities in the construction sector and improve the wealth distribution of the country (condominiums-UN HABITAT-20). Moreover the program encourages private homeownership and candidates are eligible through a lottery system as the demand exceeds the supply.

The program offers three types of financing depending also on the economic situation of the future owners: 10/90 apartments are offered to families who gain less than 1200 birr per month (60 USD); 20/80 are offered to families with a higher income of 1200 birr p/m (+60 USD) and 40/60 are targeted to middle oncome groups. In all three cases the first number corresponds to the percentage of down payment applicants must pay, and the second one refers to the percentage financed through CBE mortgage.

Even though the strategy seems highly attractive to low and middle income groups to become homeowners, reality shows a difficulty in its affordability, as well as it shows some drawbacks in other aspects.

- Financial strategy

- Dwellings are not affordable for the targeted low income groups as they can not reach the down payment (10%) + the monthly service costs + maintaining costs
- Those who can afford the CEB mortgage, the annual interests are high: 8.5%

- Costs on materiality and construction

- Most construction materials as concrete and steel are imported, which increase the total construction costs. Only the material costs represents the 70% of the total construction costs (condo 18)
- Scarce in the supply of timber, while eucalyptus' harvests increase even though are toxic to animals (23-materiality)
- There is little mutual cooperation between the professional construction sector and the informal sector (21), reducing the possibilities to train unskilled labor. Therefore, there is a lack of site supervision which is also reflected in the low-quality of construction

- Urban qualities

- Poor urban design. Do not provide urban facilities and proper infrastructure for making easier the connection among other areas of the city.
- Fragmentation of the urban layout as new developments do not consider the existent urban fabric.
- As dwellers are chosen through a lottery system, the strategy do not take into consideration the former allocation of the residents harming their social and economic networks.

- Sense of community

- There is little interaction with the outside as fences performs as borders
- Condominiums foster social segregation as they divide the population by income groups, reinforcing the idea of fortified enclaves (Caldeira)
- Local identity is also affected as new developments of massive and generic blocks do not fit the particular lifestyles of the residents

2.

Research

2.3 Study cases

Urban scheme

Suba, Subcity of Bogotá, Colombia

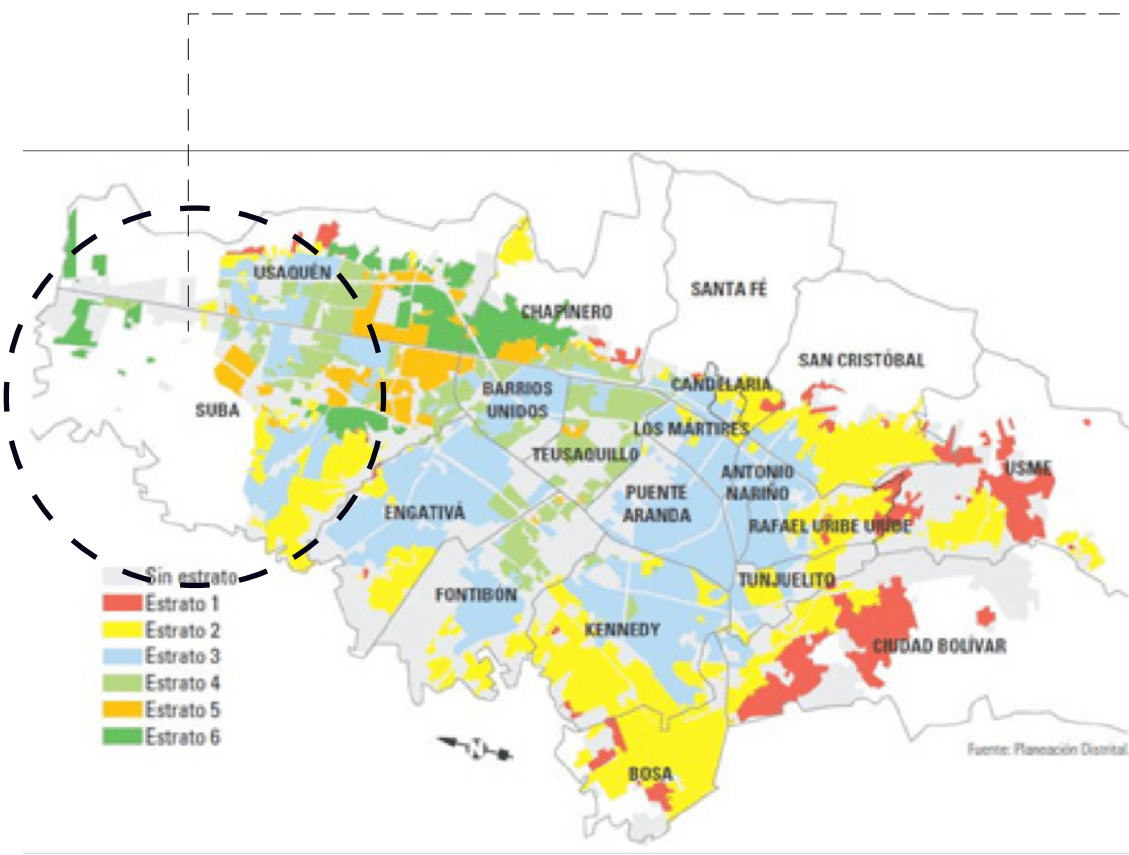
Suba is one of the 20 subcities (localidad) of Bogotá. The capital of Colombia is known for being invisibly divided in south and north, where the south is occupied by low income groups who are mainly working classes; while the north accommodates middle and higher classes.

Like the rest of Colombia's urban areas, Bogota has a social stratification system from 1 to 6, being 6 (green color in map) the richest, and 1 the poorest (red color in map). This system was created to reduce urban inequality by helping the poor pay less for utilities such as water and rubbish collection, while residents of higher strata (stratum 5 and 6) subsidize them.

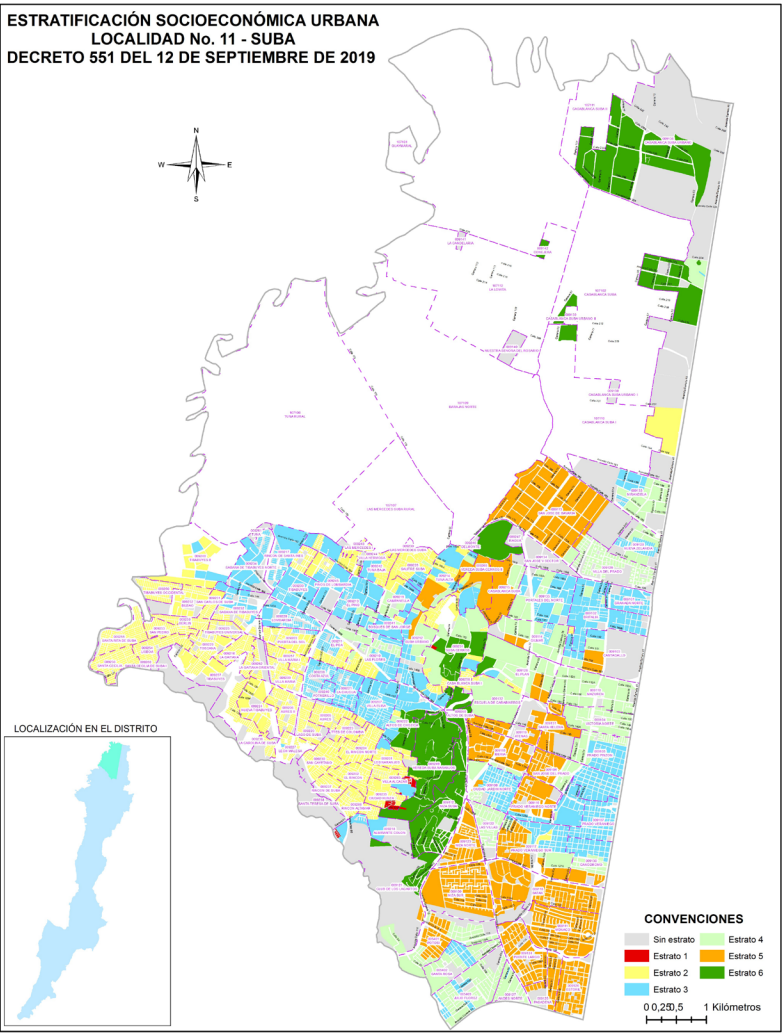
Suba, located in the northwest of the city is the most populous subcity and the largest with about 14.3% of the total population. However, it is the most heterogeneous subcity in terms of social stratification, as on one side it is located in the north, but strata vary from 2 to 6, being the lower strata the most perceived. By looking at this subcity I identified the boundaries that divide middle from lower classes and the elements of urban infrastructure also become boundaries that emphasize social segregation.

In that sense, I identified that topography, green passages, roads, the lack of paving, lack of pedestrian paths, and fences (electric or walls of more than 3 m) as boundaries dividing the area in 2 opposite worlds, in which inequalities are totally evidenced.

By looking at these examples of social segregation, my aim is to propose a system where different social groups may coexist in the same living environment without feeling exclusion due to physical elements.



Social stratification in Bogotá



Social stratification in Suba.

Strata 6 (highest income)
Strata 5
Strata 4
Strata 3
Strata 2
Strata 1 (lowest income)

Sources:

Diagram 1 and 2: Secretaría Distrital de Planeación Bogotá. Estratificación socioeconómica

Evidenced inequalities

1. In contrast to the lower-income side, this area has pedestrian paths and well maintained roads.



2. Vegetations and green areas well maintained.



3. Privatisation of the public space due to "security issues"



Types of existing boundaries



Hostile informal fences closing recreational facilities



Neglected green areas



Brick walls



Lack of road pavement and trunk infrastructure



Green areas and pedestrian paths vs no pedestrian paths

Unidad Residencial Santiago de Cali (URES)
Instituto de Crédito Territorial ICT
Cali, Colombia, 1971

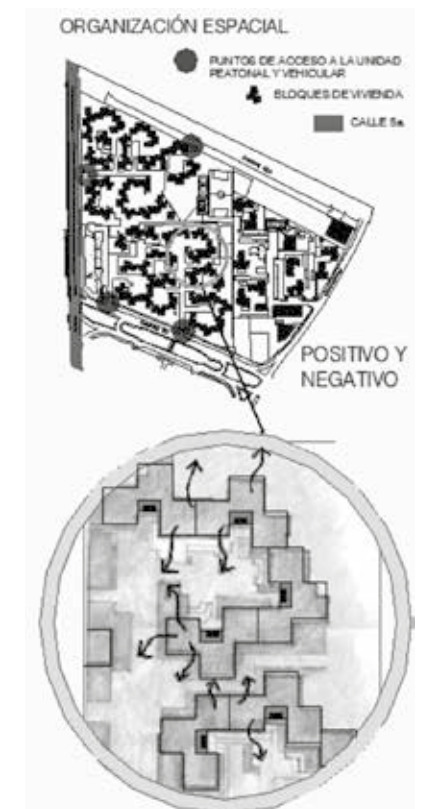
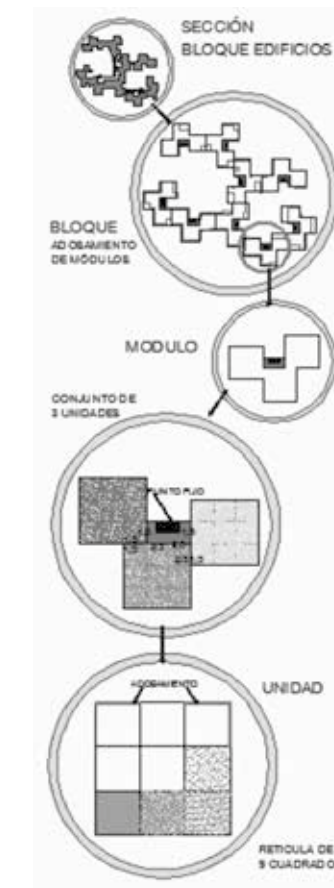
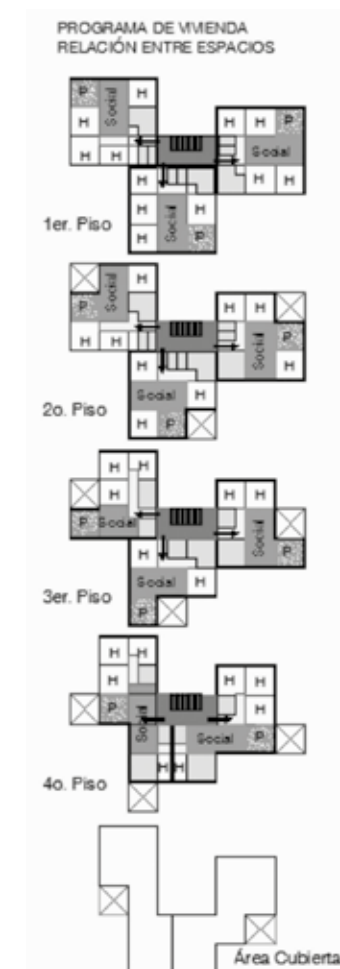
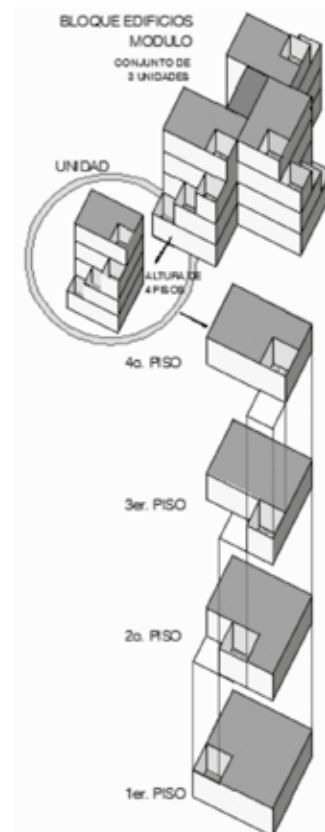
As part of the ICT national program in the 60's and 70's, The Unidad Residencial Santiago de Cali was conceived as the first condominium in the city of Cali which integrated the experience of living in a collective environment and the principle of incremental housing for an emergent middle-income group.

Besides its primary function of being a residential project, initially it also served as the athletes' accommodation for the Pan American Games celebrated in 1971.

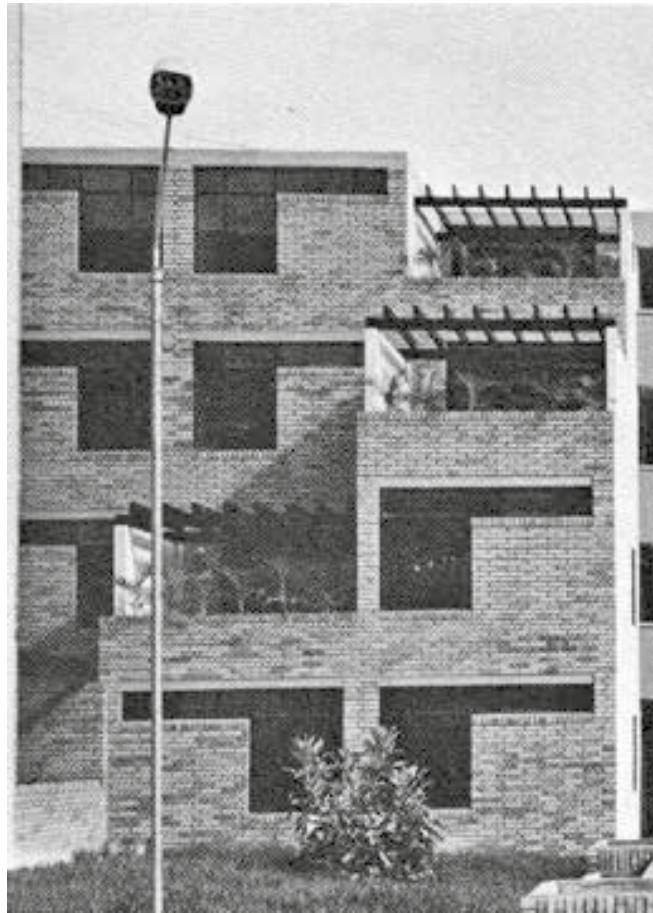
What is remarkable about this project is its form of a terraced compound of successively receding modules on each floor, which enables a future development of one module on each floor. Each compound consists on 3 units per floor, reducing their size from bottom to top. The basic housing unit consists on 5 modules, where on its ground floor can be extended with up to 4 more modules becoming the largest unit, while the top floor becomes the smallest unit. All three units are connected by vertical circulation.

The result of clustering the compounds is the configuration of different collective spaces that strength community life within the condominium. Pedestrian paths represent the main flow network due to its continuity in all directions.

Taking into consideration the principle of the gradual reduction of the unit module, I expect to create an incremental system in a building that is enable to adapt the changing needs of families over time.



Principle of receding modules on each floor



Initial construction
Units had terraces

Source:
Archivo. Instituto de Crédito Territorial



Nowadays
Terraces became the expansions of the units

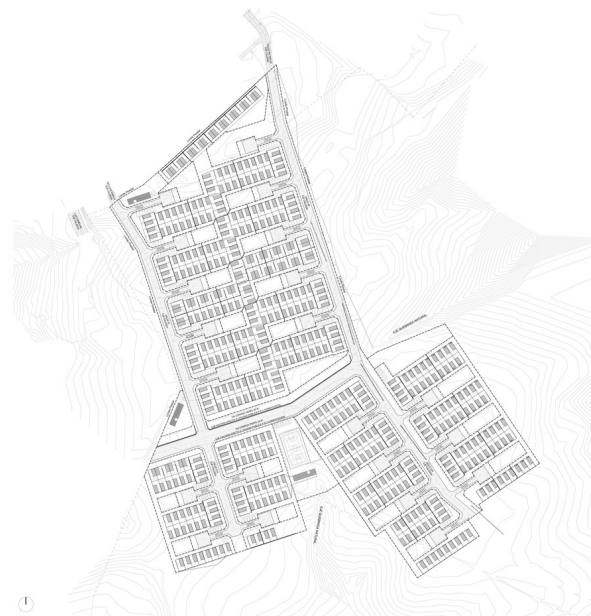
Villa Verde Housing
Alejandro Aravena, Elemental
Constitución, Chile, 2010

Originally, the project was an initiative of a forestry company to provide their employees a decent and definitive housing in 2009. However, after the earthquake of 2010 that destroyed most parts of the city, the project was accelerated to respond the needs of whom lose everything.

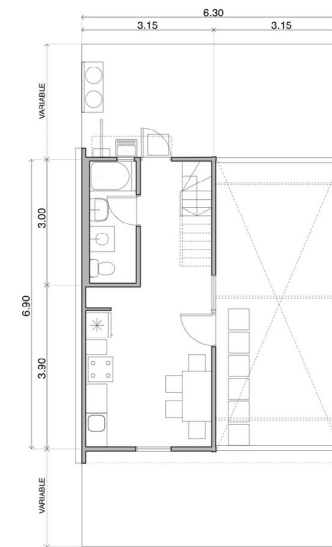
Following the same incremental housing scheme previously used in Quinta Monroy, and under the concept of John FC Turner, in which people may build their own homes, Aravena came up with the "Half House" model. This reinterpretation of the concept aims to provide low-income families with housing that can be extended up to 80m² as a middle-income family home. Therefore, instead of providing a complete low quality home for them, half of a good house is provided and they can finish building it gradually over time.

In particular, the Villa Verde Project offers a simple two-story houses half finished with sewerage and electrical installations, and half laid empty, separated by a continuous wall. The finished half part is made up with unfinished concrete floors and only with the essential appliances (sink, toilet, shower).

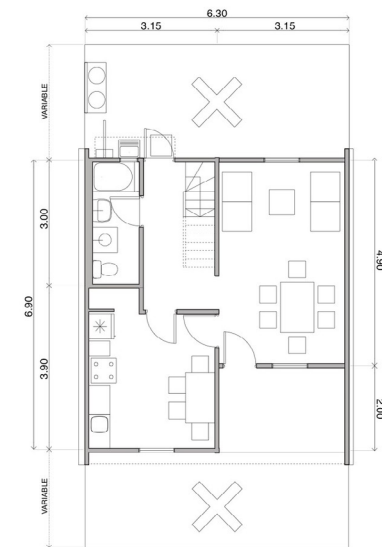
In the same way, my aim is to propose a similar structure for the lowest and low income housing, in which community get involved not only in the first part of the construction, but also gained skills to improve their homes in future. For the lowest and low income housing I propose unfinished homes with only essential appliances, in which inhabitants may decorate and personalize them according to their own interests.



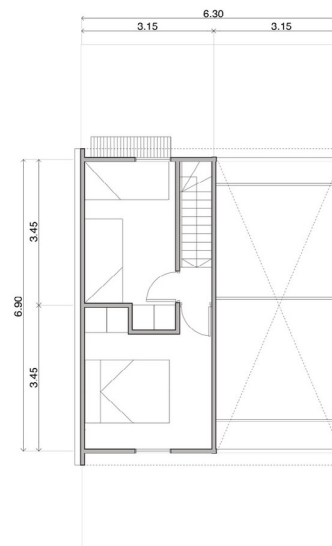
Site plan



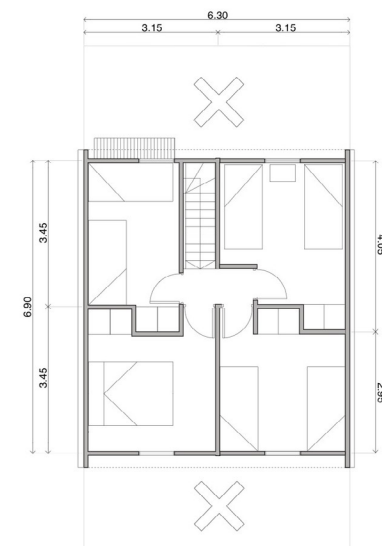
Ground floor Initial plan



Ground floor expansion plan



Second floor initial plan



Second floor expansion plan



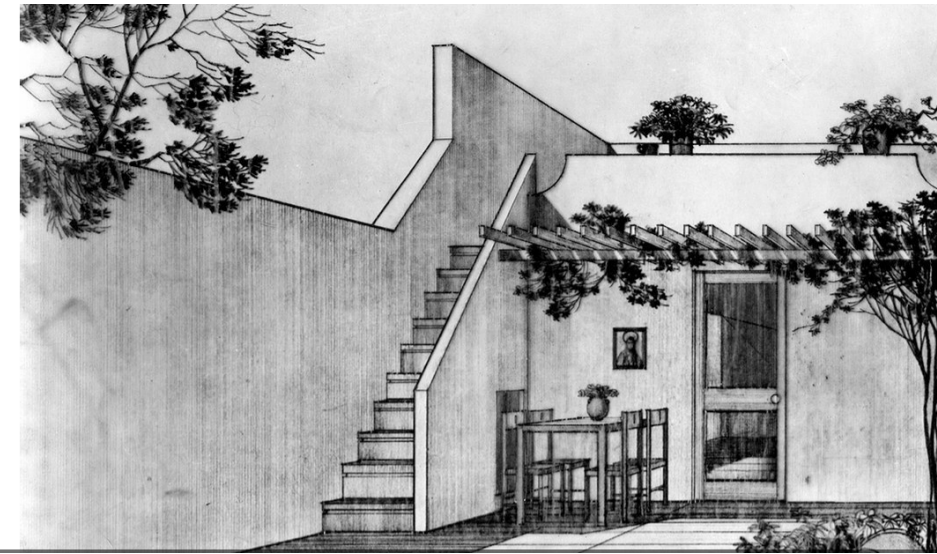
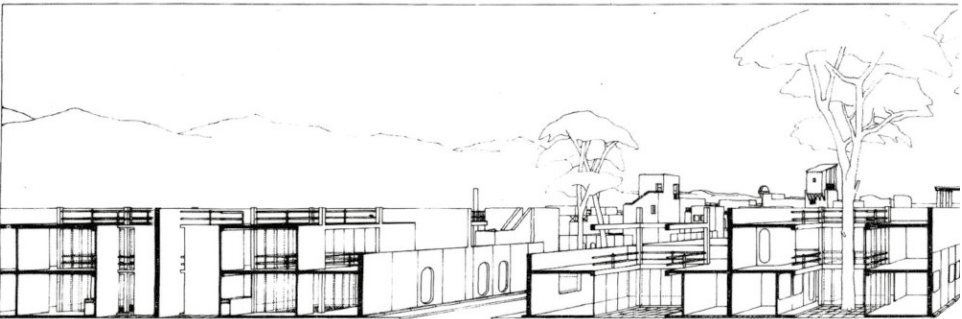
PREVI International Competition Lima

Originally, PREVI was launched as an international competition among well-known architects to find a housing solution for the huge migration from the rural areas to Lima, Peru in the 60's. Along with the National Government, UN and the Housing Bank of Peru. It was lead by Peter Land and the aim was to create high density and low-rise.

Moreover, its urban scheme is designed not as individual dwellings for modest people. It was proposed to create communal spaces and get attached by the sense of belonging.



