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Bringing Down
The House

Maramel; An Alternative for The Mass Housing Formula

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Abstract

The focus of the thesis is to critically investigate social housing and its pre-set functional formula, manifested in the apartment building block. The intention is to challenge this formula as the only way of urban living and to provide an alternative.

The thesis takes as its site the Maramel. It is a suburban site which will develop into social housing provided by Elyssar the public planning agency that plans the rehabilitation of the southwestern suburbs of Beirut. It will be my site of intervention. The study will first analyze the future residential development planned by the agency that will house part of the residents of the Ouzai informal settlement on the Maramel site.

This is where the thesis becomes critical of the architectural scheme provided by the planning agency and the attitude of the latter towards the existing urban fabric. The purpose is to propose a housing scheme that receives the displaced people causing no damage to their social structure, yet celebrates their familial and communal ties. Thus bringing back the human and social layer lost in the housing formula...

The thesis stays within the frame of the planning agency at the large scale, yet intervenes in few changes at the level of the master plan, the Maramel site and the architectural scheme.

In order to inform the architectural design strategy, a zoomed-in study of the Saint-Simon (part of the informal Settlement) analyses spatial production in the settlement and ties it to their social communal practices and their mode of living.

In Parallel to the analysis of social spatial production in the settlement, the thesis looks at social housing case studies in various contexts, architects reactions and alternative housing proposals, concentrating on design techniques that were used when transferring communal spaces from a horizontal settlement to a vertical urban structure.

Work will start at the level of the relationship between the Maramel site and the city, moves to the level of the site with its immediate surroundings; and reaches to the level of investigating the architectural block.

Bringing back the social layer to mass housing is the main aim of the intervention. All spatial investigations will have the resident's everyday and occasion social and communal activities as the main driving force.



1. Introduction

The Issue of Social Housing throughout history is a rich topic of investigation. Subject to various economic, political, demographic and social factors, housing in general has become a preset formula manifested in the apartment building scheme. In Lebanon, "The functional formula" has shaped the major portion of the urban scapes, and has become the image of the formal, legal, right way of urban living. The reasons for the rigidification of the scheme are diverse, complex and have been layered over a long stretch of time dating from the urban Centralization and the consequent urban migration from villages. The escalating number of urban dwellers is an important factor in the resort to the ready made, copy-pasted stacked floors formula that allows the accommodation of high densities in a functional and manageable way. The issue gets even more critical when it comes to mass housing, when the constructed blocks are numerous and the repetition process doesn't happen only in a vertical axis but in a horizontal one too.

The issue of public, shared space is one disappearing aspect in the city and especially in residential quarters where it should be the most existing. The encounter between the dwellers is restricted to a "by-accident" way next to the core of the vertical circulation. The Child of the city plays in his apartment, or in the best case scenario in a public garden where the whole family has to organize an outing for that. Thus playing outdoor, with the neighbors is an occasional event. These issues of communal spaces and others are drawbacks to the rigid preset formula of social housing.

The question at this point is what if we try to break out of this preset formula? Can we be efficient and create a functional scheme, that worries about more than just number and minimum comfort standards? Can we design a housing scheme that breaks the norms of what is seen as the "right way" of urban dwelling?

The answers for such questions bring together multiple professions, from the economist to the urban planner to the architect, thus will require working in a cross-disciplinary manner.

Further, many urban development and reconstruction projects were established in Lebanon after the civil war in the 1990s in various areas to "clean" the multi-layered damages of the war. This is where large scale urban strategies come to solve large scale problems, such as confused ownership, informal settlements, illegal occupation of the public beach, in addition to the destruction of parts of the urban fabric and most importantly the need for housing for displaced people. Such Projects raise many complex issues at the same time, that are woven together making their analysis and critique a hard task.

The problem of the mass housing projects proposed by such agencies is usually that they resort to the pre-set housing formula because they care about providing the largest numbers of units in the most efficient way burying any social dimension that the design can have. This problem is common at all strategies that were faced with large number of displaced people and needed a fast functional solution. One example, is the case of social housing in Algiers which will be featured as a case study in the thesis.

One main issue that those agencies face in Lebanon is the issue of Informal Settlements in the South-Western Suburbs of Beirut (the territory of work of Elyssar). These Settlements have been formed through multiple waves of migration, especially from the south due to the Israeli occupation (1978-2000). Illegal occupation of the settling migrants, was allowed due to the absence of the state and in many cases the confused ownership of the open lands of the suburbs.

Until nowadays, these informal settlements still exist and use any political conflict situations where the state can be absent to extend their houses and their land occupation, because of their increasing number. The conditions of living in these settlements are very poor. Most of the lands lack infrastructure, especially the part that is right along the beach. The narrow spaces are getting even narrower and the density getting even higher. (Mona Fawaz and Isabelle Peillen, "The Case of Beirut, Lebanon.")

Various opinions and strategies try to find solutions for the informal settlements problems. Legalization of the land and the upgrading of the infrastructure is proposed by the people who see spatial and social value in the narrow alleys, created by the residents themselves, and see them as the only communal spaces created in the urban settlement. On the other end, radical demolition and reconstruction are proposed by people who see the settlements as dirty, unhealthy, crime centered urban spaces.

The thesis looks critically at both ends , appreciates the social value of the space of the settlements, yet stays realistic about the poor living conditions of the settlement.

Work starts from the Marmel site , studies its planned future as a mass housing development by Elyssar, one of the planning agencies, and it ends up proposing a new housing scheme that brings back the social layer to housing.

In order to do that, a study of the previously mentioned issues is made, in addition to considering the informal settlement as a site of learning to inform th design intervention.







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2.Maramel : The Site of Intervention

A-The Past and The Present

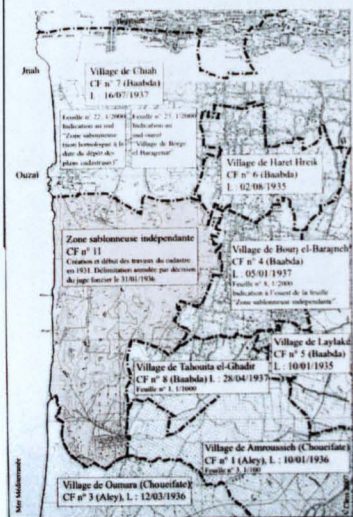
a. A History of Neglect and Confused Ownership

The sandy zone has always been a land of conflict between the numerous owners of the undivided parcels on the one hand and the municipality on the other. It belongs in its largest portion to the municipality which made it easy for the informal settlements to extend from the beach (another public property) to it.

As Dr. Mona Harb points it out in her article : "the public character and the confused ownership permitted the establishment of informal settlements."(Harb El-Kak.M., "L'espace dans les discours sur l'aménagement de la banlieue sud: Le Projet Elyssar").

There is a shortage in the amount of records we have about the sandy zone due to the lack of registered information about the area. The fact that was caused by the absence of agricultural and urban value to the land.

Since the time of the Ottomans, this land was outside the city and it was neglected. Partially constituted of meadows, the sandy zone was also used for extracting stones. The first attempts to draw the limits of the parcels were by the Ottomans who focused on the few lands that were cultivated (fruits mainly) in order to get the taxes. Other inhabited parts were thus neglected. Further, although the limits of the various parcels were never clear, the landowners (who owned stocks equivalent to an area of land) bought and sold their parcels which added the complications around the ownership.



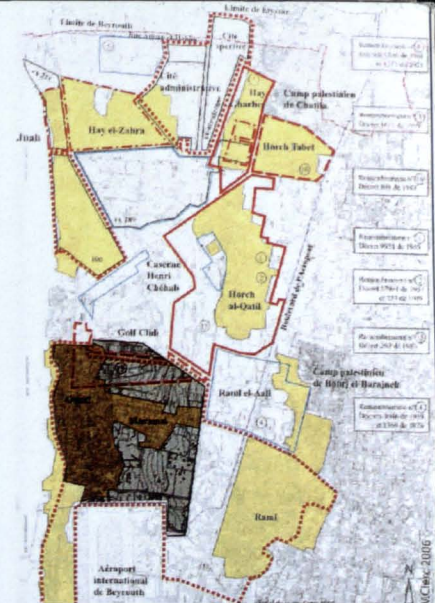
1931 till 1936
The zone 11 called the "Sandy Zone"



1936 till 1955
Zone 11 was attached to Borj-el-Barajneh , Tahouit el-Ghadir and Amroussieh



Since 1955
The Western part of the Sandy zone is attached to Chiah



Big Undivided Parcels
Maramel, parts of ouzai and parts of the gulf club are all in the Parcel 3908

In 1931, during the French mandate , the zone was seen as very complicated to be divided due to its size and to the complications already mentioned , so it was called "ZONE 11: THE INDEPENDANT SANDY ZONE" and was divided into 24 zones described as "unconstructed" (shown in light pink in the diagrams to the left) In 1936, zone 11 was attached to the neighboring villages (Bourj-el Barajneh, Tahouitit el Ghadir and Amroussieh).