- | | | |
|---|---|---|
| 1. <i>Atelier 5</i> (Suiza) | 8. <i>Figueras de Orzoño y Vázquez de Castro</i> (España) | NOTA:
En negrilla, los proyectos premiados.
En amarillo, los proyectos analizados. |
| 2. <i>Kikutake / Kurokawa / Maki</i> (Japón) | 9. <i>Taivo Korteinen</i> (Finlandia) | |
| 3. <i>Herbert OH</i> (Alemania) (no construido) | 10. <i>James Stirling</i> (Reino Unido) | |
| 4. <i>Center for environmental structure</i> ,
<i>Christopher Alexander</i> (EEUU) | 11. <i>Knud Svensson</i> (Dinamarca) | |
| 5. <i>Carroll Uppic-Woods</i> (Francia) | 12. <i>Alto E. van Eyck</i> (Holanda) | |
| 6. <i>Charles Correa</i> (India) | 13. <i>Esquerma Sáenz Urdaneta-Samper</i> (Colombia) | |
| 7. <i>Oskar Hansen y Svein Hatloy</i> (Noruega) | | |



Problem Statement

Addis Ababa is a city of contrasts.

On one side, the city is in the process of transformation into an international city, experiencing a construction boom with numerous of halfway-done constructions all over the city. In part because is the African's political capital, the government has prioritized urban development by attracting global capital and foreign investments in order to boost the economy and the development of the country.

On the other hand, the city, where around 80% of its population live in slum conditions and 70% of them live in rental housing, the rapid and uncontrolled growth of the city especially over the last decade has redefined a unique and unforeseen urban fabric where people from different social backgrounds have learned to live next to each other. Perhaps, the coexistence among income groups is the most valuable feature of Addis. The constant interaction with each other and the share of public facilities highlight the character of community, that in contrast to other developing cities, those divisions are strongly marked arising social segregation.



Nonetheless, as Addis is considered a young city and income inequality is not that uneven among social groups the sense of collectivity is present in daily life activities which are still strongly attached to the rural areas, better known as "ruralization" . This concept is ambiguous, because on one side, the perception of the rural remains in housing, social life and in the economic activities that somehow inhibit the modernization of the city arising informal economic activities whenever new residents see an opportunity . But, on the other side, the every day's activities mainly based on economic activities such as the informal retail trade, and on the religious practices, both serve as catalysts of the public life reinforcing the social behavior of the citizens.

Therefore, Addis is in the process to reach a balance between conserving the traditions and sense of community , and becoming a competitive city through modernity. As a consequence social layers overlap and boost the emergence of new income groups separating and marginalizing the poor, creating enclaves that deteriorates not only the social, but also the physical environment.

Hence, the main problem is the fragmentation of the layers caused by "ruralization or urbanization", (depending on the point of view), affecting the way on how people experience the city triggering social, economic and environmental issues, as well as the loss of cultural identity. Saying this, the loss of identity starts to fragment the social life, and with it, the urban fabric, and the cultural, economic and environmental layers. As E. Yitbarek describes, Addis is a collage of cities, where layers overlap each other, but operate individually due to the lack of an institutional framework that regulates the coexistence among them.

Indeed, the neighborhood of Kolfe, the chosen project site, is an example of how those layers operate individually within the neighborhood, but also shows how the community is disarticulated from the surroundings and from the city as well. Kolfe is located in the west area of Addis Ababa in a suburban area due to its proximity to the countryside. It was founded in the late '70's as part of the Federal Housing Program as a resettled neighborhood from the Sheraton area, where the majority of its population is already retired and the young ones base their economic activities on informal jobs.



By simply looking at Kolfe's urban fabric, there is a fragmentation among the environmental, social and connectivity layers, and there is no relation with the inner center, the most important commercial area of the city, where a great percentage of the population living in Kolfe base their economic livelihood there. As other parts of the city, Kolfe is characterized by the sorority ties that residents have developed throughout the years, fostering sense of community and empathy. However, the physical environment of the neighborhood shows the contrary. Kolfe may be seen as an island within the city due to its urban disconnections. This kind of feature is described in the Octopus City 's urban model, characterized by linking the new nodes of development and main institutional infrastructures passing through the neglected areas of the city, but without actually connecting them with the rest of the city. Therefore, the skyline of Kolfe is marked by isolation and the boundaries created by the same community in response to security and privacy issues.

Therefore, the specific problem is that Kolfe is defined by boundaries, forbidding the interactions among residents while accelerating the loss of sense of community. In that sense, the Kolfe's physical conditions are similar to those from Condominiums where they perform as islands within the city and boost even more the generic and impersonalized spaces, segregation and a total disruption from the outside .

As if it were a condominium, Kolfe presents tangible and intangibles boundaries. For instance, tangible boundaries are found in the tall and sealed fences enclosing the compounds limiting the relation inside-outside, and also in the environmental structure that is used as a garbage disposal lot. While, intangible boundaries are those present in situations where is possible to identify contrasts. The clearest example is between the formal and informal economic activities, that even though it is a helping hand relationship, it tends to exacerbate social issues when informality takes possession of the few public spaces restricting the right to join the public space and the interactions among neighbors.

In sum, as Kolfe has been included in the redevelopment program of the government as a possible potential site to develop multi-storey blocks, the design project is an opportunity to re-dignify from two different scales the living conditions of the current and the new arrival residents. On one side, it is expected to recompose the character of community based on the re-articulation of the social, economic, urban and environmental layers through the public space as the element of social transformation. On the other side, providing an alternative solution to the condominiums that achieves the interior relations of functionalism but also highlighting the relation with the outside creating flexible borders and fostering future developments through a self-progressive construction.



Research question

How to re- densify Kolfe in a multi scalar way that provides an alternative solution to the condominium units by integrating the fragmented urban layers; and by adapating the traditional needs of the families into a modern approach enabling future developments while upgrading the character of community and social inclusion?

Design Hypothesis

In response to the idea to redevelop Kolfe's area as part of the governance plan to remodel the whole city, the design project pretends to reconnect, firstly, the overlapped and fragmented layers of the city with those in the neighborhood as an attempt to read the urban fabric as a continuous element enhancing the social and economic interactions among citizens. In that order of ideas it is expected to achieve the following:

By consolidating the environmental element as an element of social cohesion; building it up as a visual image adding quality to the vulnerable communities; and defending the space as joinable public space able to host and serve as a source of income generation fostering economic activities such as urban agriculture.

By using the public space as a joint of the physical and social transformation of the area, fostering a sense of belonging among the residents.

By incorporating the informal economies into the city fabric, providing decent working spaces where residents and foreigners may able to coexist in a harmonious way.

By providing an alternative solution to re densify kolfe, in which dwelling units are conceived to understand the functionalism of the family and its economic dynamics through a low-cost construction but highly durable that can be easily adapted in the future.

By reconnecting the fragmented layers in the architectural scale, not only on ground floor but also on upper floors, allowing a direct and permeable relations with the living spaces.

Methodology

Method description

As part of the research methods that the Global Housing Studio encourages their pupils to explore are the participatory research and visual ethnography. Nonetheless, both methods are complemented by literature research, typological analysis, and a fieldwork research.

- The Literature research, is used in both phases: the group phase research, and in the individual phase in order to explore the topics I find most interesting so, they can be included in the design proposal.

For instance, during the first phase of research, the literature review serves as a general intellectual framework to get familiar with theories, concepts and the way of people from different cultural contexts experience the everyday life. Moreover, specific literature about Ethiopia is also used as a tool to understand the roots of the social, political and economic background and how these historical facts have defined the behaviors and features of the population and their relations with the spaces. This part of the research was combined in a four chapter's booklet, divided in: facts, the socio-historical context, the analysis from a spatial perspective and the living environments of the Ethiopian life.

- The Typological research, carried out firstly in a familiar context such as Rotterdam, gave us the opportunity to analyze from a morphological perspective and from a multi-scalar way the relation between the urban and the dwelling, but also how the physical aspects and the socio-economic environment define the social interactions among neighbors.

Moreover, during the design phase, this research method will be fundamental in order to provide an alternative solution to the generic condominiums in Addis. Taking as referent the traditional houses, the typology of the dwellings of Kolfe and their relations of function, they can be adapted to the emerging needs of the families.



- The visual ethnography, without doubts is the most enriching type of research. It is the complement of the theoretical framework that literature and mapping are not able to transmit. Being in the place, experience it with the own senses and the interaction with the locals, helps to create an own perception of the context and an idea of how is the relation between citizens. As this method is mainly perceptive and subjective, we, as researchers draw our own conclusions based on what we observed. In that sense, the fieldwork and the different strategies used to collect data such as observation, photography, drawings and interviews to local people, have served to take a rational position of the Ethiopian context. However, as this is a qualitative research and is limited by the lack of time to actually get in a deep understanding of the context, the use of heuristic practices such as intuition and common sense are fundamental to discard speculations and information that may be not as reliable, especially during the interviews to locals where they tend to provide self-evidences and partialize the reality according to their own experience.

Relevance

By considering that Ethiopia is the second most populous country of Africa, but only 20% of its population live in urban areas means that traditions, beliefs, economic activities and the social structure are still highly attached to the rural areas. Consequently, the skyline of cities, especially Addis have been transformed by migrants who bring their traditions and particular ways of living into the city, knowing this process as “ruralization”. However, the ruralization of the urban environment retards the progress of the city and the goals set by the government to achieve modernization. In that sense, is precisely to understand the importance that rural has on people’s behaviors in order to create harmonic environments where both may be able to coexist.

Moreover, by understanding that Addis is an emergent city, and so, its economy is also emergent, informality becomes the main source of income for the majority of the population. By being aware of this situation, informality may be seen as the engine to develop micro-economies within the neighborhood by grouping the residents into cooperatives creating entrepreneurship and generating decent working opportunities. Besides, strengthens the relationship between neighbors by creating sense of community and sense of belonging, which in turn will be reflected in the enhancement of the neighborhood.

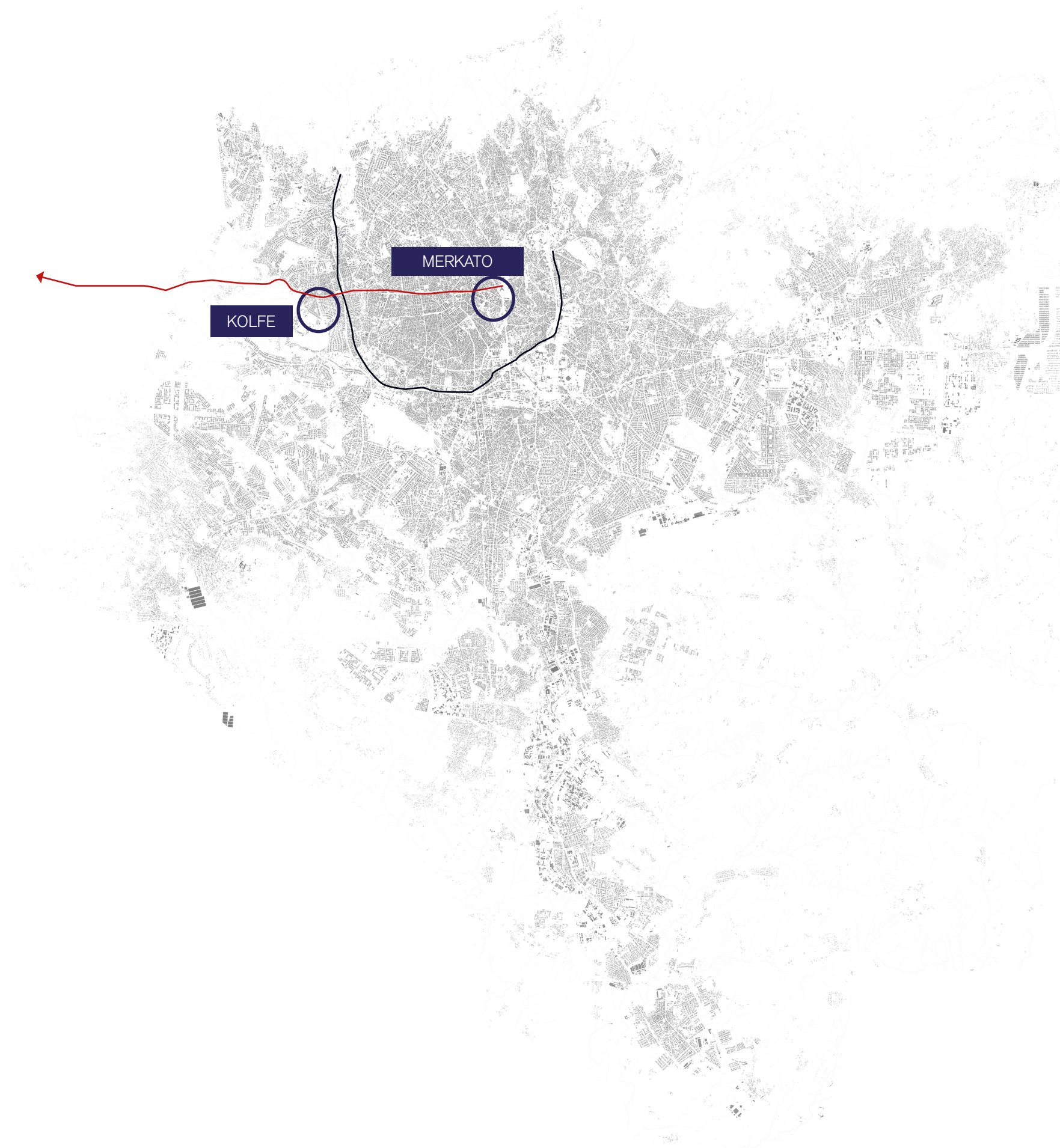
Lastly, by understanding that adequate housing is a human right firstly recognized in the Universal Declaration of Human Rights in 1948, and then, in the International Covenant on Economic, Social and Cultural Rights of 1966 as part of the right to an adequate standard of living . By implementing the right: “adequate housing must provide more than four walls and a roof” it is expected that housing, especially for the poor, provide more benefits of satisfaction than what shelters provide, as they only perform as elements that satisfy the basic needs of people. However, this is a worldwide concern for the human rights defenders in the sense that providing affordable housing for low-income groups is not a priority, and instead, governments and developers conceive them as programs to supply the shortage of housing rather than upgrading the residents standards of life. For that reason, UN-Habitat has proposed a new approach, called it “Housing at the center” positioning housing as a priority in the government agendas

“ ‘Housing at the Centre’ approach comes to position housing at the centre of national and local urban agendas. ‘Housing at the Centre’ aims to shift the focus from simply building houses to a holistic framework for housing development, orchestrated with urban planning practice and placing people and human rights at the forefront of urban sustainable development”.



4.

Location



4.1 Location within Addis Ababa

Kolfe is located on the west part of Addis Ababa out of the main ring road of the city. It is laid on one side of the New Ambo Road which connects directly the city center to the countryside. Though for many of the residents this is a challenge due to its distance from their working places (mainly informal and located around Mercato), this may be an excellent opportunity to attract new residents who want to live in a more suburban environment.

5.

Urban
proposal



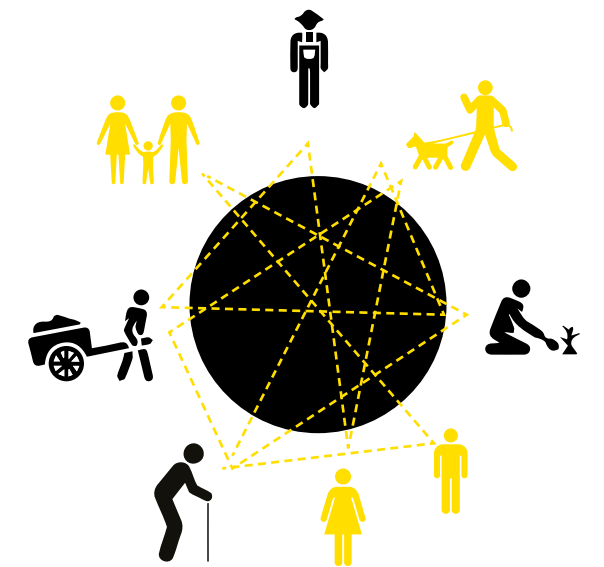
the identity, by conserving the existing roads and the main public space as part of the collective memory



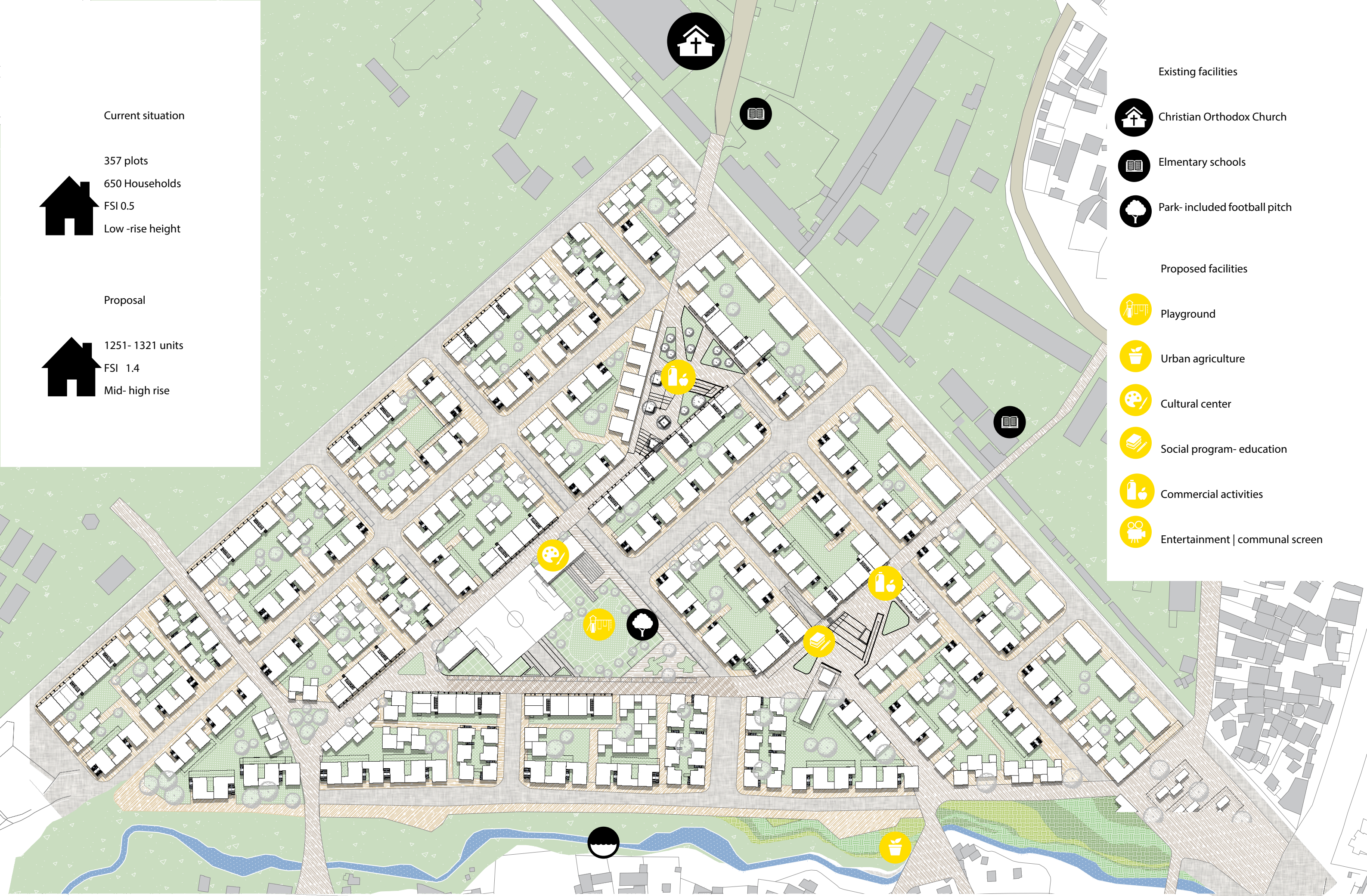
Giving continuity to the existent paths and connect them to the surrounded neighborhoods



Consolidate the neighborhood as a hub of micro-economies, enhancing the standard of living of the residents



Mix of income groups as an attempt to reduce inequality



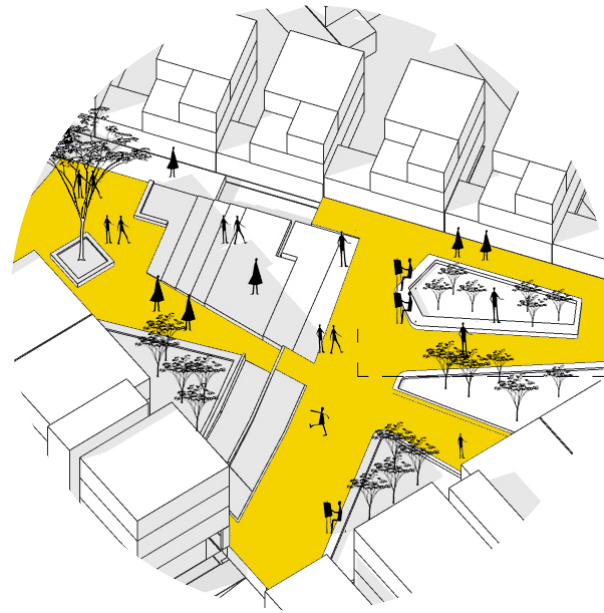
5.3 Main “Common spaces”

The structure of the urban scheme is very simple as its defined by the existing public space located in the center.

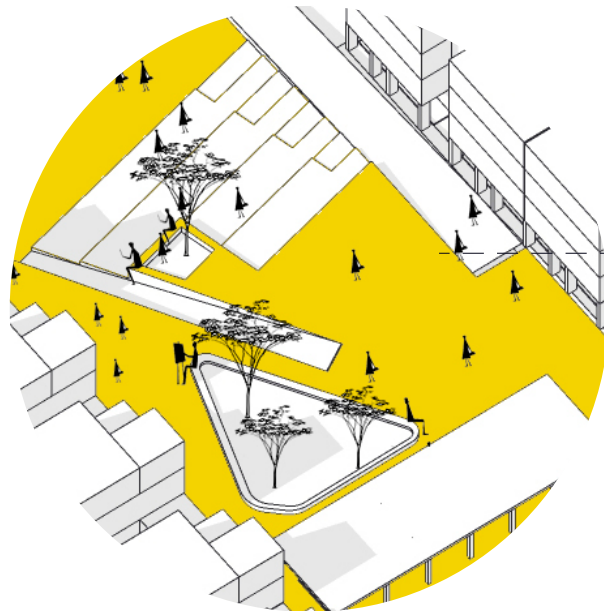
Then, 2 other main common spaces are proposed with different characters as an attempt to humanize the public space as Germán Samper points out.

The tension among these 3 spaces suggests a main connection, while emphasizing the connection from edge to edge of those points that use and experience have marked the daily life in kolfe

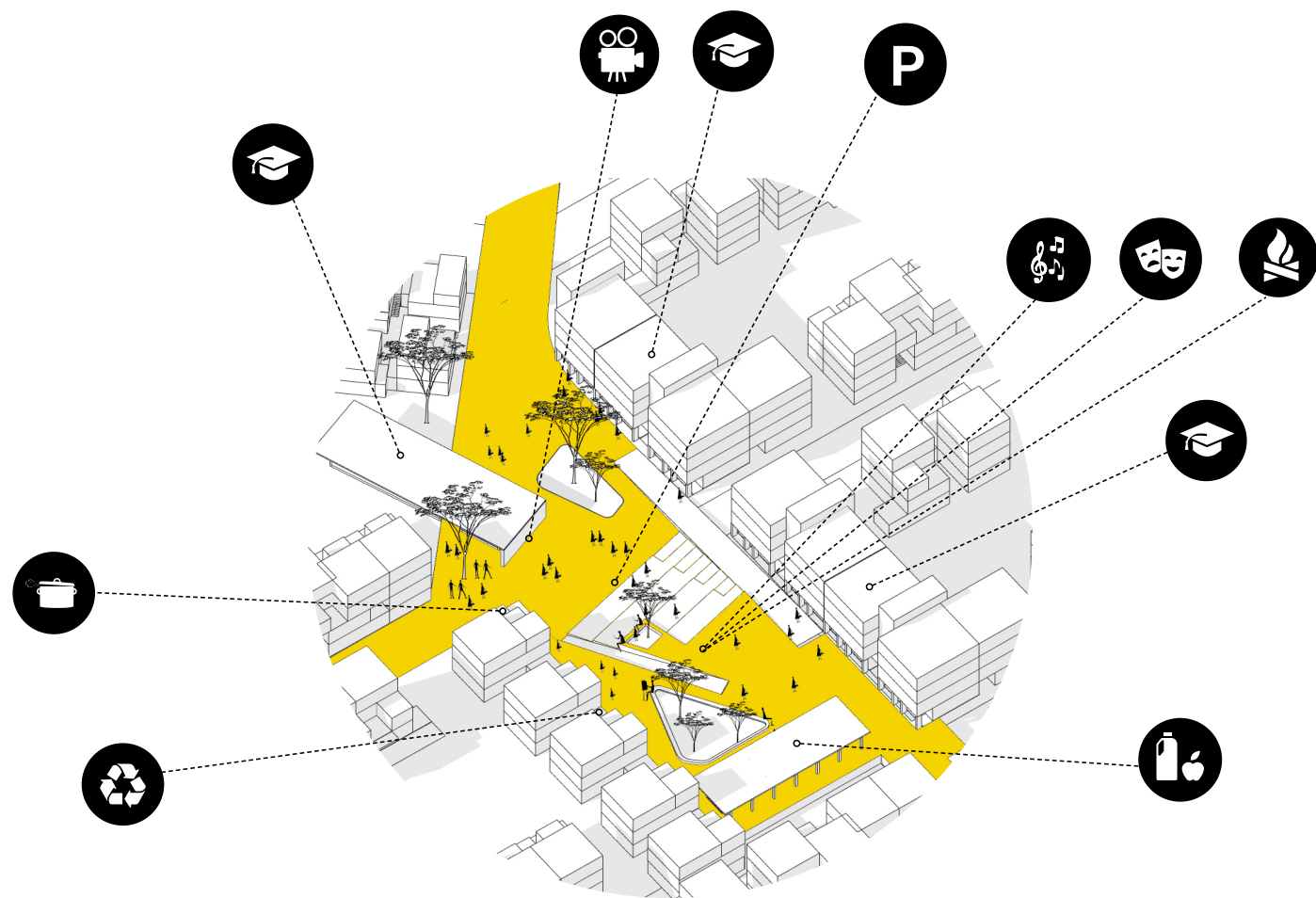
Commercial square



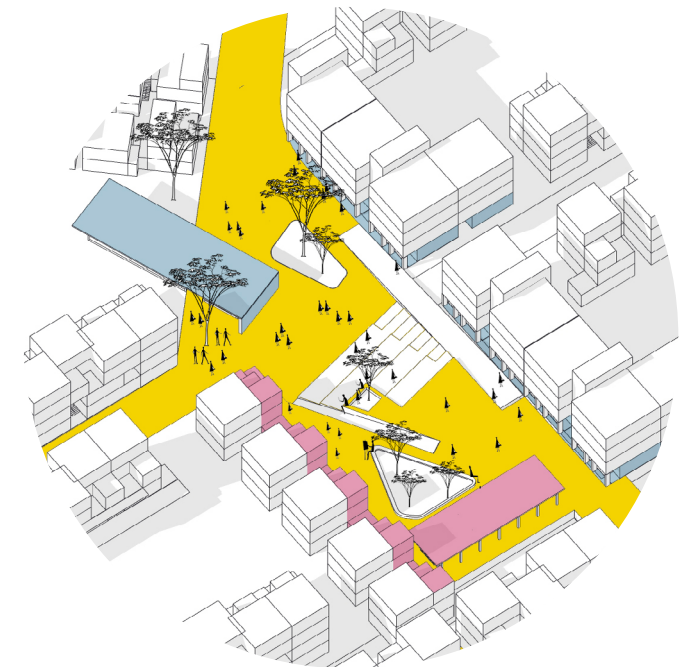
Educational public space



Educational public space



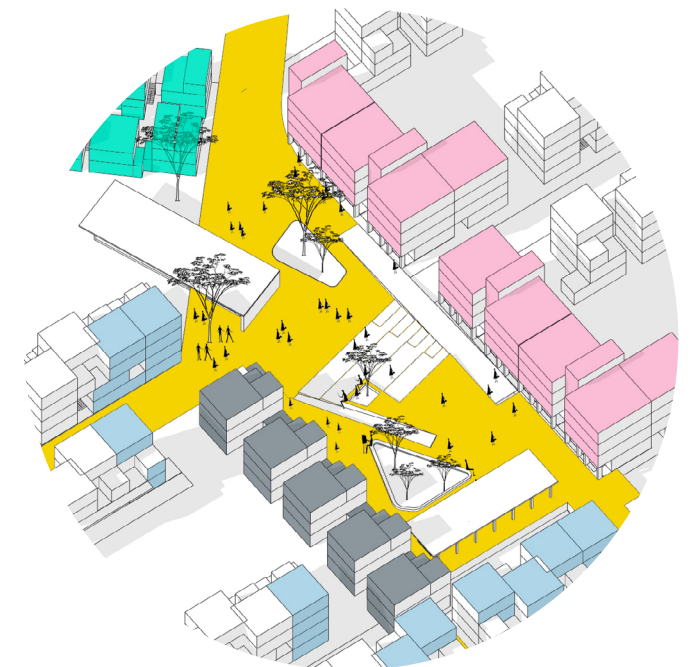
Relation with the ground floor



Activation of the common areas

Theoretical areas- grey
Practical areas- pink

Space for social cohesion



Portico typology (middle income)- pink
L typology (low income)- blue
Commercial typology (low income)- dark blue
Productive units (lowest income) - green

An on-going neighborhood



Border intervention



5.4 Road network

I

The road network is defined by pedestrian flows. There is a shift in the hierarchy of the road network since the car roads are controlled by the pedestrian paths.



II

Main common spaces are interconnected but also remark the traces of daily use



III

Car roads
The peripheral road distributes the local ones



IV

Parking route

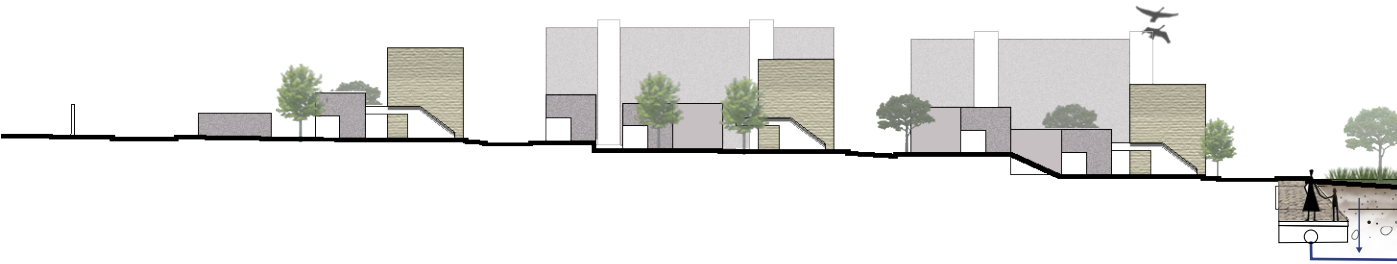


5.6 Wadi system | Water management

The word “wadi” is an Arabian word which refers to the dry rivers in deserts that once a year swell and cause flooding. Netherlands, has taken this principle to develop a water infiltration system.

The wadi system also called grass infiltration fields, infiltrates the stormwater and transports it in gutters to the swales, minimizing the overflow and improving the water quality which is purified by the soil.

In the proposal, at the neighborhood scale, and taking the topography slope in consideration, the excess of rainwater is collected in a subsurface infiltration layer and transported through a porous layer (gravel, clay granules, stones) to the groundwater. The bottom is wrapped in geotextile to prevent clogging. Finally, the groundwater runoffs in the collective harvests located along the stream and may be used for irrigation.



Esc: 1_1000

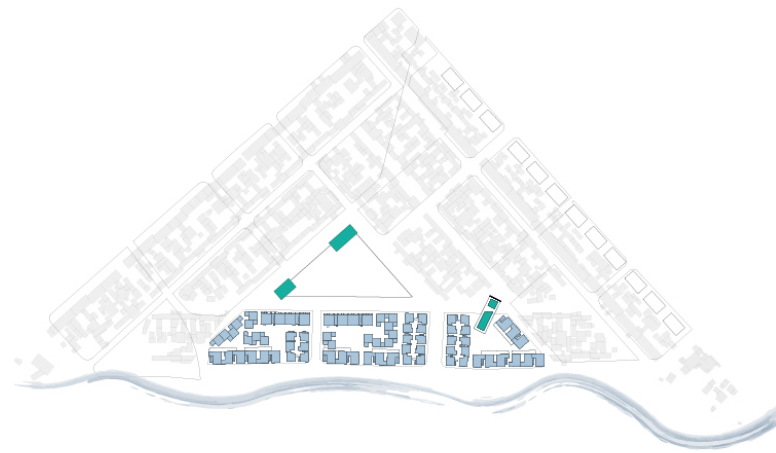


5.7 Phasing

Phase I

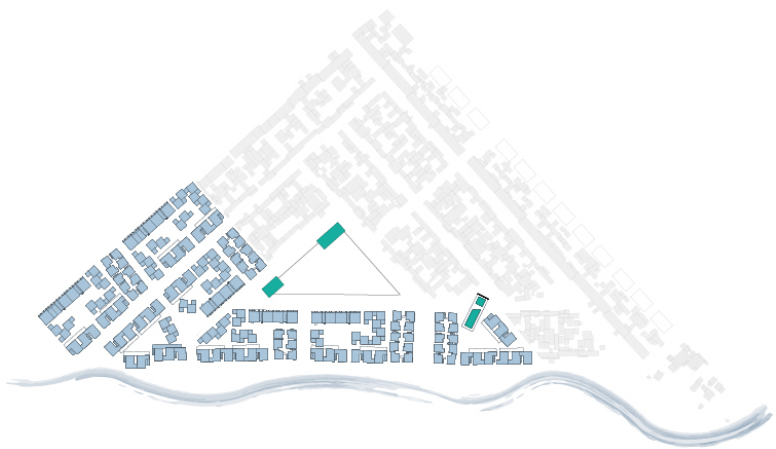
Preventing the risk of overfloodings, the first area to get intervened is the one along the stream. Here, the closer area to the water front, the more vulnerable and degraded is the area.

Moreover, the first phase includes the intervention of the existing park with the infiltration system and the construction of the 1st part of the collective underground parking.



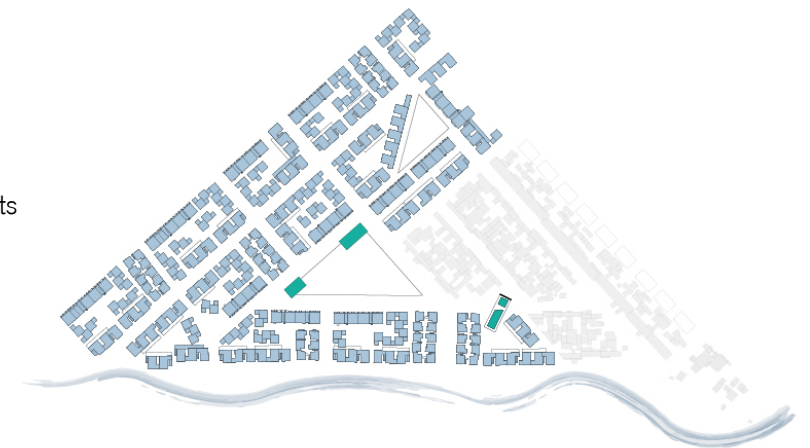
Phase II

Then, the intervention takes the furthest area from the vehicular access taking into consideration all the construction process



Phase III

The second underground parking is built as well as its top level



Phase III

Finally, the closest area to the main road is intervened and it is built the last phase of parking.

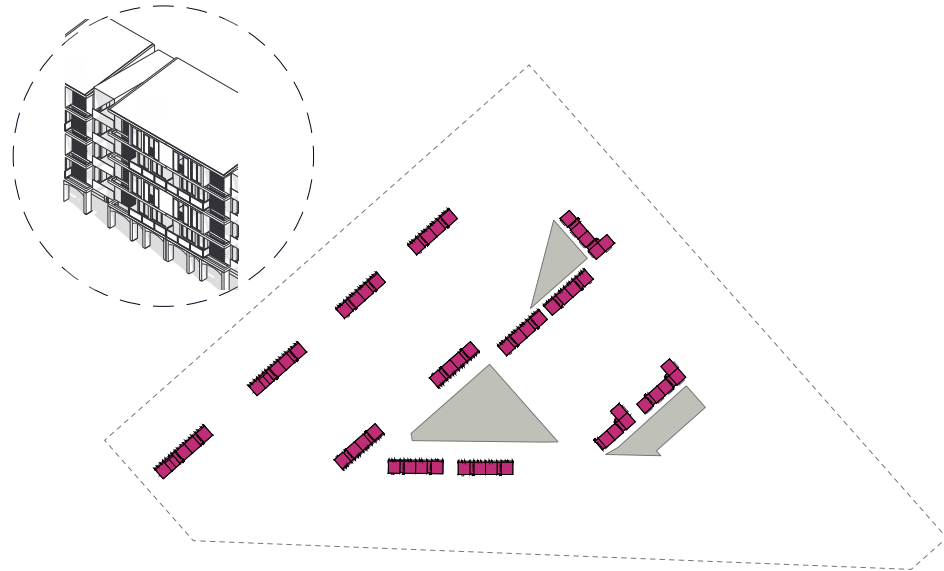


5.8 Distribution of the income groups

I Portico building

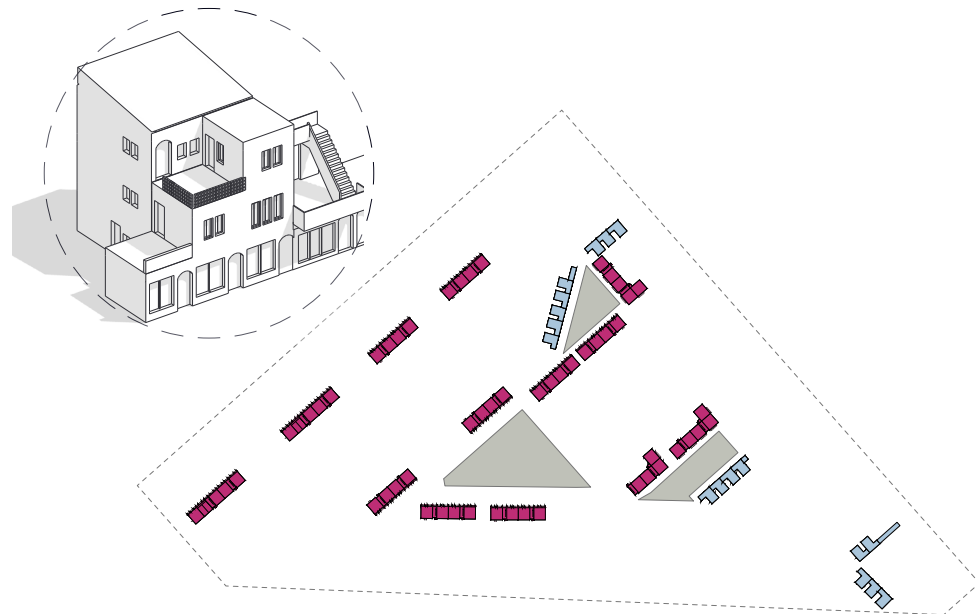
The criteria to distribute the income groups was based on different aspects though those with public uses such as service facilities, commercial areas, or educational purposes on their ground floor defend the main structure.

In that sense, as the middle income typology offer services on the groundfloor, they a set surrounding the main common spaces



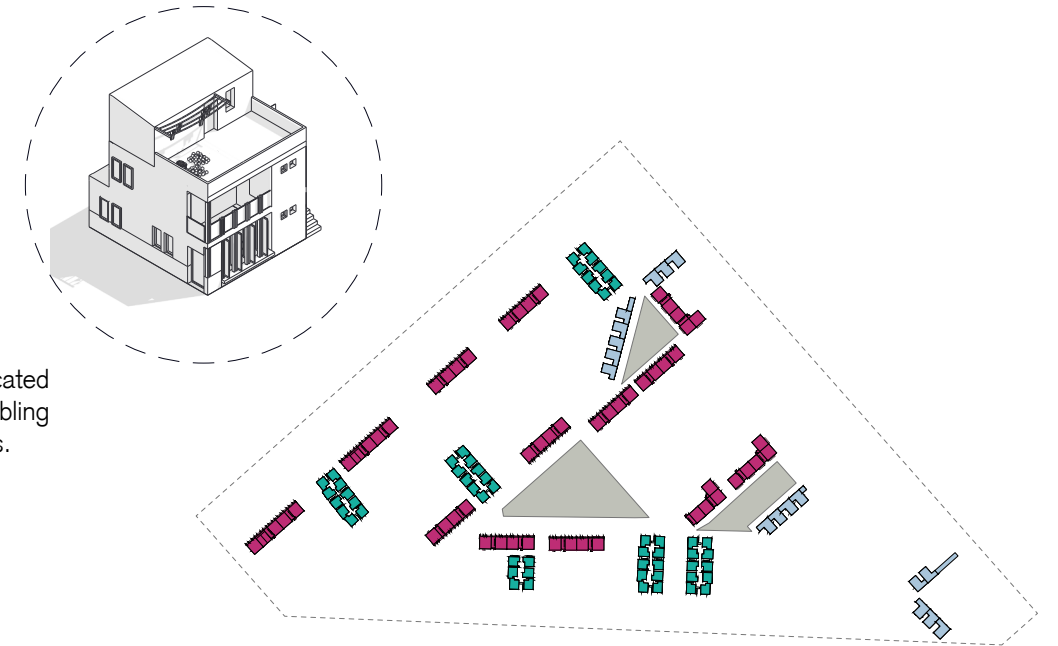
II The commercial units

As its name indicate, the commercial units which are part of the low income group also define the configuration of the "common spaces"



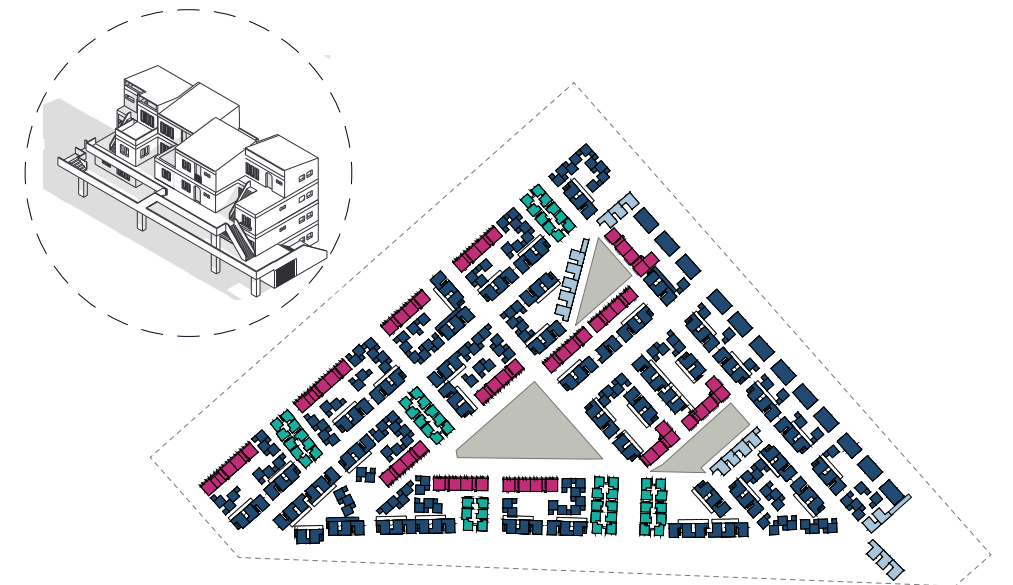
III Productive units

The lowest income group is located near the common spaces enabling informal sales from their homes.



IV. Low- income

This group fills the rest of the area, drawing special attention to cluster them in such a waty that enables openings for sunshading while creating diverse collective spaces.



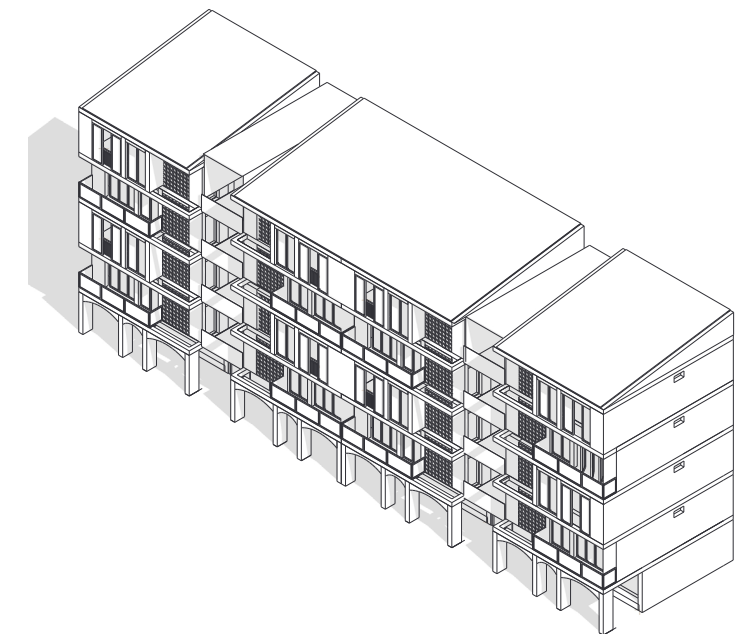
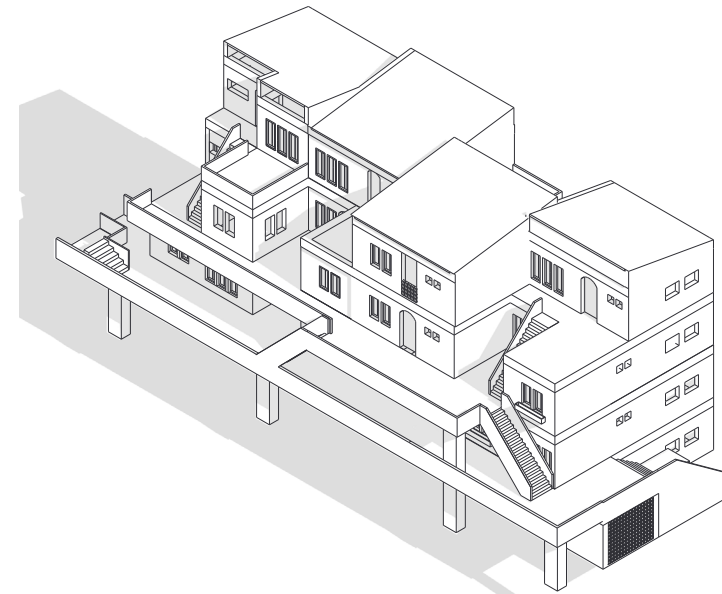
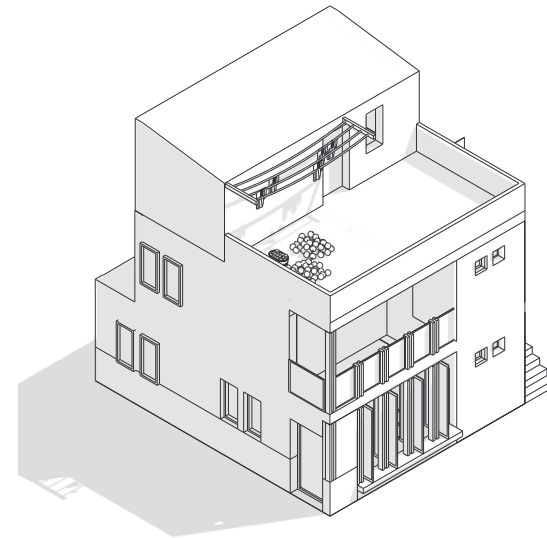
6.

Architectural Design

6.1 Managerial proposal

Having access to home ownership in the global south “ reflects the popular view that money spent on rent is money lost outside the family. Because of this, modest families will make considerable sacrifices to purchase a small house or lot”.