Under the Lebanese authorities, the problem of landownership in that region was never solved either; it was even getting more complicated with time and hereditary systems. Parcel 3908, that contains the maramel site, is one example of the very big parcel size that results in a very complicated system of ownership that is based on the system of 2400 of stocks per land, regardless of the size. Which explains the ability to buy and sell land without the need to know the exact boundaries... Throughout the generations, the ownership got more complicated due to hereditary laws. (V.Clerc-Huybrechts,P69-p84)

2.Maramel : The Site of Intervention

The Elyssar project consists that one big plan that engulfs this area , and reclaims these contested lands by expropriation. In such situations, radical gestures such as Elyssar's might be the only solution to end the individual conflicts on the one hand and the private v/s public ownership on the other, and in order to be able to use the land to its full potential. The maramel site, part of the Sandy Zone, consists one site in the master plan of Elyssar, which is planned to be turned into a residential development cleaned out of all the informal settlements that were formed in its boundaries. The Elyssar project will be analyzed in depth in the next chapter.

A. From The Informal Settlement (Looking East)



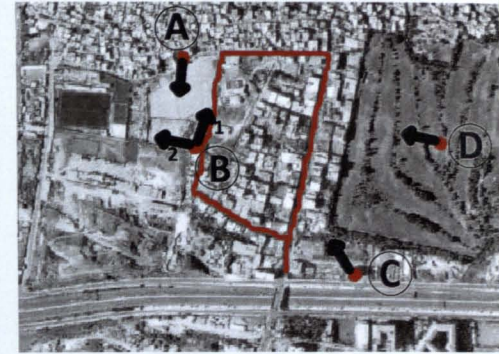
Panoramics From The Site

A. From The Informal Settlement

B. From The Industrial Buildings

C. From The Roof of a Building
Outside the site

D. From The Gulf Club



2. *Maramel :The Site of Intervention*

B.1 From The Industrial Buildings (Looking West)



2.Maramel :The Site of Intervention

B.2 From The Industrial Buildings (Looking South)



2. Maramel :The Site of Intervention

C. From The Roof of a Building Outside the site
(Looking South)



2. Maramel :The Site of Intervention

D. From The Gulf Club
(Looking South)



2. Maramel :The Site of Intervention

b. The Present Location :An Edge Location

The site is located at the western edge of the informal settlement of Ouzai which stretches along the coast. It is also at the northern edge of Beirut International Airport.

It is mostly an empty land with a temporary quarry on the highway edge of the site.

20% of its area has illegal buildings that are relatively recent. These buildings have created an industrial area with a specialty in automobile repair which is now a destination for the entire city. The industrial spine thus created came as an extension to the Ouzai highway that has the same specialty concentration.



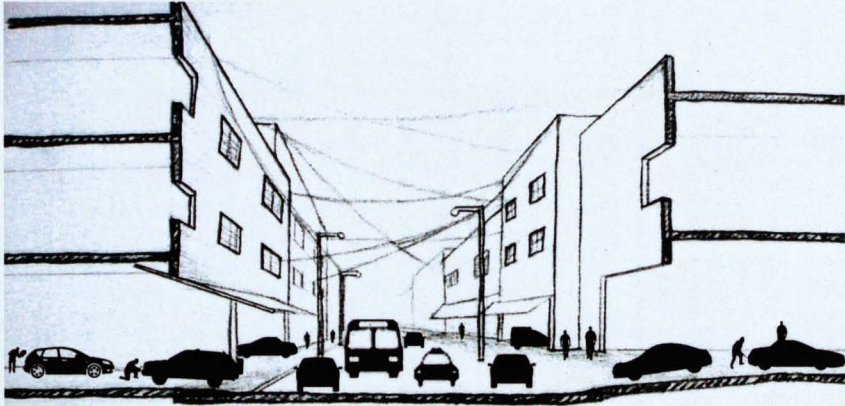
The Ouzai highway was formed during the process of settlement of the displaced people during the war, while the industrial area of the maramel came in a later stage during the early 90s.