Peter Land (p57, PREVI, the Experimental Housing Project)



Productive units typology

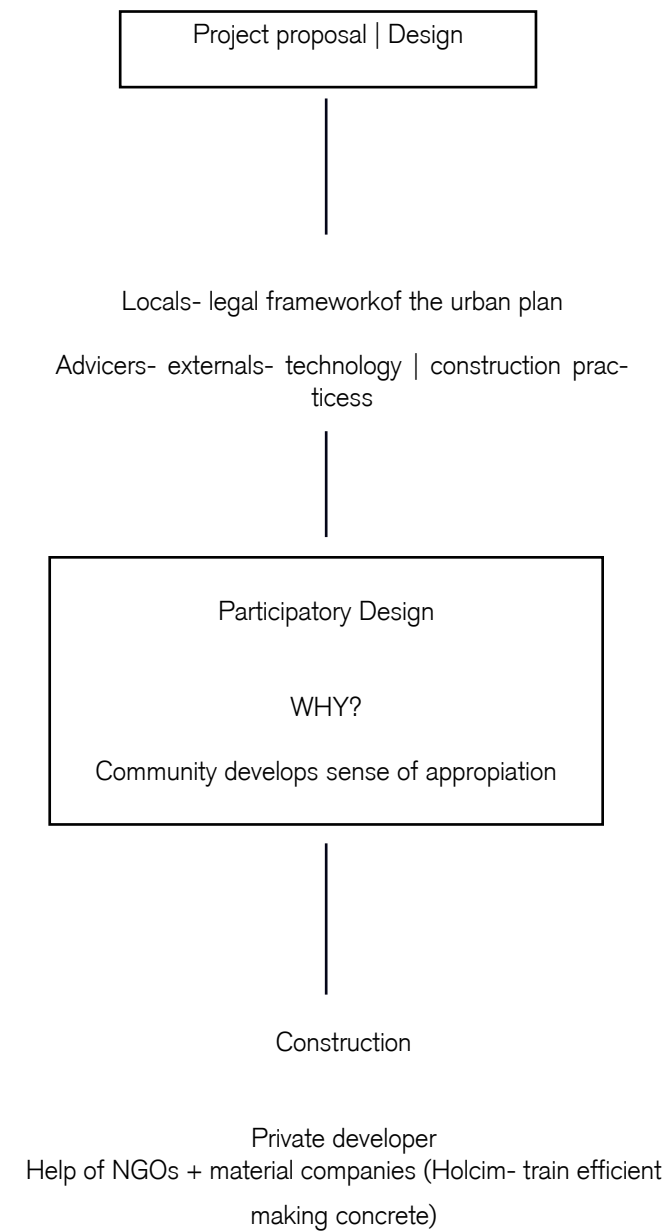
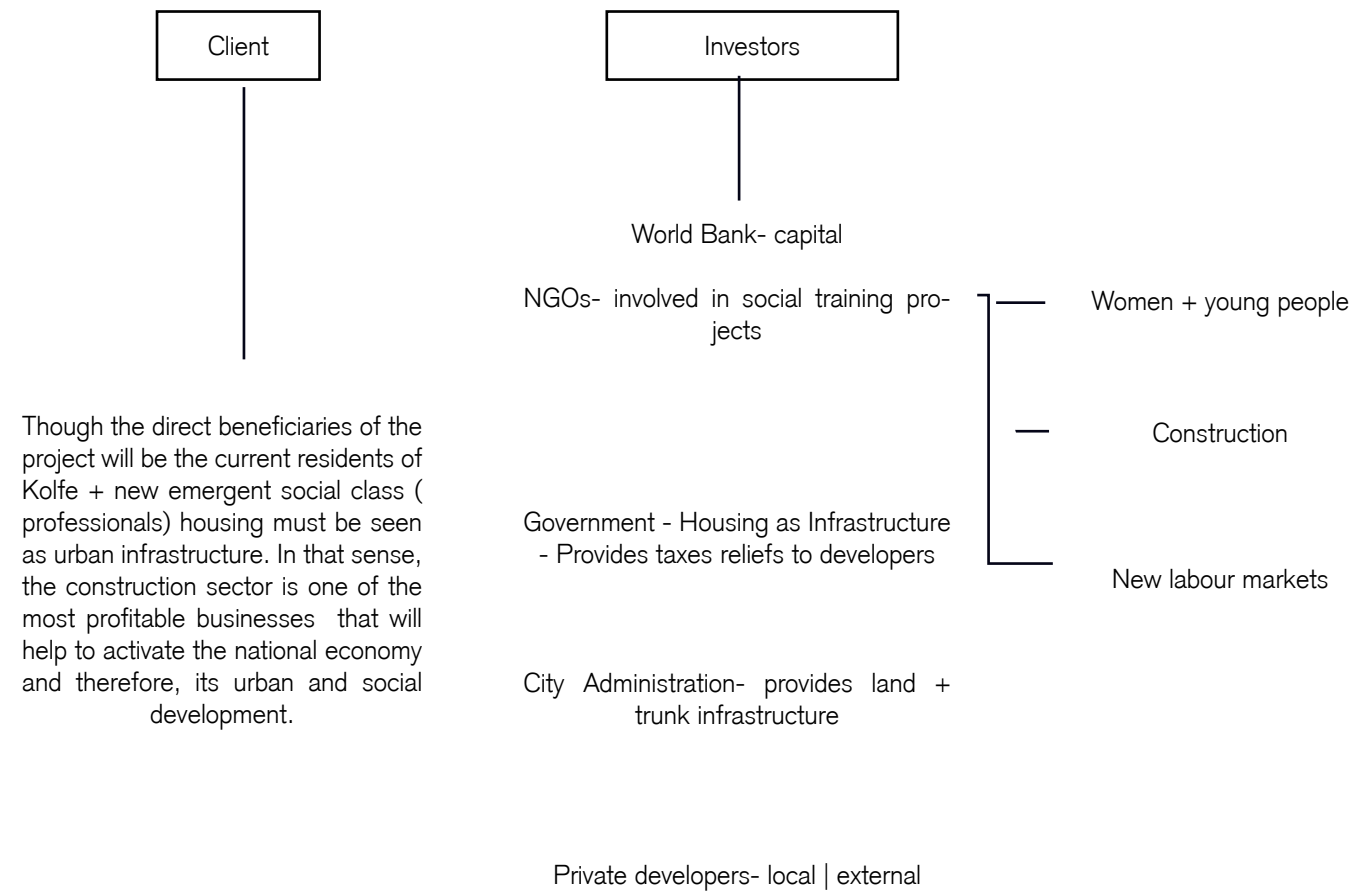
- Self- build housing program
- Individuals may build their own home under certain guidelines given by supervisors and the architecture team. They get trained and develop skills. Formalize jobs

The L typology

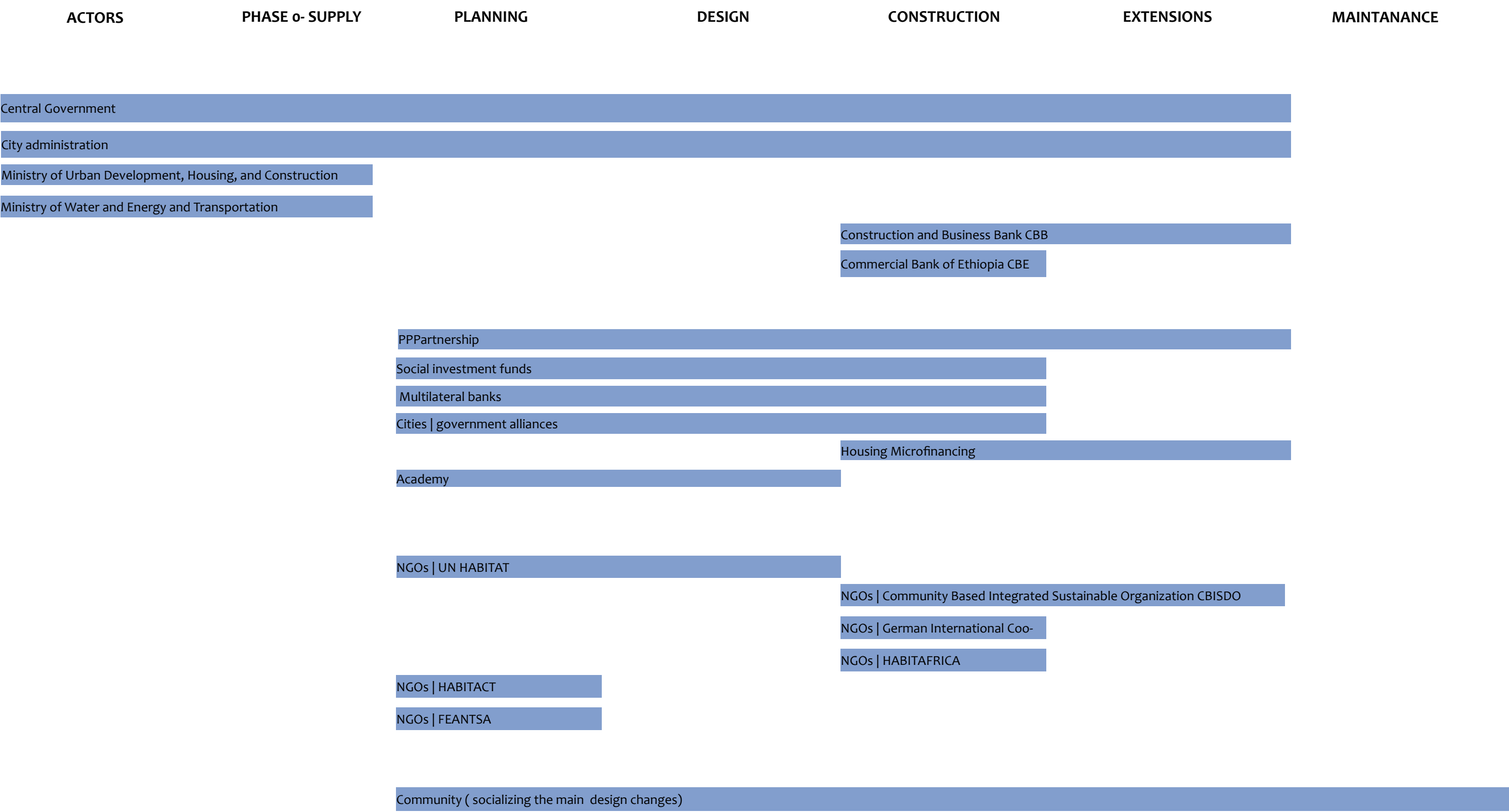
- Rent to own
- Individuals may have access to bank mortgages and low interest rates

Portico typology

- Ownership
- Cross subsidy



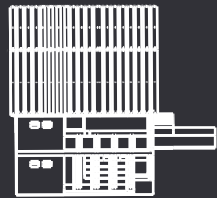
Actors involvement through phases



Original unit

Productive unit typology

Lowest - income typology



Expanded unit

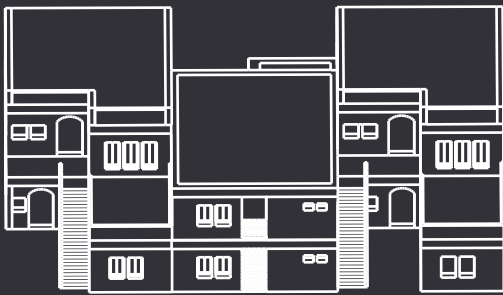


Clusters



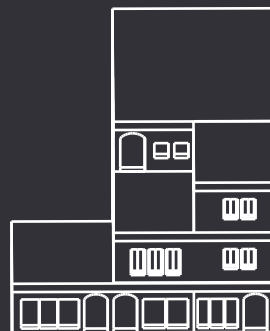
Low-rise units

(Low-income typology)



Commercial units

(Low-income typology)



L typology

(Low-income typology)

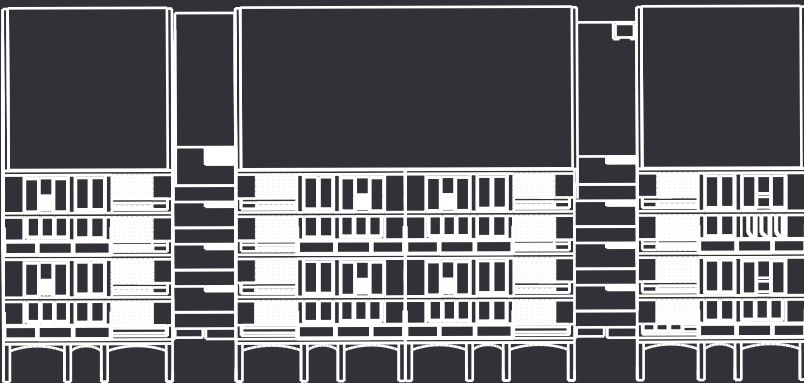


Portico typology

(Middle-income typology)



.....These long- term family projects become a disciplining principle for how money should be spent over the years. The collective efforts are a source, moreover, of family pride and self - respect".
Teresa Caldeira (p 98)



6.2 Materiality | Local Market



Street pavement

- Used in the pedestrian network of paths and in the main public squares



Corrugated iron sheet

- Re use them on floors and handrails



Soil

- Used in CEB as the main material construction, including load bearing walls and infill walls



Stone

- For plinths

Compressed stabilized earth blocks CSEB

Material chosen over adobe bricks because adobe does not contain portland cement, which reduces the durability and strength of the blocks.

Advantages

- High performance in compressive strength
- Thermal insulation
- Durability- efficiency and reduce of costs in future
- Low cost in production and low skilled trained workers
- Uses low quantities of cement, reducing costs

Composition

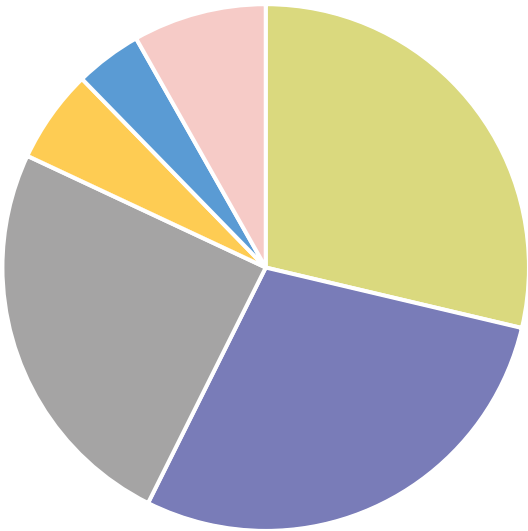
Clay- 35%
Sand- 35%
Aggregates (sand, stone, gravel) - 30%
Cement 7%
Banana fibers - 5%
Water 10-12%

The main distress of CSEB is being exposed to direct moisture. For this reason, stabilize them with Portland cement and other natural fibers is important. This is why I found out that the use of **banana fibers** has many attributes, including its re-use.

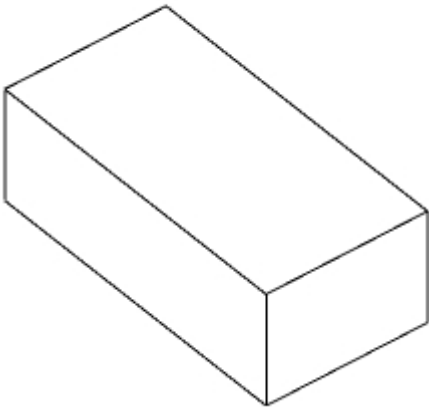
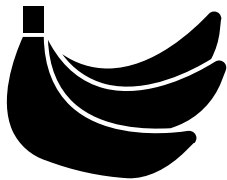
Moreover, the banana is the most cultivated fruit in Ethiopia representing 68% of the total fruit produced in the country, and covers 59.64% of the total fruit area.

Some of its benefits are:

- Works as structural reinforcement
- Low density and light weight
- High tensile strength
- Water repellent
- Fire resistant



1 2 3 4 5 6



26 x 14 x 9 cm



Centrer For Earth Architecture. Francis Kere in Mopti, Mali.

Fly ash bricks

As a way to reduce the foreign expenditure in coal , essential element in the energy sector, studios have confirmed the existence of coal deposits. Last year, in August, the council of Ministers approved the regulation to promote investments in mining industry.

Deposits are identified in Amhara, Oromia and Southern Nations.

Fly ash bricks are made by clay and fly ash- a product of coal burning. Fly ash contains high volume of calcium oxide, which provides great resistance and repellents. It is optimal for structural purposes. It may be lighter in weight than clay and concrete bricks.

In the project I use them in the service modul which includes the bathroom and kitchen in infill walls to reduce the risk of humidity and water leaking.

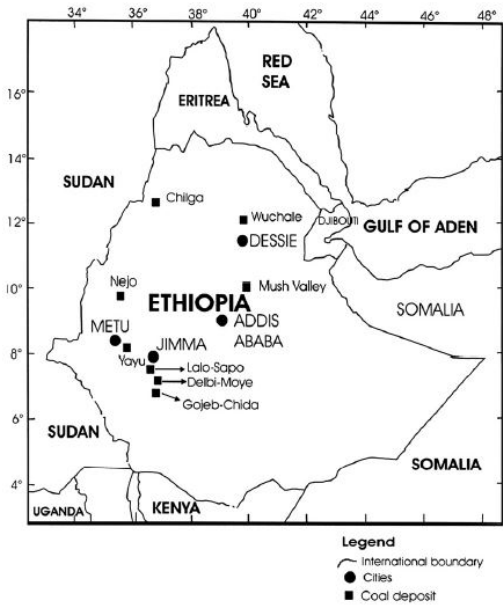


Fig. 1. Location map of coal deposits of Ethiopia.

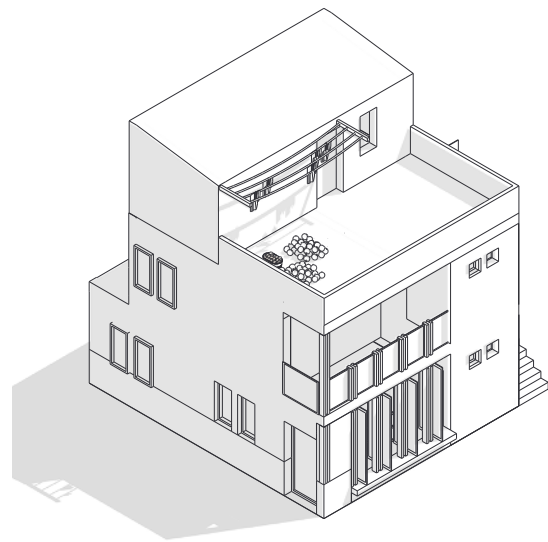
Location of coal deposits in Ethiopia



Fly ash manufacturing



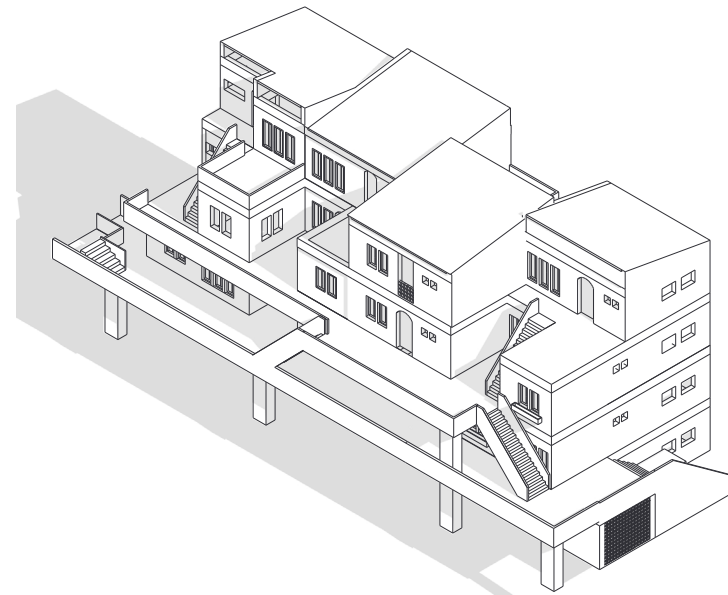
Materialities



Structure: CSEB Load bearing walls
 Beam ring: Concrete beam
 Flooring: Concrete joists separated every 80 cm
 Infill walls: CSEB

Non structural:
 Service module (bathroom and kitchen): fly ash bricks

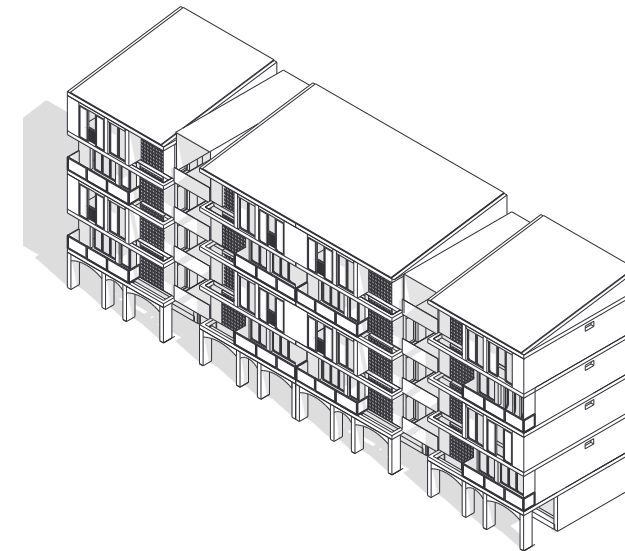
Veranda: bamboo
 Louvers: bamboo fibers



Structure: CSEB Load bearing walls
 Beam ring: Concrete beam
 Flooring: Concrete ribbed slab with joists separated every 80 cm
 Infill walls: CSEB
 Gallery columns: concrete

Non structural:
 Service module (bathroom and kitchen): fly ash bricks

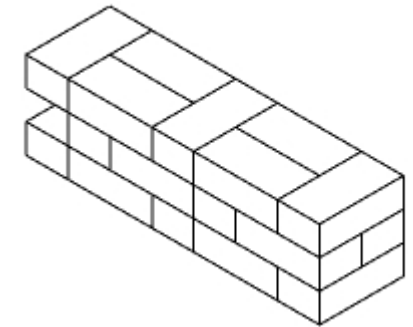
Note: All 3 low-income typologies have the same structural system.



Structure: concrete columns for greater flexibility on ground floor use + dual walls for stability

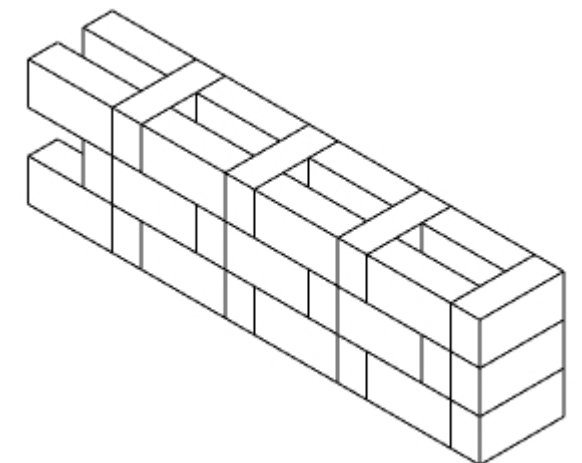
Flooring: Concrete Ribbed slab
 Flooring: Concrete joists separated every 90 cm
 Infill walls: CSEB

Non structural:
 Service module (bathroom and kitchen): fly ash bricks
 Louvers' facade: bamboo fibers + galvanized black steel frame



Load bearing walls

Flemish bond

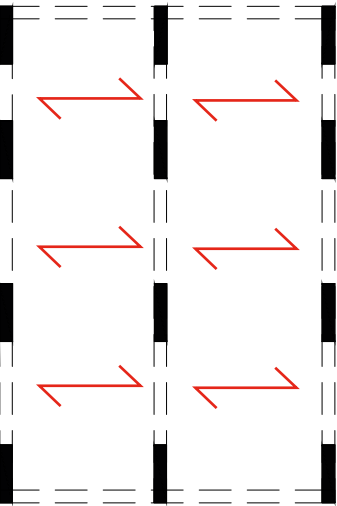


Infill walls
 Rat trap bond

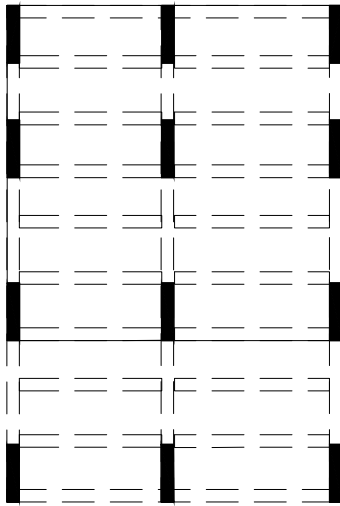
Requires 25% less bricks,, therefore lighter and the electrical cables are hidden inside walls

6.3 Structure

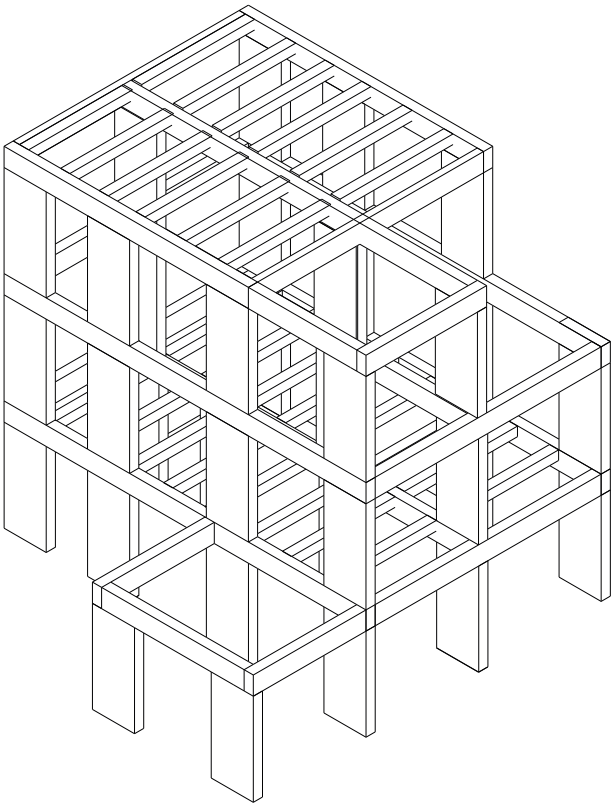
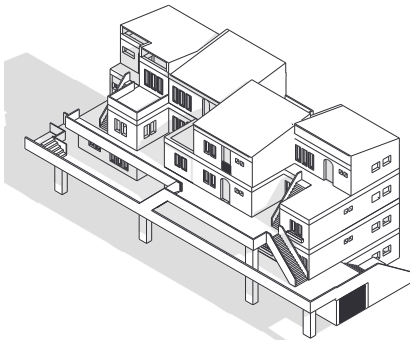
L typology