The site is almost a square with the Airport to the south, the highway to the east, the golf club to the north and the Ouzai informal settlement to the west. It has a slight slope towards the west. Drawing sections at the four boundaries shows the difference in character in the four segments of the site.

2.Maramel : The Site of Intervention

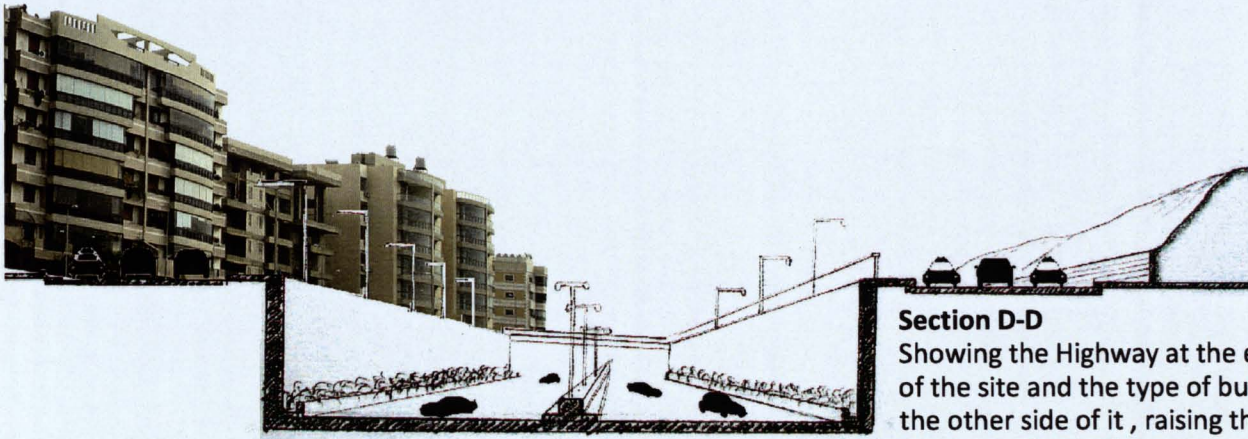
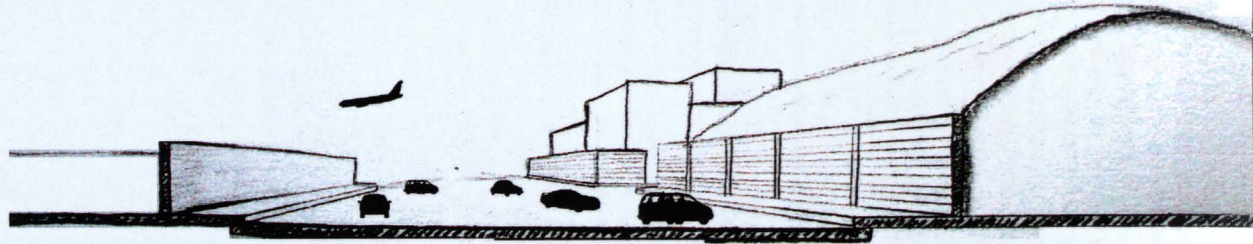
SectionB-B

Section through the industrial spine, showing the prevailing car repair activity on the ground floor .
It is an all day long crowded spine.



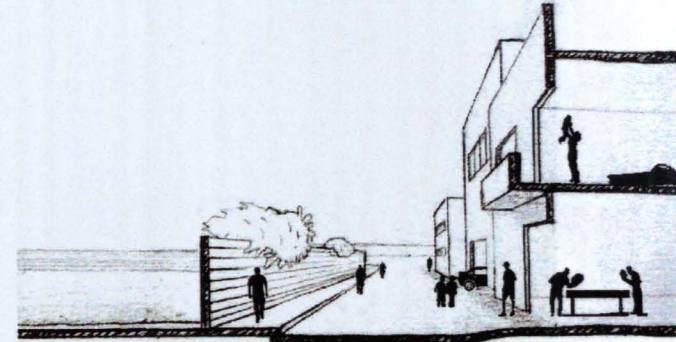
SectionC-C

Section through the wide street separating the site from the airport.
It is an almost deserted area now, because the site is empty on this side and the airport has a blank wall at its edge.