Floor span

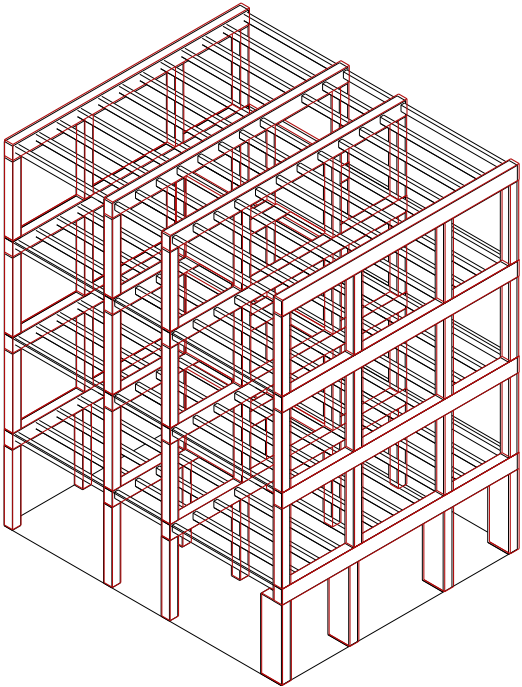
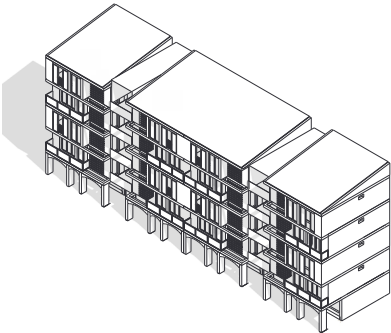
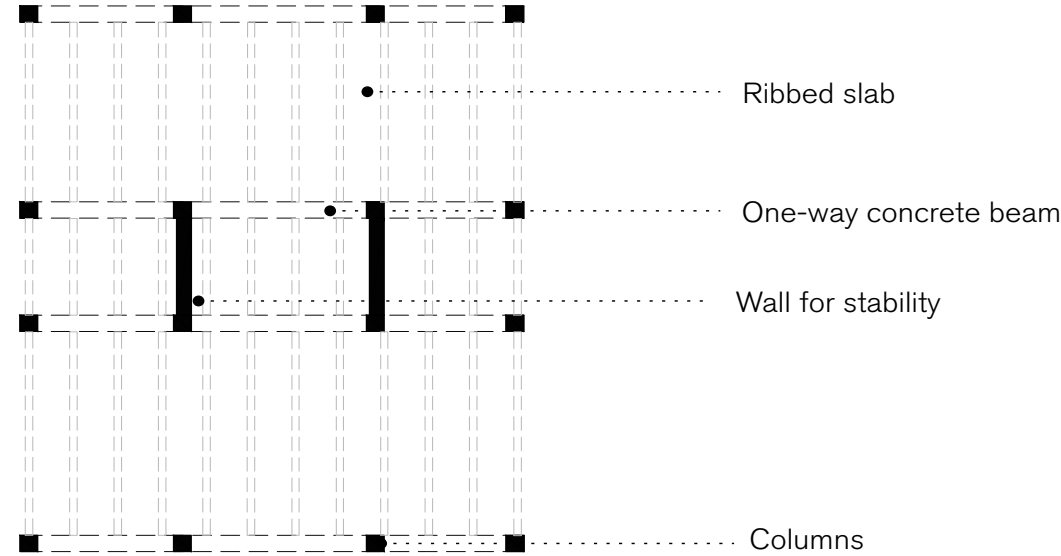
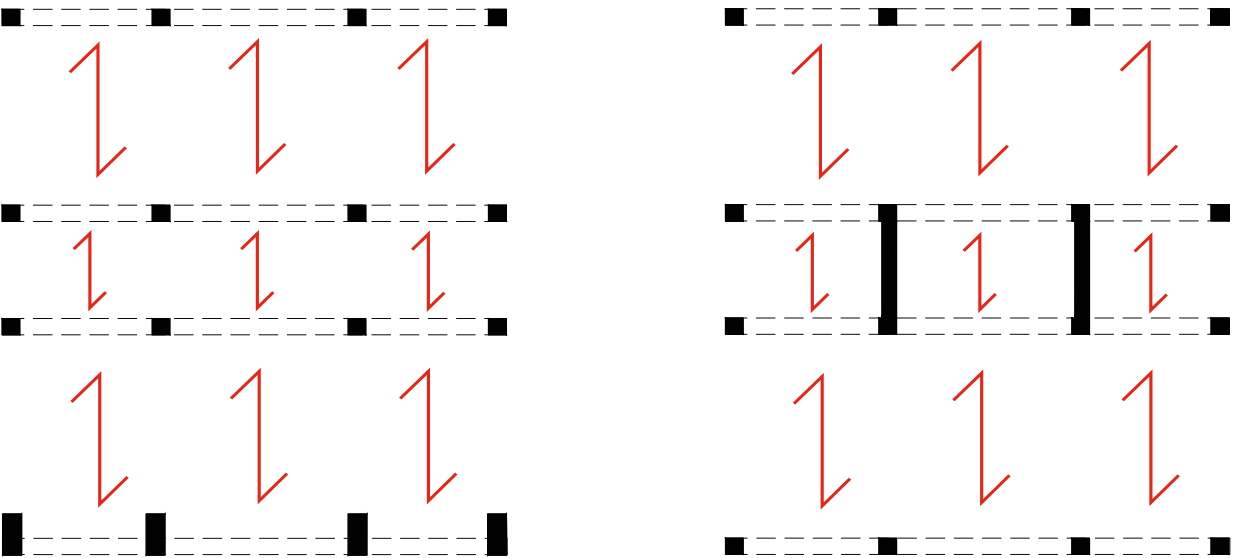


Structural system



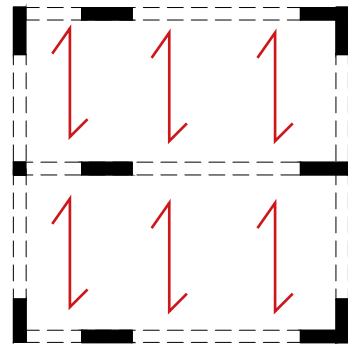
Structural system with expansions

Portico typology

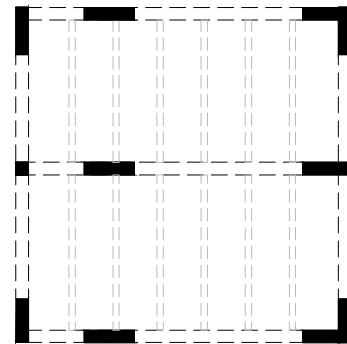


Structural system with expansions

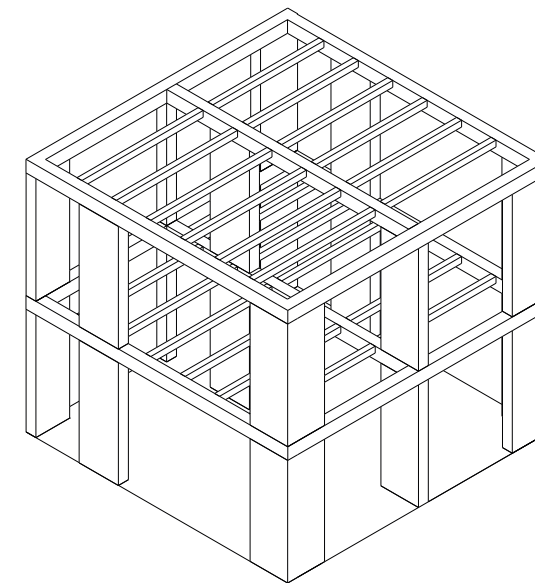
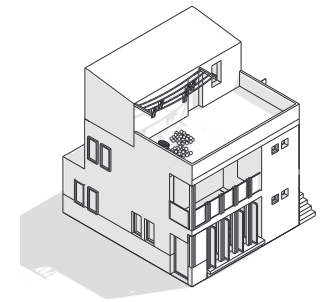
Productive units typology



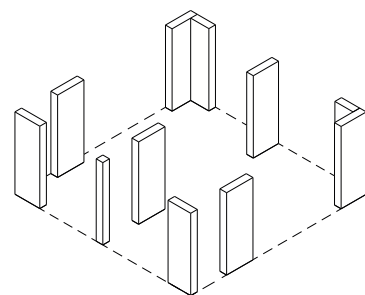
Shear load diagram



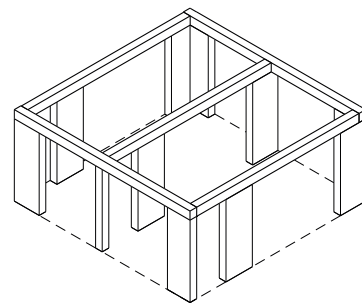
Structural system



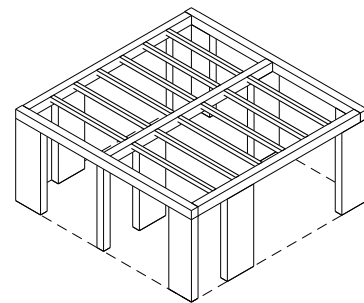
Structural system with expansions



CEB Load bearing walls



Concrete ring beam



Ribbed slab

6.3 The cluster

An overall mid-rise system is proposed within the neighborhood. This is the result to search for a balance between high density and spaces where human scale prevailed. Avoiding a high-rise model for low income groups is a main issue due to the concern that new redensification model could end as a vertical slum.

In that case, I searched for a more personal scale enable to get transformed over time. The location of the volumes and the closed and open spaces provide a richer spatial relations among housing which create ties for social relations.

Besides that, proposing a low-rise system also provides a better use for sunlight and circulation of the air.

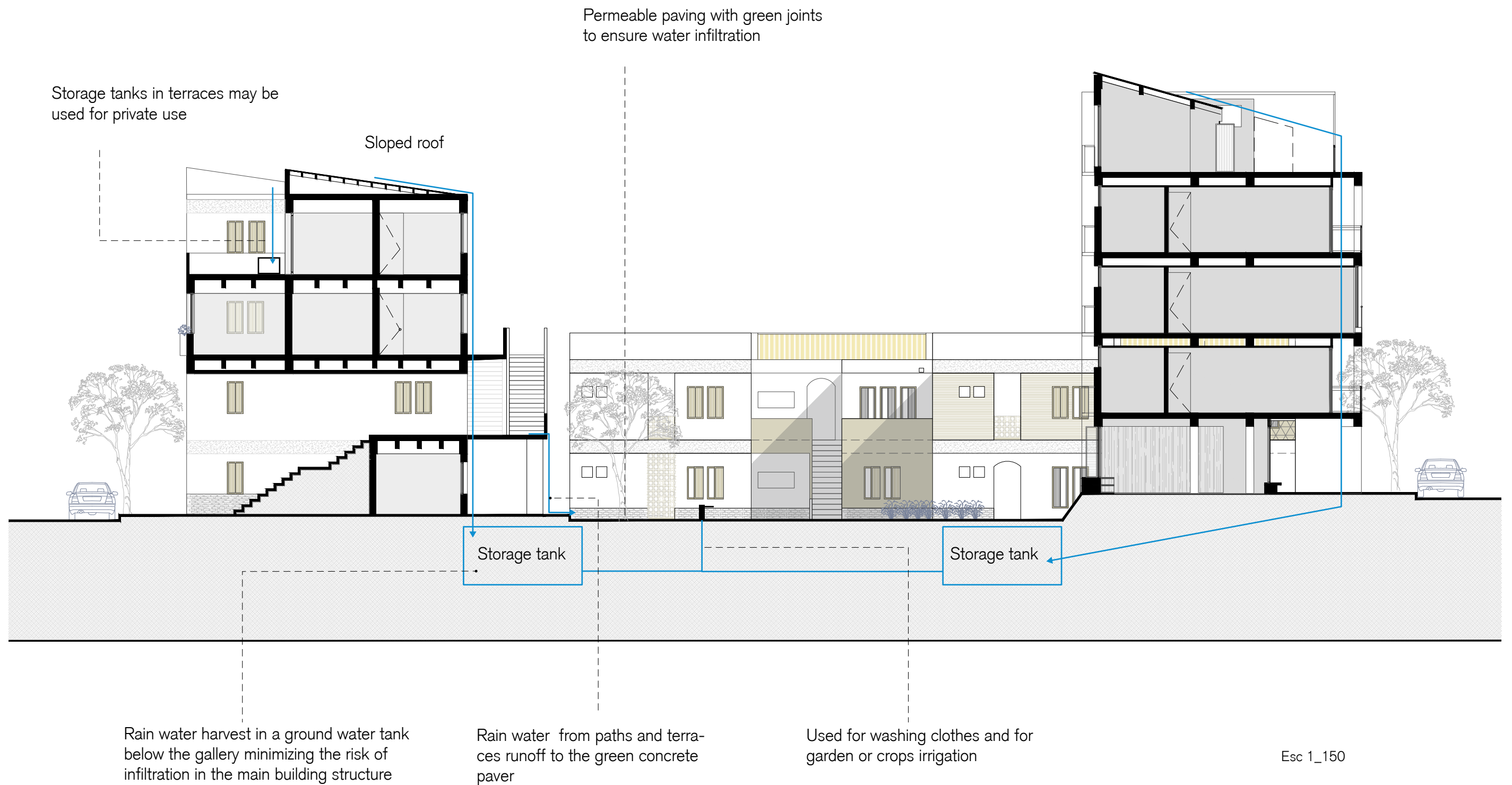
Talking about the high rises....."For a poor Indian or Peruvian family who cannot afford more than one or two rooms, to live in the 10th floor is absolute hell. Especially when you have several children, the elevators break down, and the water and electric supply are erratic- in addition to all the other calamities that are part of their everyday lives".

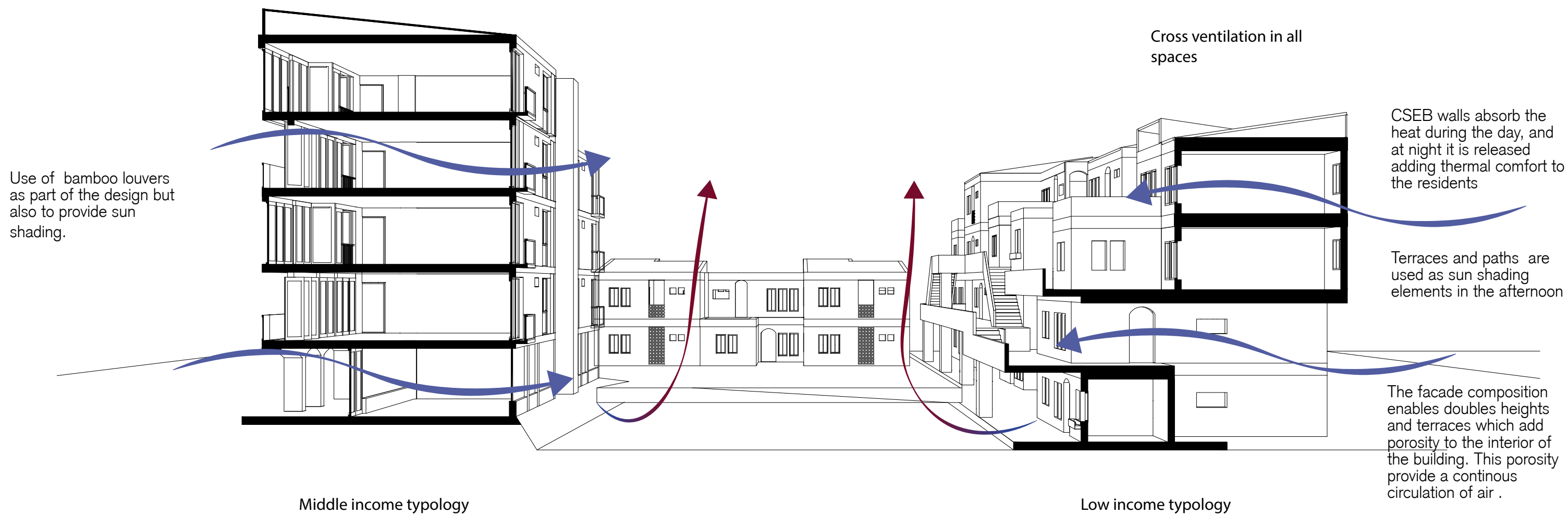
Charles Correa (p 17, PREVI, The Experimental Housing Project)



The courtyard relations

6.4 Climate



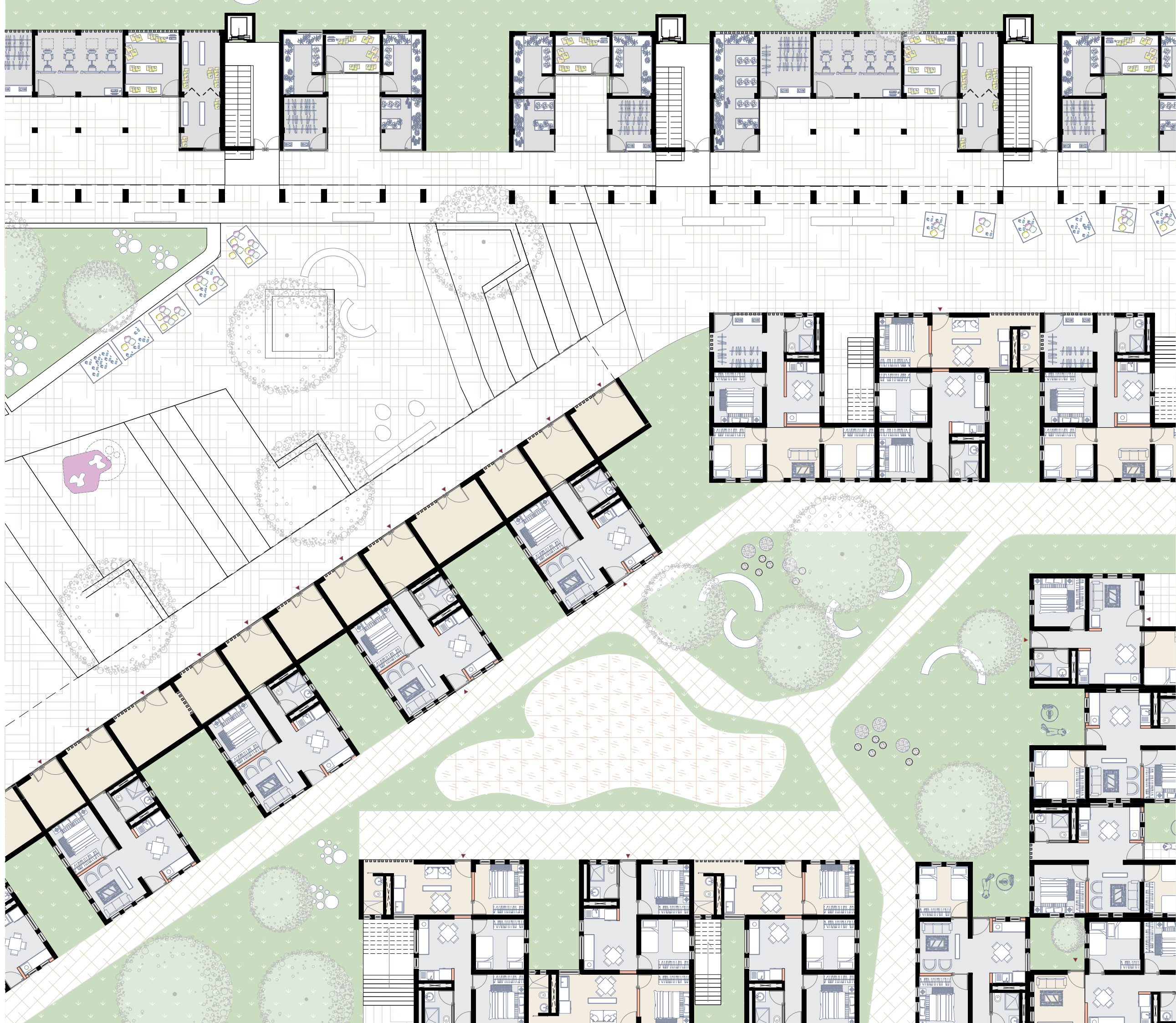


Esc 1_150

From the courtyard to the commons
and its ground floor relations

Esc 1_250

110



From the courtyard to the commons
and its ground floor relations



The street life

Esc 1_250

114



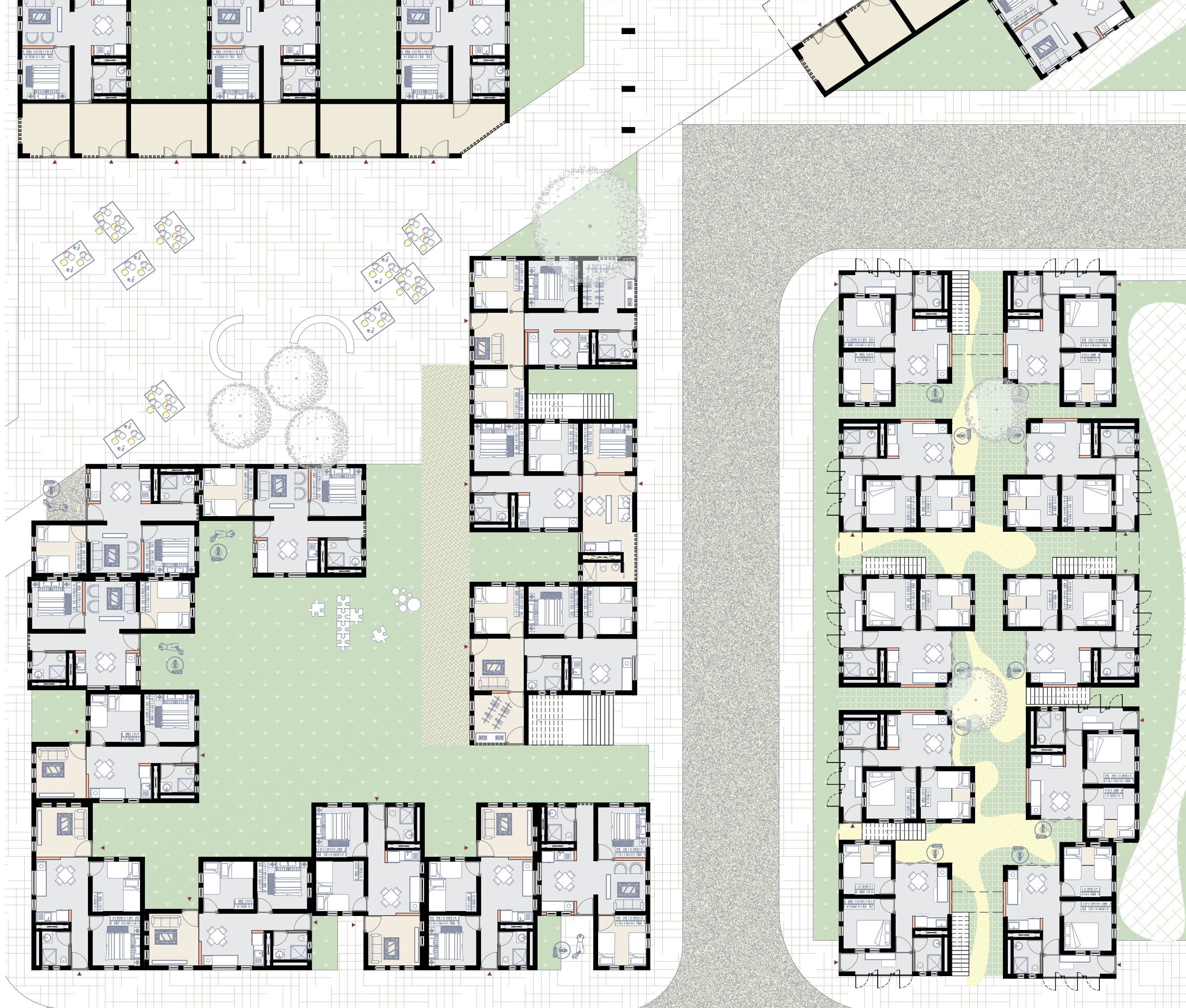
115



The street life

Towards a more inclusive scenario

Esc 1_250

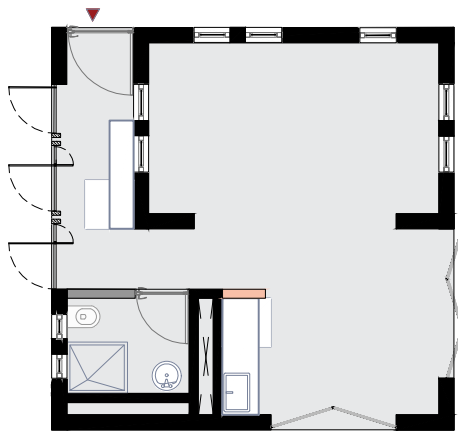




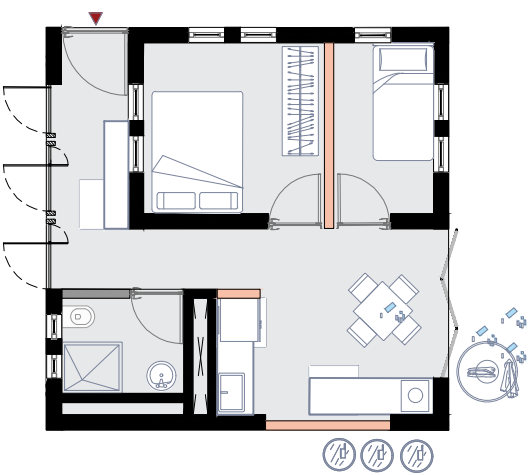
Towards a more inclusive scenario

6.5 The productive units

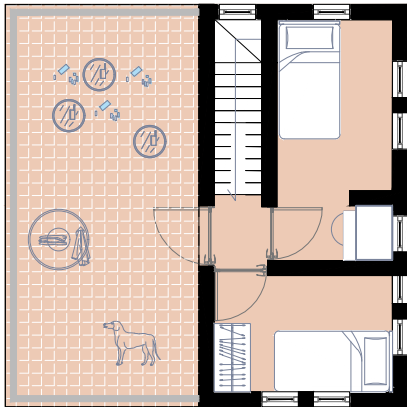
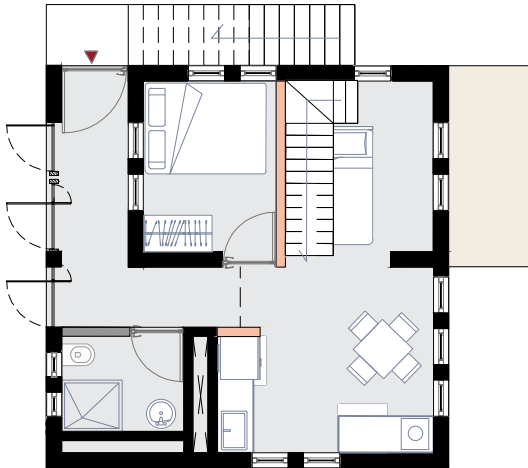
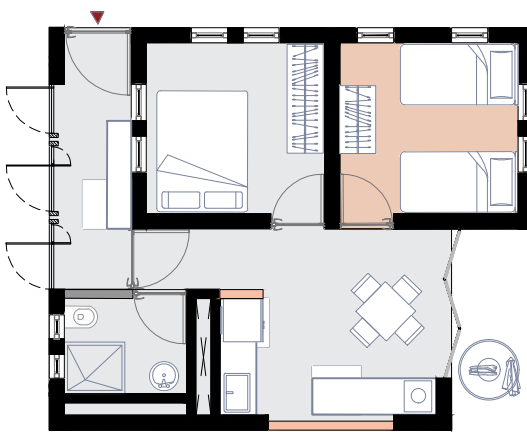
Core house
(Only has the basic supplies)



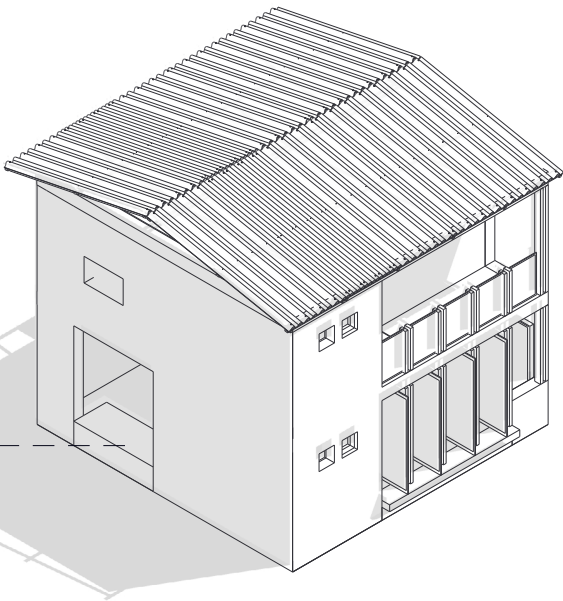
Ground floor core house unit
44 smq



Ground house unit expansion
(on the back)
50 smq

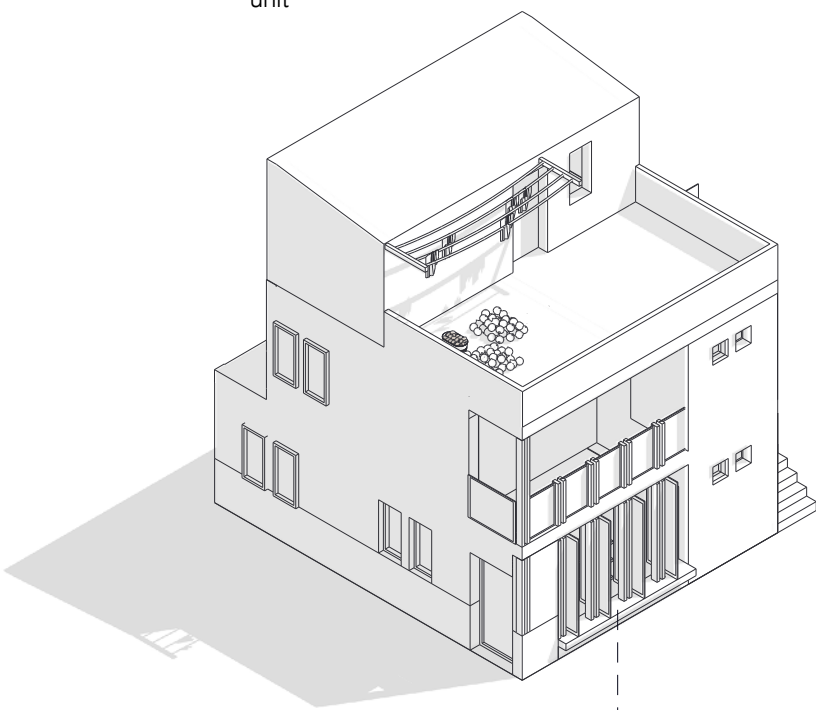


2 units per household
Original stage



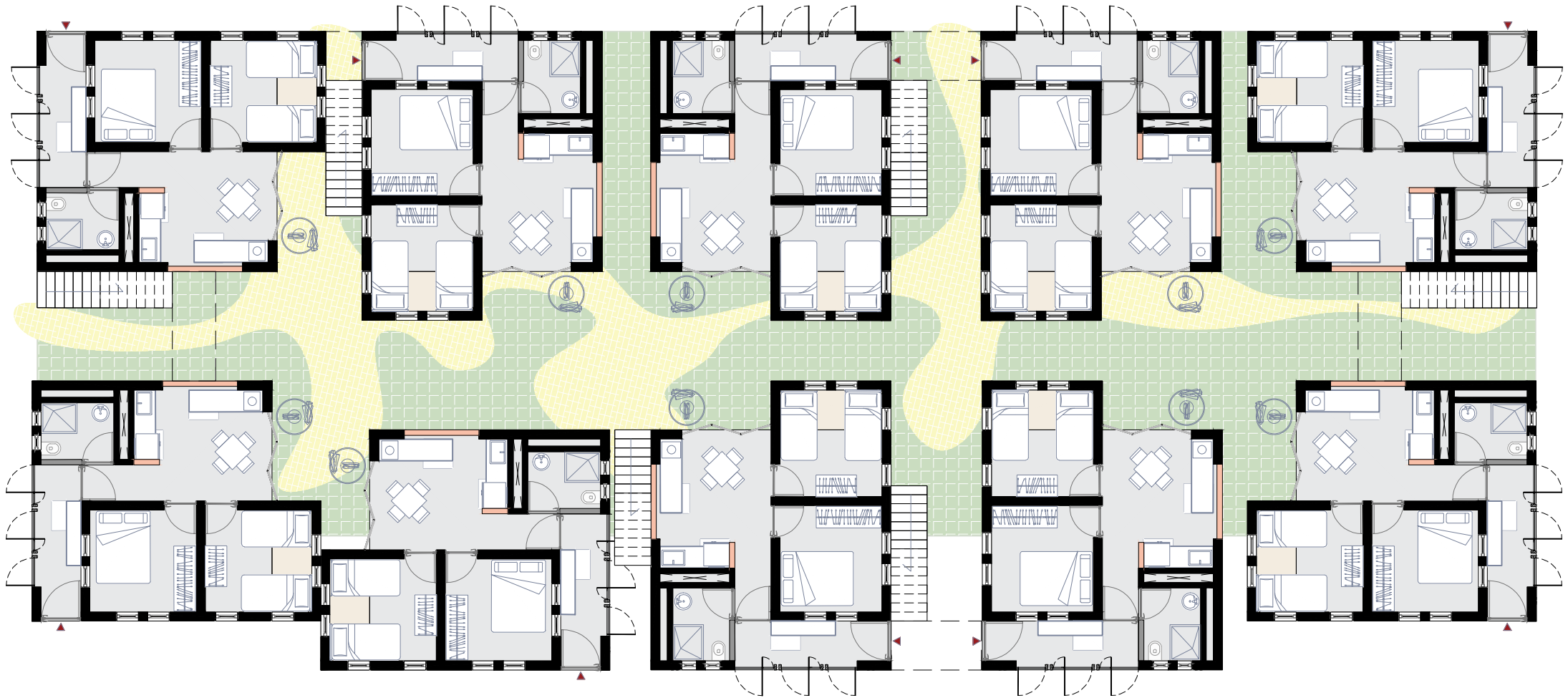
Open kitchen faces their
courtyard

Expansions on the 1st floor
unit



Open facade for informal
sales

The compound

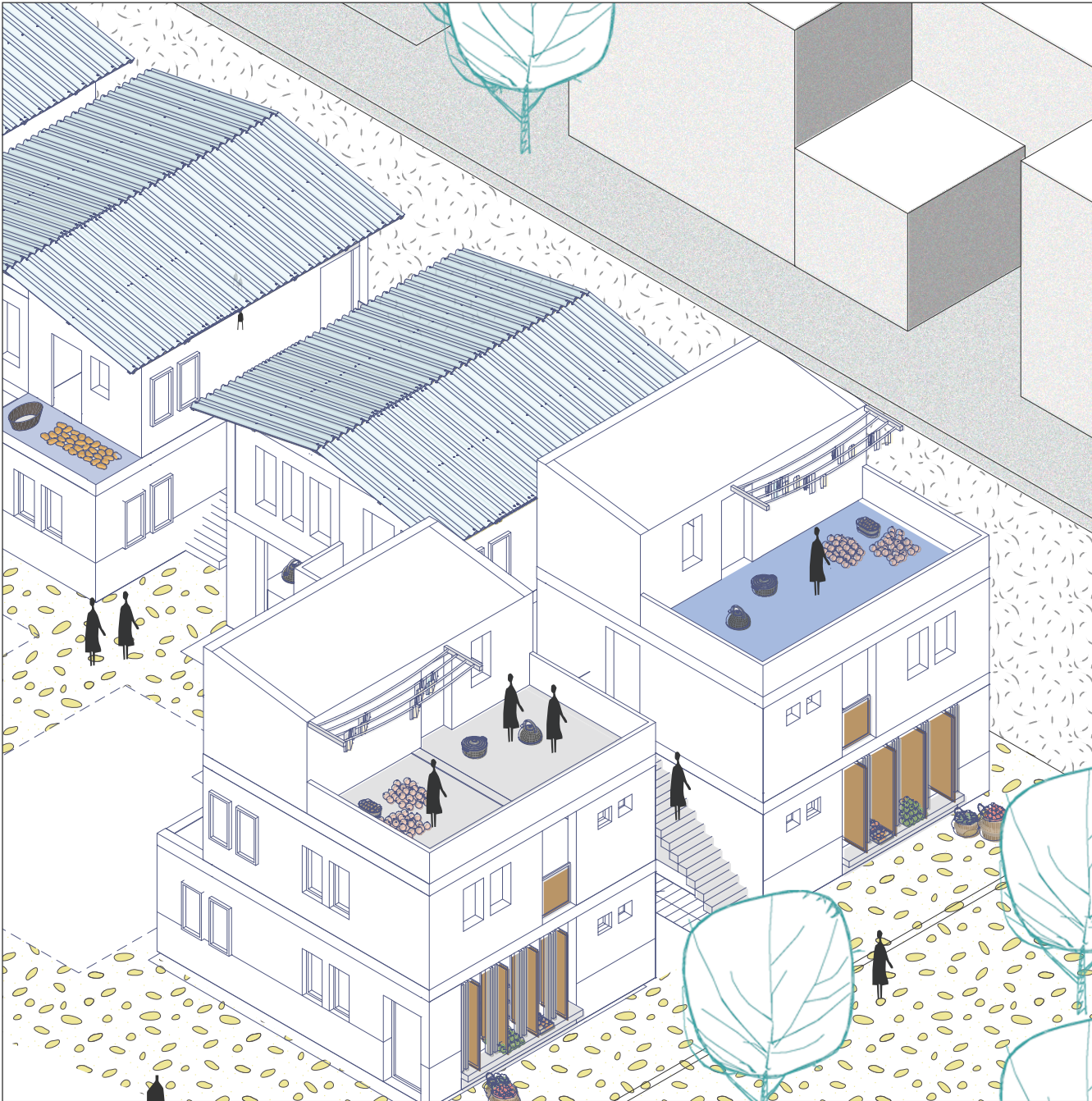




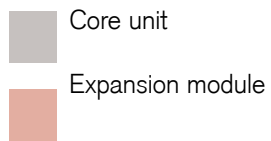
The kitchen and the courtyard



Re interpretation of the veranda for
a new use



6.5 The productive units

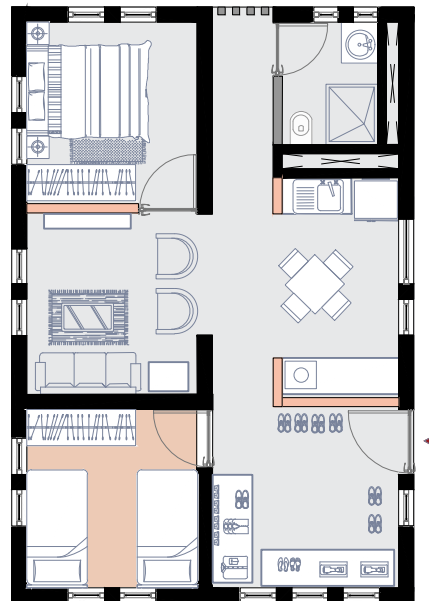


1. Ground floor



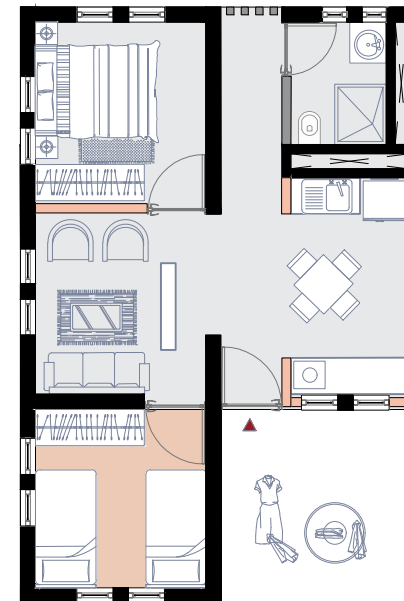
4 bedroom apartment
67.5 sqm without extensions
75 sqm with extension

First floor



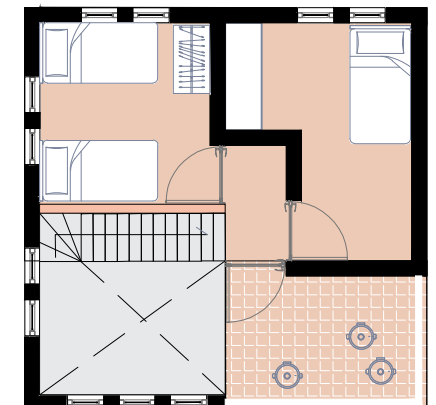
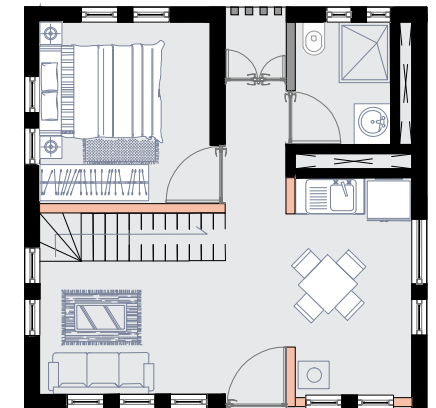
3 bedroom apartment
55 sqm without extensions
67.5 sqm with extension

Second floor



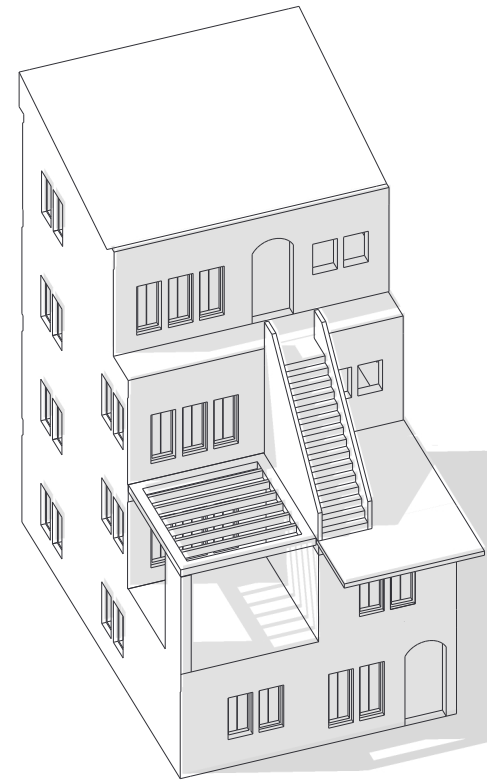
3 bedroom apartment
44 sqm without extensions
55 sqm with extension

Third floor

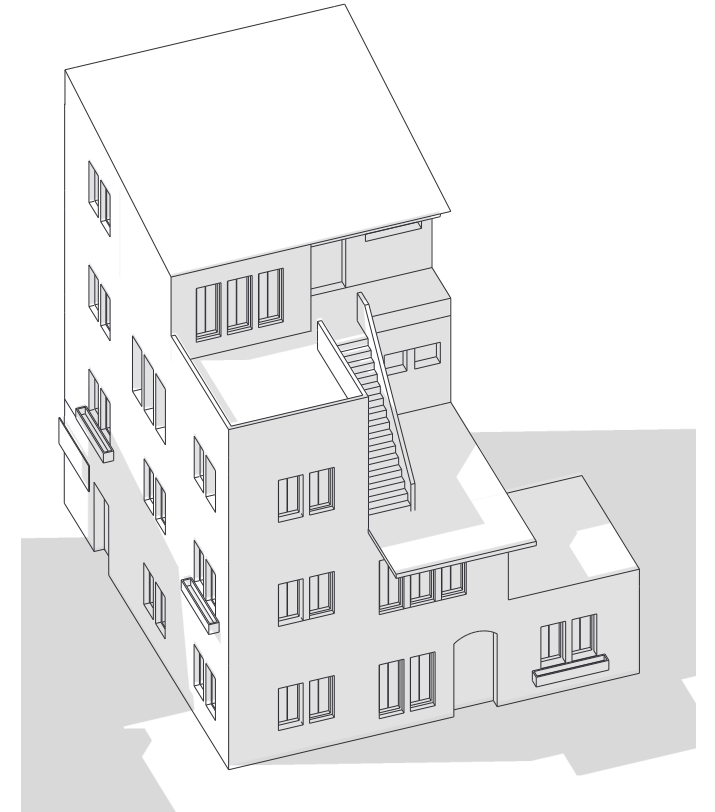


4 bedroom apartment
44 sqm without extensions
80 sqm with extension

Original state



Evolution of the compound

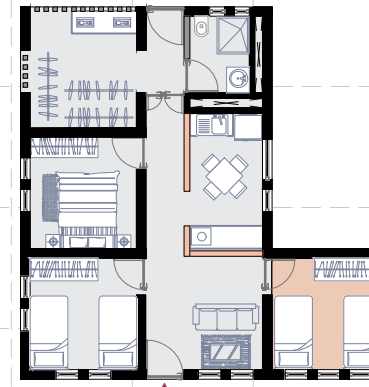


Corner units

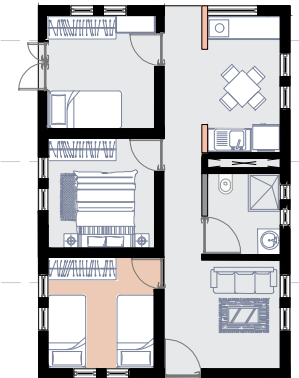
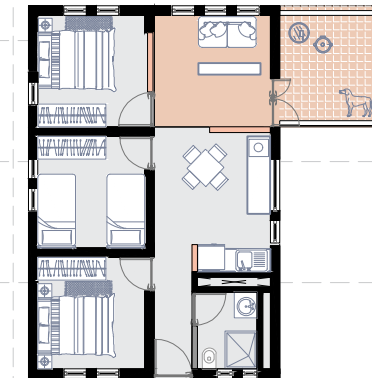
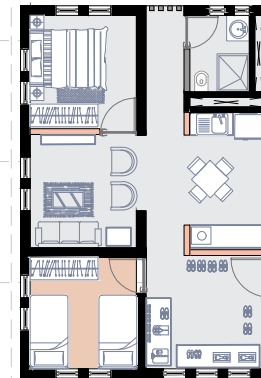
Units between party walls

Units next to staircase

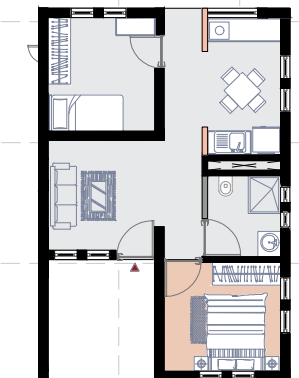
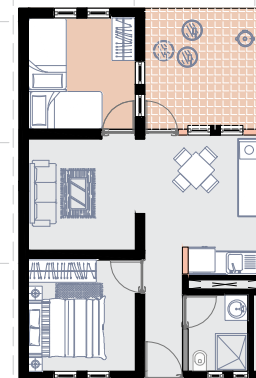
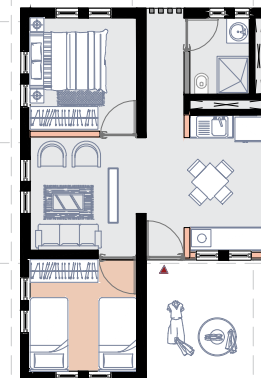
Ground floor



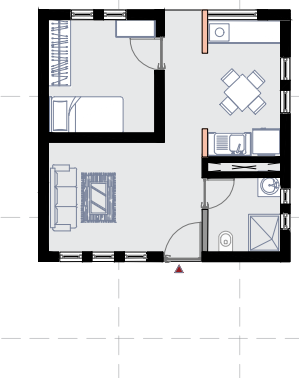
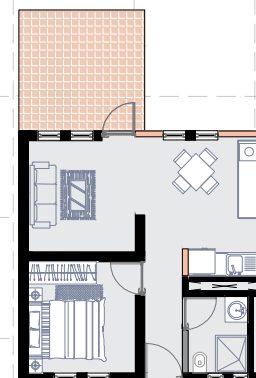
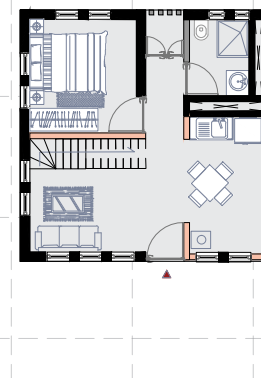
First floor



Second floor



Third floor



Core unit
Expansion module

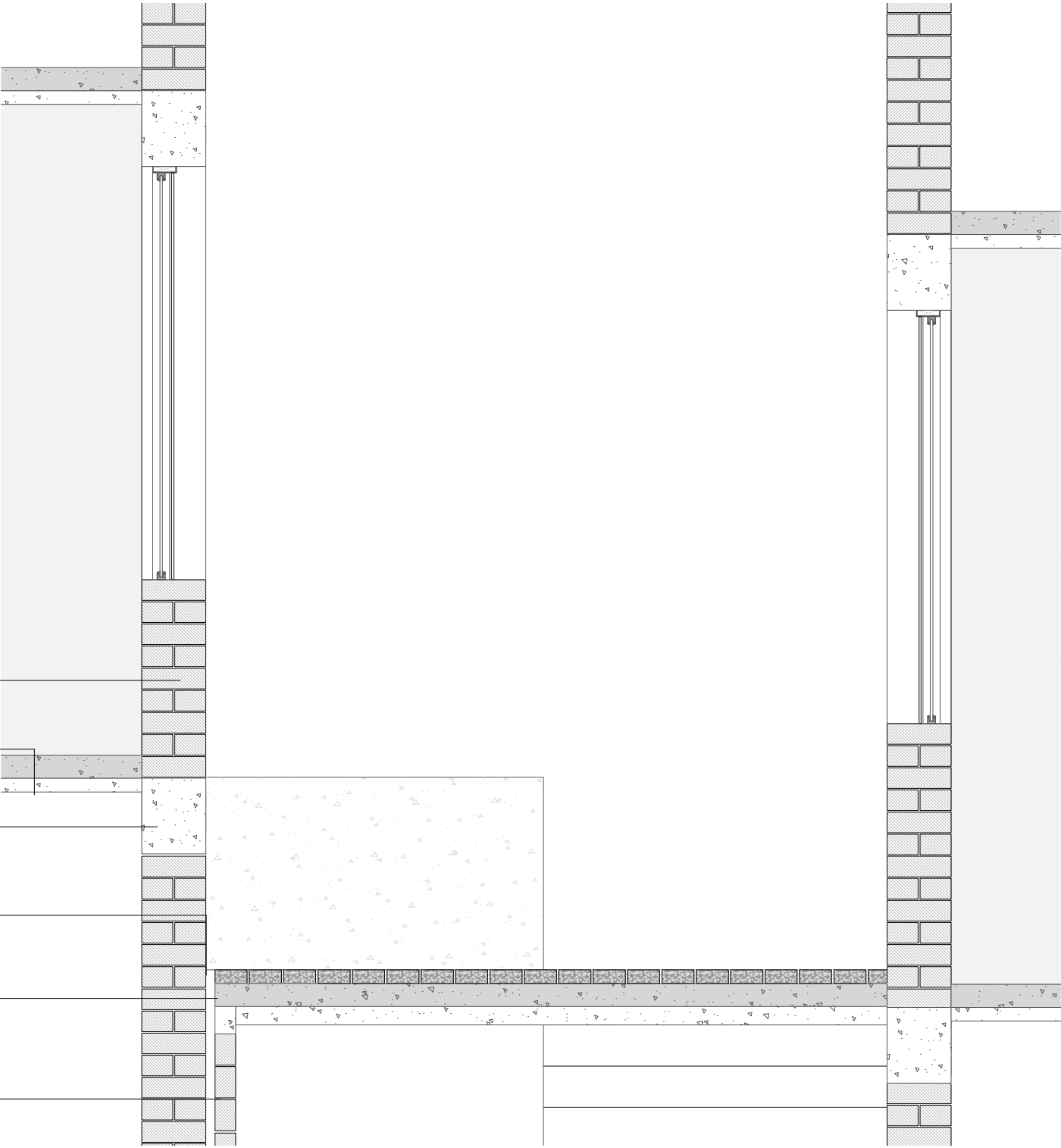
Esc 1_200

The cluster



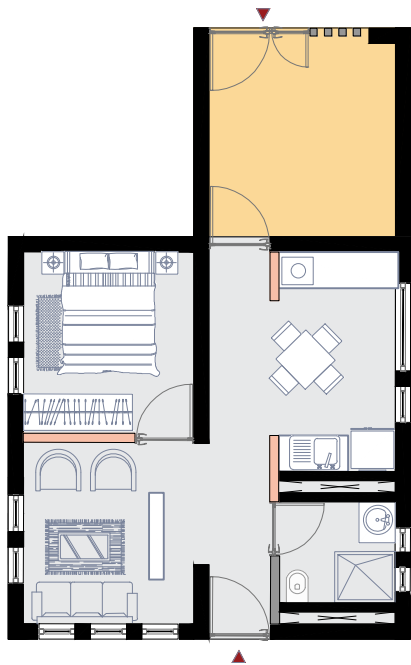
Topography difference

- Inner CSEB load bearing wall in flemish bond
- Concrete ribbed slab
- Concrete ring beam
- Dilatation 4 cm
- Screed 8cm
- Simple outer CSEB wall to support the concrete slab

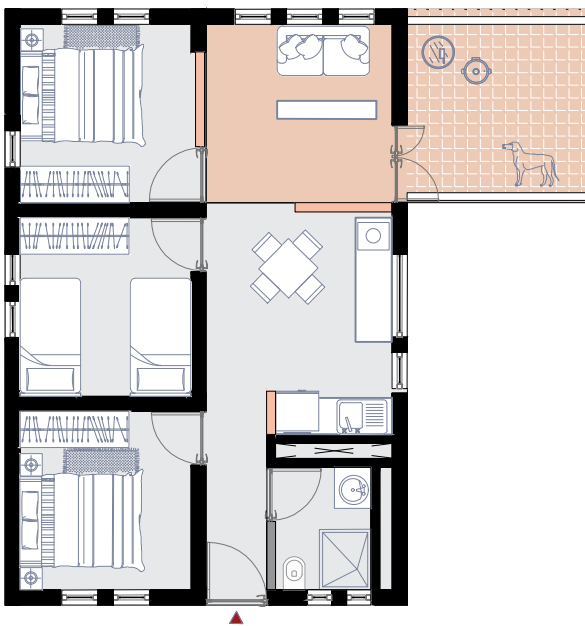


6.6 Commercial units

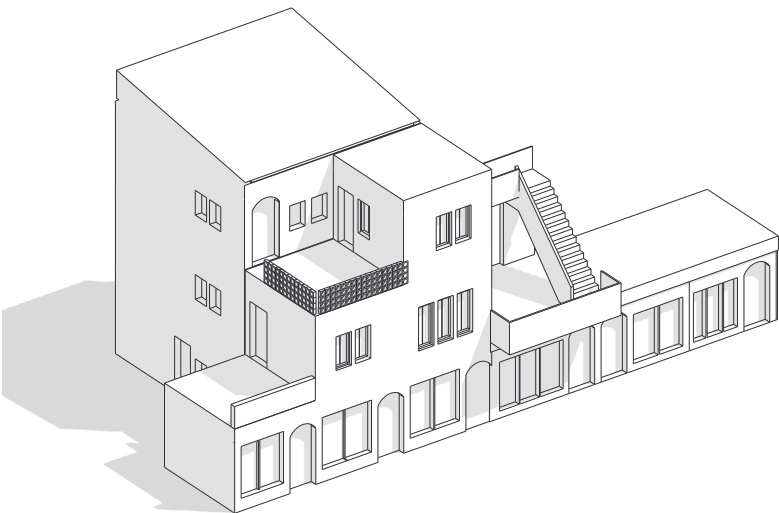
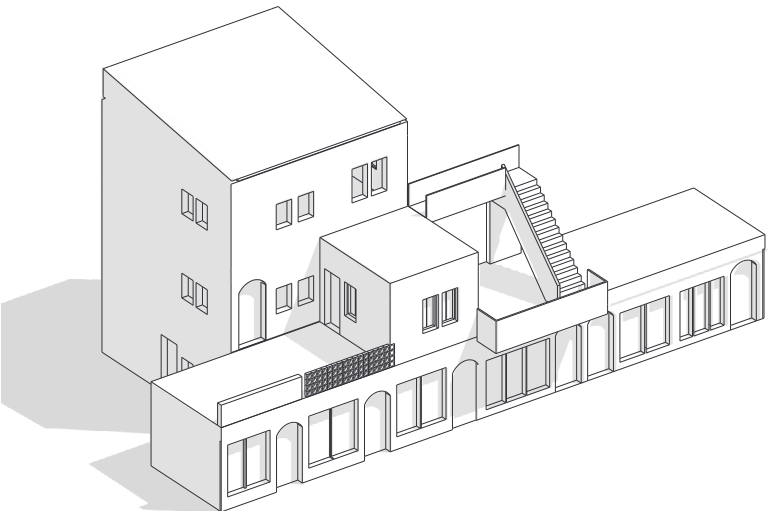
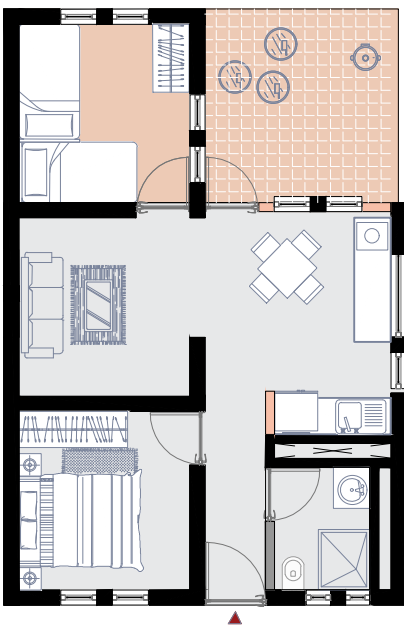
1. Ground floor



First floor



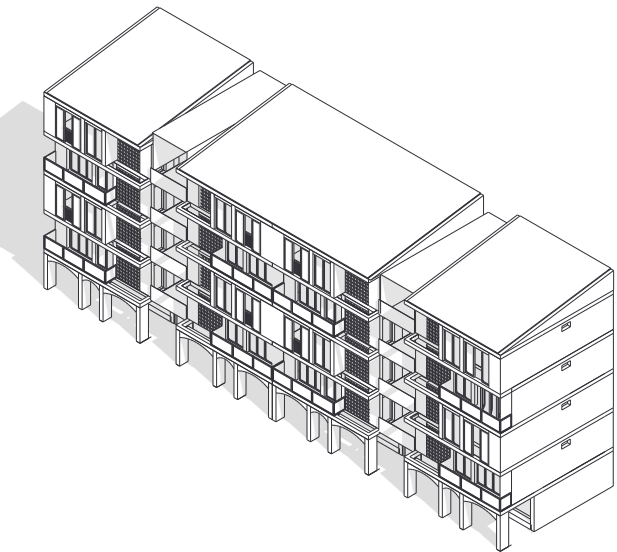
Second floor



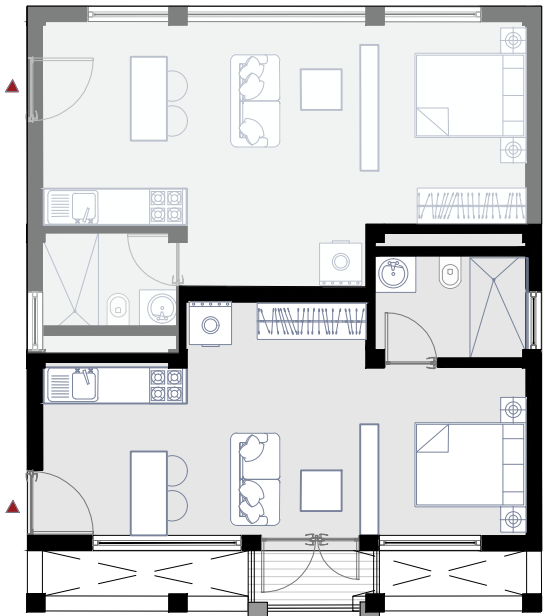
Core unit
Expansion module

Esc 1_125

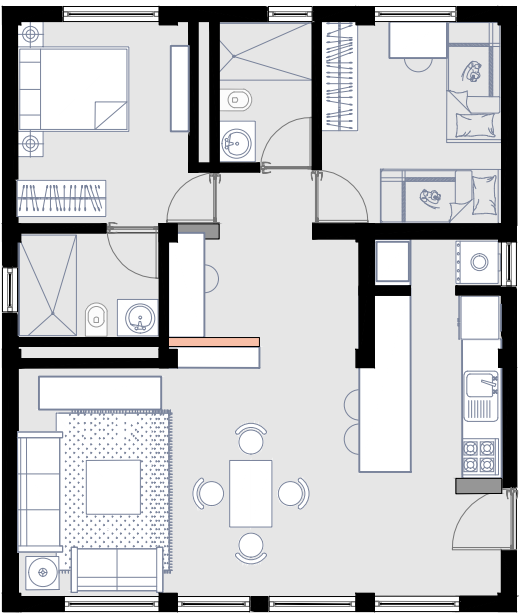
6.7 Portico Typology



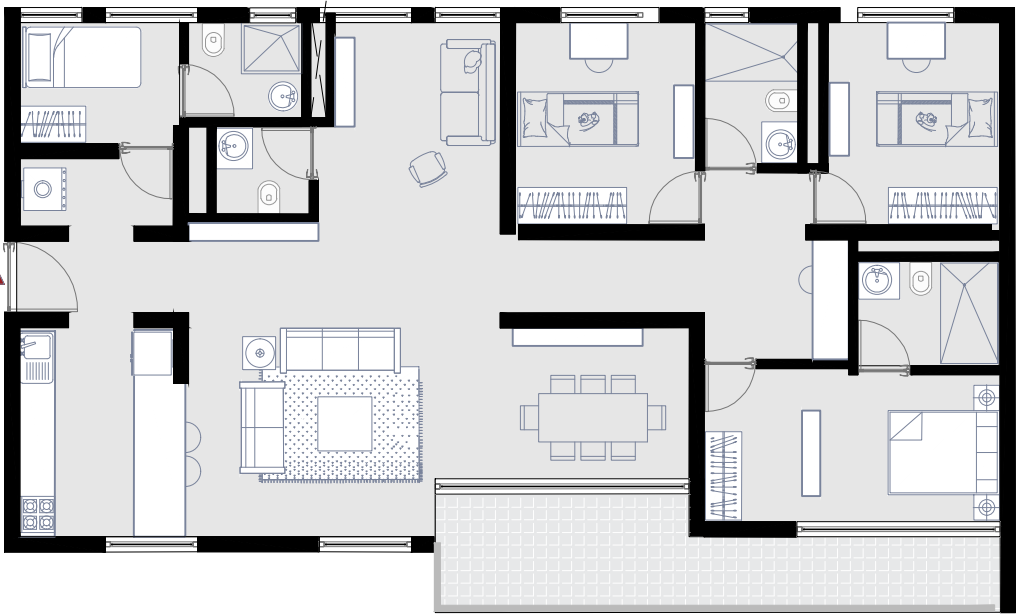
Option 1_ Studio
40 smq



Option 2_ 2 bedroom apartment
80 sqm

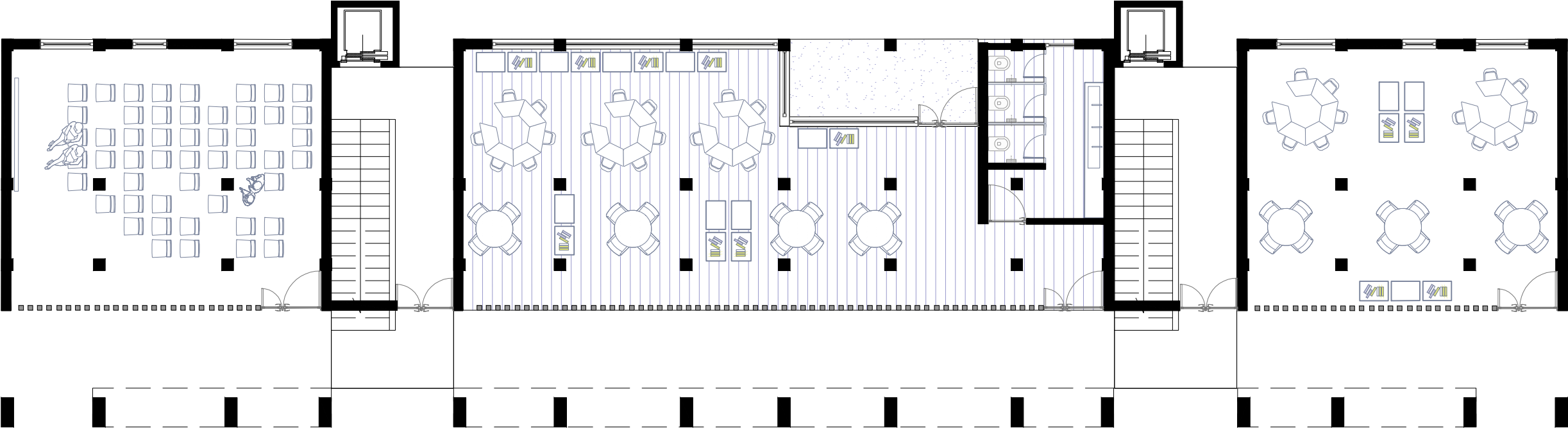


Option 3_ 4 bedroom apartment
160 sqm

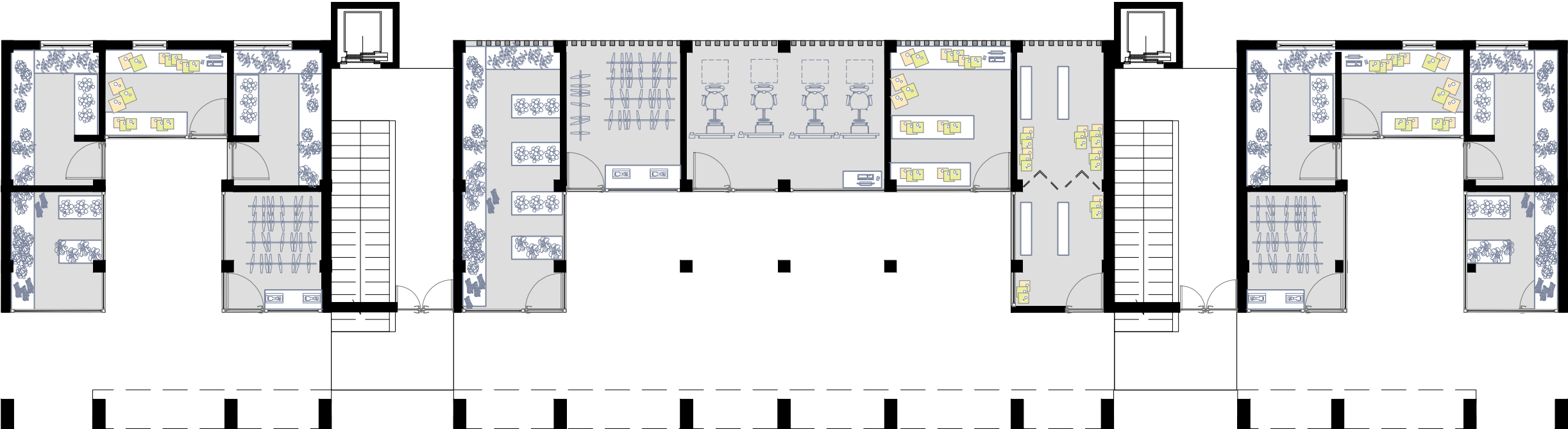


Esc 1_125

Ground floor educational facility

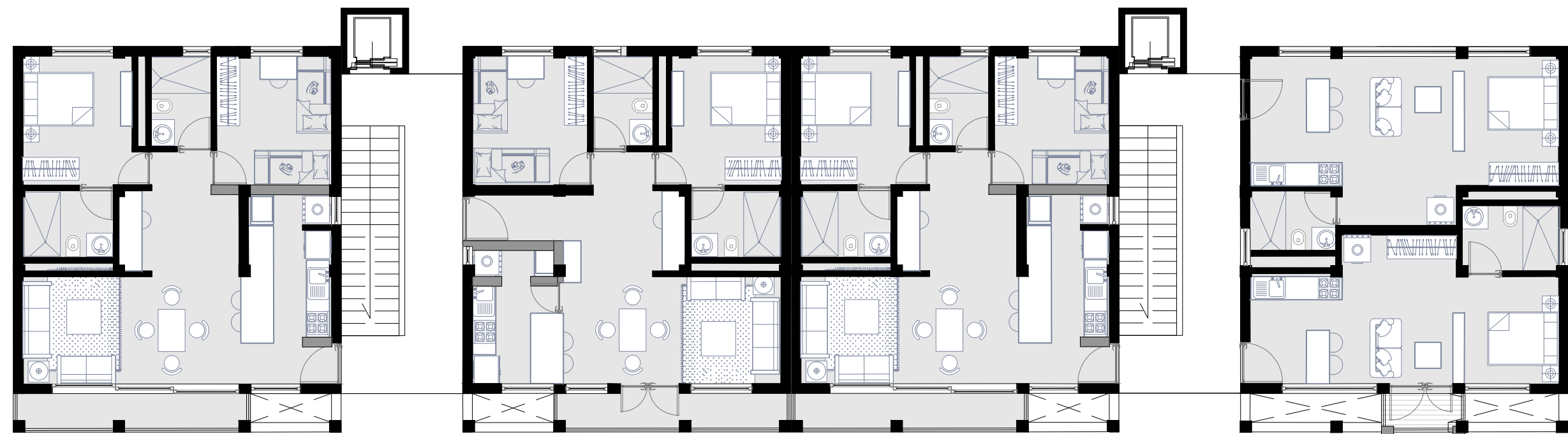


Ground floor option services use

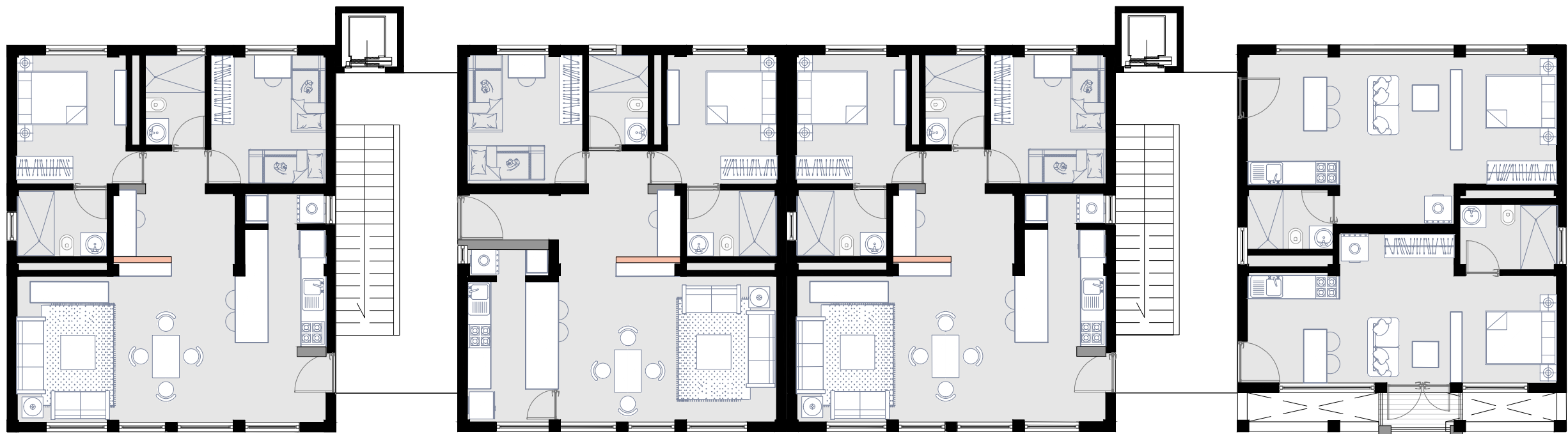


Esc 1_125

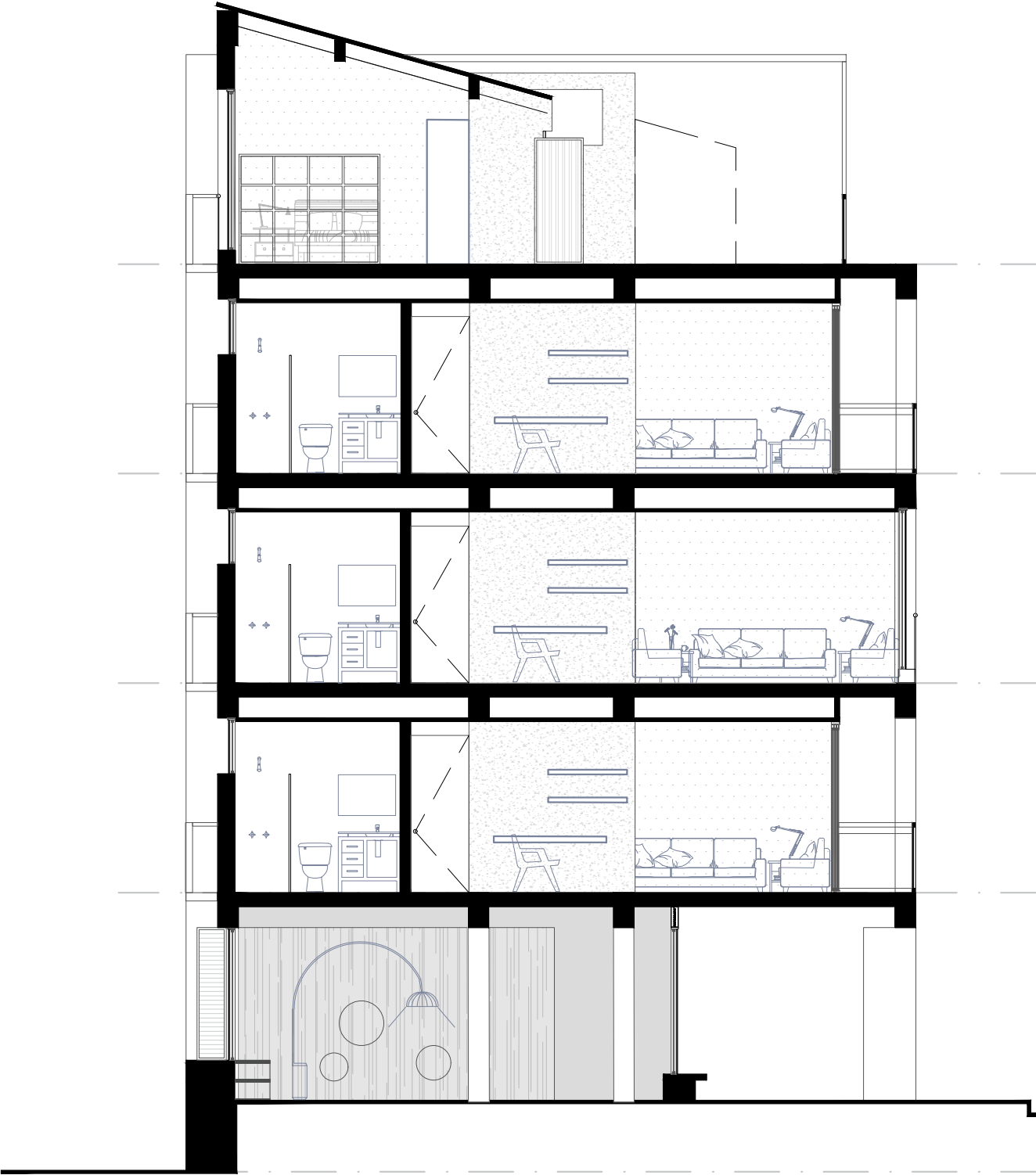
Type floor with balcony



Type floor without balcony

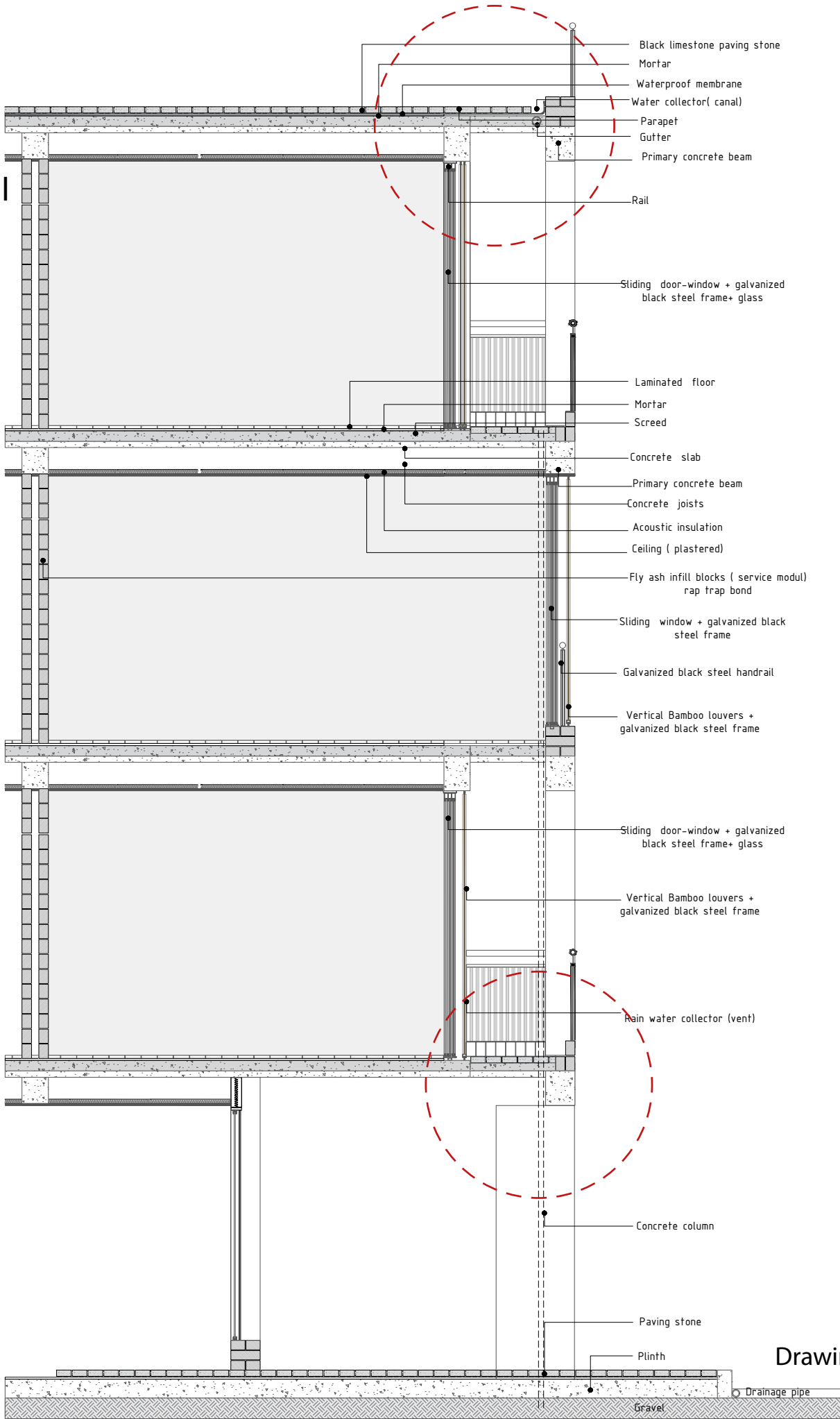


Esc 1_125

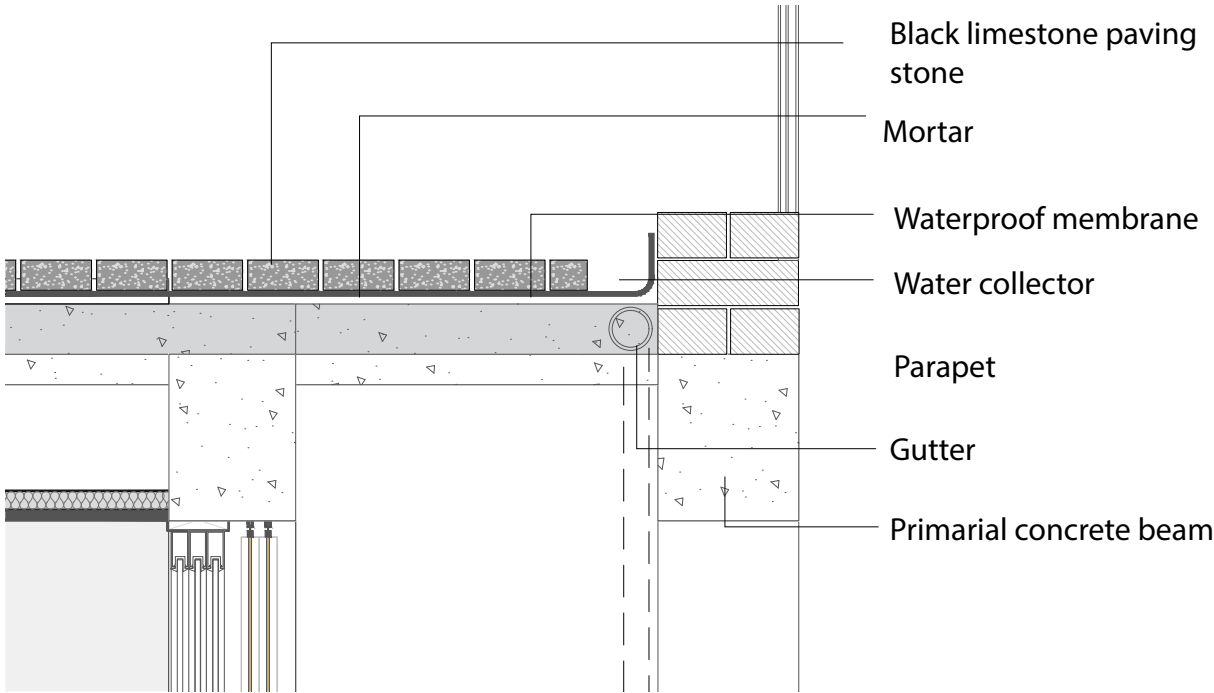


Esc 1_125

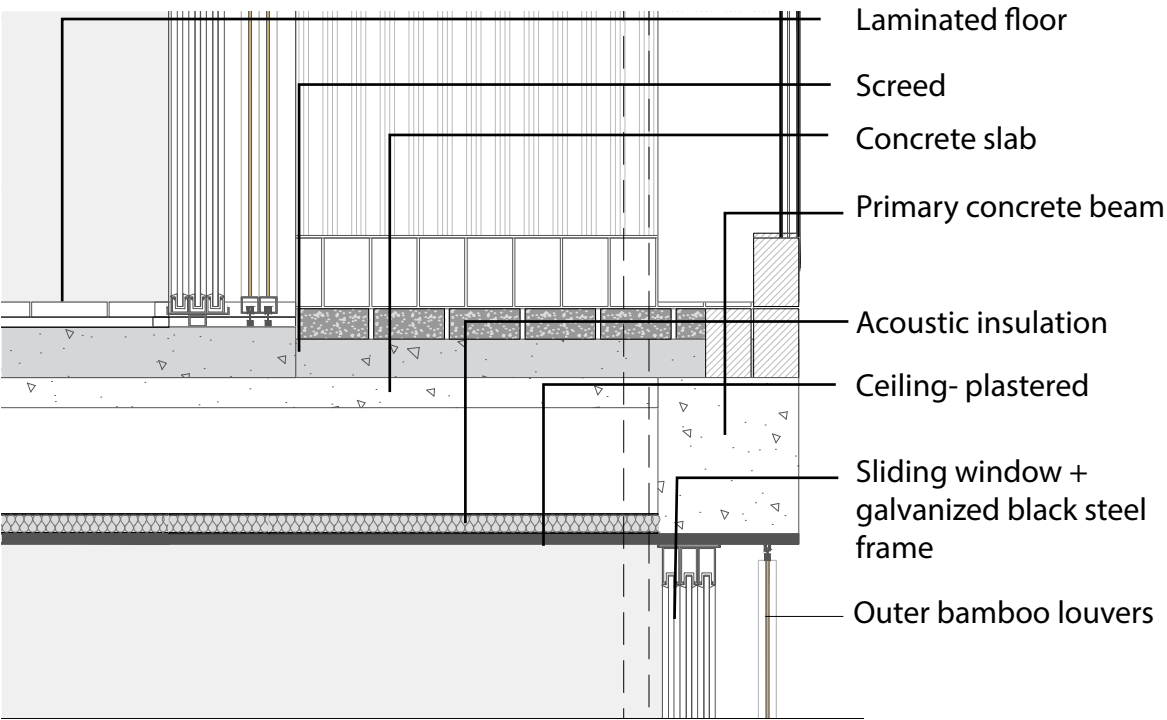
Portico | Detail
Facade detail



Drawing 1_50



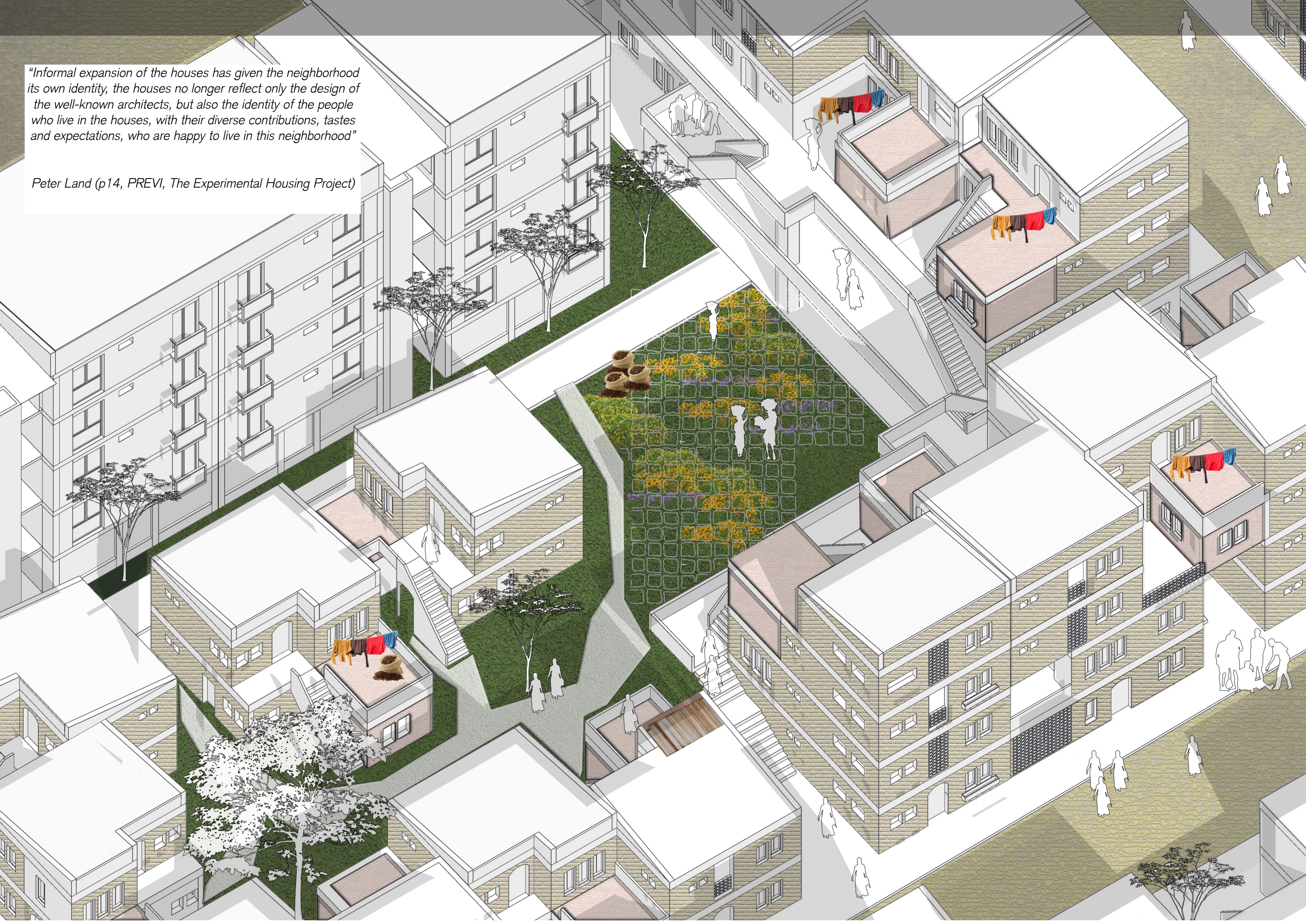
Drawing 1_15





"Informal expansion of the houses has given the neighborhood its own identity, the houses no longer reflect only the design of the well-known architects, but also the identity of the people who live in the houses, with their diverse contributions, tastes and expectations, who are happy to live in this neighborhood"

Peter Land (p14, PREVI, The Experimental Housing Project)



7.

Reflection

1. Research and Design

In order to understand the complexity of the social context of an emergent country such as Ethiopia, first was to interpret the cultural, historical and economic background of the country. For that reason, research was carried out in two phases: a theoretical research which involved different literature about the country but also about the existing living conditions of the people from the Global south; and a practical one which involved a field trip to the capital, Addis Ababa for two weeks. Both research were necessary to create a critical perspective identifying the main problems of the locals' living conditions, and then generate a statement and a research question based on our own interest, so then they could be developed and materialized in a design proposal.

The theoretical research was conducted during the first phase in order to get familiar with theories, concepts and the socio-economic challenges commonly present in developing countries. This first phase helped us to understand the causes of why people live in poverty and how their living conditions directly affect the economy, environment and the culture of those countries. In fact, questioning myself and having my home country (Colombia) as a reference made me to understand that although both countries experience similar conditions of poverty, the causes differ as well as the behavior of the population around this situation. In turn, the practical research that was carried out after presenting the theoretical research was highly useful in terms that I was able to re interpret my intended perspective that had based on the previous research. That shift from expectation to reality enriched tremendously my conception of the country and led me to a constant questioning about its culture and its relationship with traditional rural practices.

Therefore, I draw especial attention to topics related to ruralization, the mix of different social backgrounds and the informal economic activities that somehow have reshaped the image of the city combining the country life with the modern life of the cities. Taking into consideration these three points I started to include them in my project proposal not only in the design but also in the social aspect I want to emphasize. For instance, is precise to understand that Ethiopia is an emergent country in terms that only 20% of the population lives in urban areas though is the second most populous country of Africa, which means that the way of living of the people is intrinsically attached to the rural. Through the practical research I found out that traditional practices rooted in the countryside are part of the daily activities of Addis Ababa fostering a juxtaposition and fragmentation of land uses emphasizing the chaotic urban growth. This may be seen in the design proposal on how I translated their social life into the courtyards and how community spaces become the heart of the daily activities. Second, the mix of income groups in the same living environment helped me to propose a similar model where different social backgrounds may coexist with each other. And thirdly, how

these informal economies that are the result of slow changes in productive economies can be transformed into the formalization of jobs where community participation within the construction sector and other emerging service sectors are essential for the development of the country.

2. Graduation Project- Master and Building Science

The right to adequate housing is a challenge in developing countries due to the lack of urban policies able to control the rapid expansion of the urban areas, creating rings of poverty while accentuating overcrowding and the conditions of unhealthiness. Addis Ababa is not the exception. Around 80% of its population lives in slum conditions and 70% of them lack of basic services or share them with two or more families. Despite the efforts of the national government to invest in upgrading the slums all over the city, and the creation of the program “The grand Housing Program” in 2004 that searched for affordable housing for the poor while reducing the shortage of housing through a lottery system have not be enough to counteract poverty. On the contrary, the creation of new massive blocks and with it, the emergence of a new model of city have exacerbated the gap between those who can afford the new units and those who have to quit their dream of having an own roof for not being able to meet the down payment.

Moreover, this approach is what 'Housing at the center”, an initiative of the UN-Habitat tries to avoid. For “Housing at the center” the idea is to make housing a priority for governments instead of just solving the shortage of housing without taking into consideration other principles of wellness.

In that sense, The Global Housing Studio as the name suggests focuses on the basic element of architecture that is housing, but oriented to the poor. However, the study aims to go beyond what is “housing”, and encourages students to explore different possibilities and feasible solutions in a broader concept that not only suits people’s basic needs (sleeping, showering and feeding), but also understanding it as the element that provides flexibility of well-being and flexibility according to the needs of residents; While providing urban services and facilities within immediate environments in order to improve the quality of life of these vulnerable communities. In this sense, I believe in the social role of architecture as I have experienced it in my home country, of how creating sense of community may alleviate internal conflicts while the quality of life of residents through the implementation of public infrastructure and collective spaces which are used according to the needs of these communities.

In turn, the perception of housing can be understood from different perspectives and points of view, especially from such a heterogeneous study group, where different nationalities converge around the same theme, but each has its own version and approach of what a home means. This constant discussion and shared knowledge among students, guests, other professionals and tutors enrich our perceptions and help us acquire tools that allow us to more consciously develop our projects. In this sense, architecture becomes a humanist discipline that must be complemented by other collaborative disciplines in order to provide safer environments in which the forms of life, daily interactions and cultures of communities can prevail, while being made visible to the rest of society.

3. Method and approach- Scientific relevance

In the Global Housing Studio, the study of the relations between citizens and cities is fundamental to grasp how the rapid growth of the urban areas in the global south have redefined not only the skylines of cities but also the effects it has on the social dynamics and on the cultural contexts. As this constant interrelationship among people occurs at different scales is important to analyze the social and physical patterns in a multiscale way . Starting at the living space’s scale considered the most basic element of living, until the territorial scale which remains how countries host diverse cultures and social backgrounds in one whole scenario.

Whatever the scale is, what is meaningful is the study of the human action and its behavior (praxeology) that serves as a guideline to propose resilient and mindful living environments. Therefore, praxeology becomes the framework of the research, whereas literature and architectural ethnography are the research methods used to collect and analyze data and to understand a non-familiar context respectively.

In that sense, a theoretical and a practical research have been done. For instance, the theoretical research was conducted during the first phase of the Graduation Master project, and was conceived to understand the cultural and social context of Ethiopia, as well as get familiar with theories, concepts and foreign contexts. During this phase group research was carried out in groups of four choosing a main topic to be developed. The main topics were: data and facts (Hard data), cultural-political background (Soft data), the evolution of the capital throughout the time embossed on maps (Spatial mapping), and finally, the evolution of their living environment having the dwelling unit as the primary element (Dwelling). This phase was fundamental to take a critical perspective of the current situation, that later on was modified by the living experience. Moreover, other general literature such as the book: Building and Dwelling: Ethics for the City , by Sennet, was used as an intellectual framework to interpret how cities work around the world and the dilemmas they tackle everyday as a consequence of the rapid urbanization.

The second phase of the research was practical. The fieldtrip to Addis Ababa to visit the work site and in general to get an overview of what we previously learned through the recommended literature, gave us the opportunity to elucidate and reinforce our own perspective of the Ethiopian society. Without doubts, this phase was totally enriching because the fieldtrip works as the complement of the theoretical framework that literature and mapping are not able to transmit. The fieldwork itself is the main tool to gain knowledge and understanding of the culture we are studying, whereas the techniques used to collect data to subsequently analyze it were observation, photography and sketches, and informal interviews in the streets of the neighborhood and in some houses. Though the limitation of time and language, interviews with the locals was the activity that I enjoyed the most due to the openness and kindness of the cultures from the Global South.

Finally, all these activities served to draw our own conclusions based on what we observed and experienced, while the different strategies used to collect data have served to take a rational position of the Ethiopian context.

However, this research method makes me reflect on whether it is a double-edged sword due to the limitation of timespan, language and knowledge about the complexity of the social context which is highly relevant for making design decisions. The lack of available information in english especially that related to policymaking and governance, and the lack of Google Street view as a tool to observe patterns of inhabitation at any time also hinders the reality-based design process and becomes ideal. This is perhaps what the ethnographic research may become: a romantization of what we had observed proposing living environments that may not be able to fit into those

realities. This is why reflect on whether is better to choose a familiar context to carry out the investigation where each participant may be more objective by proposing something that knows profoundly in all aspects.

The other aspect I would improve next time is the way we conducted interviews. Having informal conversations are more enriching rather than having interviews with specific questions. This may be also applied to the participatory design which I found out was not very useful in the sense we were asking “ how do you imagine your dream house?” in a context where the living conditions barely provide the basic needs of sleeping and food and where the majority of them have not had the opportunity to go beyond the limits of its city.

4. Ethical dilemmas

Without doubts this point may be analyzed from different perspectives. From the research methodologies chosen until the considerations for technical aspects such as the different mechanisms of housing tenure.

In that sense, I would like to start with the dilemmas we all could had doing the practical research. As other methodologies, ethnography, the preferred method for anthropologists, has its challenges in the way that firstly, takes a long time to know in deep a foreign culture, exacerbated also by the language limitations; and second, in the way on how the researcher is going to take a position in the process . Even though the academic exercise is highly valuable there are always aspects that we will overlook though they are important to understand the context.

The second factor relays on the understanding that Addis Ababa, and in general Ethiopia are part of a transitional period shifting their rural traditions to urban ones. In that sense, the dilemma is how to propose a new scheme in a non-static environment which in 20 years the living conditions may be totally different as today. For this reason, I believe that people also must learn on how to adapt and live in other circumstances, sometimes totally foreign to them. Addis Ababa will no remain rural forever, therefore its residents also must to be able to adapt to the new rhythm of the city, as communities are in constant evolution (or involution depends on how it is seen). However, it is important that urban policies support and encourage the migrants and those who live in vulnerable conditions to learn and to be literate creating new jobs opportunities for them. In that sense, education and training may become the new base of an inclusive society and a key element for the progress of the country. For that reason, my research project also involves community participation during the whole process of construction but also the creation of spaces where youngsters and women are able to learn new labors.

Finally, the last difference stands out on the perspectives from different cultures on basic concepts for example on “ what housing means” for a person who grows up in a developed country and for someone who is born in a developing country. Probably the person who was born in a developing country housing means its entire life. Having a roof may be the only stable and safe in his life that no one else can take it away, because in these environments even dreams are taken away. This is why I support the ownership as the mechanism for housing solution and an instrument for reducing poverty.

5. Social, professional and scientific framework

Cities are in constant transformation, especially those that are experiencing a transition from the rural to the urban world. As those social and urban changes are usually framed by weak urban policies that do not take early actions to help curb uncontrolled urban growth, let alone help alleviate the bonds against extreme poverty that arise. Consequences are reflected in the inhumane conditions in which thousands of people live in overcrowded spaces, and lack public services and community facilities which could highly improve their quality of life.

For that reason, I find in my research project an opportunity to explore feasible and resilient solutions for those communities that live in vulnerable conditions. Even though, the work site I chose for my project is a low-income neighborhood, its roots constitute a formal neighborhood. However, as many other parts of the capital, Addis Ababa, urban and infrastructure conditions could be improved, and thereby generate better spaces for social inclusion. In that sense, my research project is about inclusiveness in a world whose trend is being more and more unequal, and where indifference from those who have more opportunities in life tend to reshape the meaning of cities.

Based on the idea that housing is a fundamental right and that homeownership is one of the pillars to reduce poverty worldwide, inclusive scenarios must be created in order to provide higher standards of life, while mitigating the proliferation of squatters, and reducing the gap between rich and poor. In that sense, and due to the cultural context of Addis, mixing social groups in the same living environment is a logical solution. Pretending to dignify the lives of residents by granting the same accessibility rights to decent homes and healthy environments, social inclusion is reinforced. Therefore, the use of different strategies of design such as reconnecting the fragmented layers with the surrounded neighborhoods, the use of transitory spaces such as the urban gardening in between buildings as division between areas, and the use of public spaces as elements to weave community highlighting the sense of appropriation among residents are principles that may be replicated worldwide.

8.

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