Section D-D

Showing the Highway at the eastern side of the site and the type of buildings on the other side of it , raising the real estate market in the area.



Section A-A

At the boundary of the Informal Settlement, showing light industry workshops (furniture, carpentry...)
It is a narrow street that is almost only pedestrian.

Bringing Down
The House

Maramel; An Alternative for The Mass Housing Formula

2.Maramel : The Site of Intervention

B-The Future : By Elyssar

a.The Planning Agency

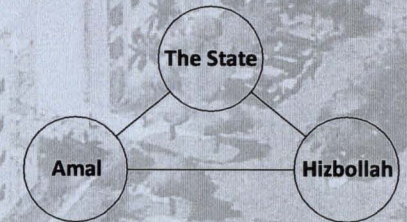
1.Conditions of Foundation

As mentioned in the Introduction, Elyssar is one of the rehabilitation projects that came to light after the civil war , in the 1990s, having in its agenda the redevelopment and reconstruction of many regions in Beirut and the suburbs.

The project was under the direct supervision of the private office of the Assassinated prime minister Rafiq Hariri . An office that was the solo agent in the planning of several other projects such as Solidere (Beirut Central District) an Linord (Beirut Northern Suburbs and beaches). When Elyssar(Beirut South-Western Suburbs) came to birth , people have had already witnessed the Solidere Project and conceived Elyssar as another project "cooked"by the same private company that plans to "own"their land with monetary compensations in return. Therefore, The project faced the opposition of both the residents of the South-western Suburbs and the political parties representing this region being Amal and Hizbollah. Elyssar's intervention zone is part of the Southern Suburbs of Beirut : a contested space , that is seen as Amal and Hezbollah's enclave from most of the other city regions dwellers. (Mona Harb el-Kak"Urban Governance in post-war Beirut: Resources, Negotiations and Contestations in the Elyssar Project")

This is where the concept of governance , extensively explained by Dr. Mona Harb in one of her articles comes in to explain the situation. A situation where "the state, though still a major player, is just one player among others." (Mona Harb el-Kak"Urban Governance in post-war Beirut: Resources, Negotiations and Contestations in the Elyssar Project"p2)

In order for the project to keep going, the administration was now turned into a public agency, having on its board representatives of the 3 agents involved (the state: represented by 4 members ,Amal : represented by 1 member , and Hizbollah: represented by 1 member as well). A form that got the acceptance of all the parties involved and thus gave birth to Elyssar: The Public Planning Agency. Thus the government is responsible for the financing of the project or as the project booklet says "... or enter in partnership with developers to create valuable projects..." (Elyssar, Public Agency for the Planning and Development of Beirut South-Western Suburbs , Project Summary, p7)



Since 1998 , the project has witnessed a lot of obstacles and delays that are politically rooted, and that were accentuated by the opaque negotiation process that the agency followed. Although the administrative composition seems healthy because it gets the various political parties to participate, yet the representatives of the residents (being the members of Amal and Hizbollah) did not take the residents opinion in the planning process and the three agents had their political agenda as priority over the benefit of the residents.

Further, as mentioned by Dr.Mona Harb in her article, rumors about unfair compensations were spread whenever Amal and Hizbollah wanted to stop the project and get the protest of the residents. On the other hand, there was a change in the order of the execution of the plans to benefit the state back then. When the initial agenda insisted on starting by building the low-incom housing units, and then the construction of the airport highway, what happened is the exact opposite, which made the people doubt the honesty of the intentions of the agency. Thus the agency was accused for caring about economy more than about the residents. Many other problems happened , and the final one was the construction of the airport road, before starting with any housing project that shifted the car flow from the ouzai highway and thus causing economic losses for the car mechanics activity there. This step was justified by the lack of funds to start with the housing projects and that in the mean time, tourists should not pass by the ouzai highway when coming from the airport to beirut. That was the problem which stopped the realisation of the project , especially after the assassination of the prime minister Rafiq el-Hariri.

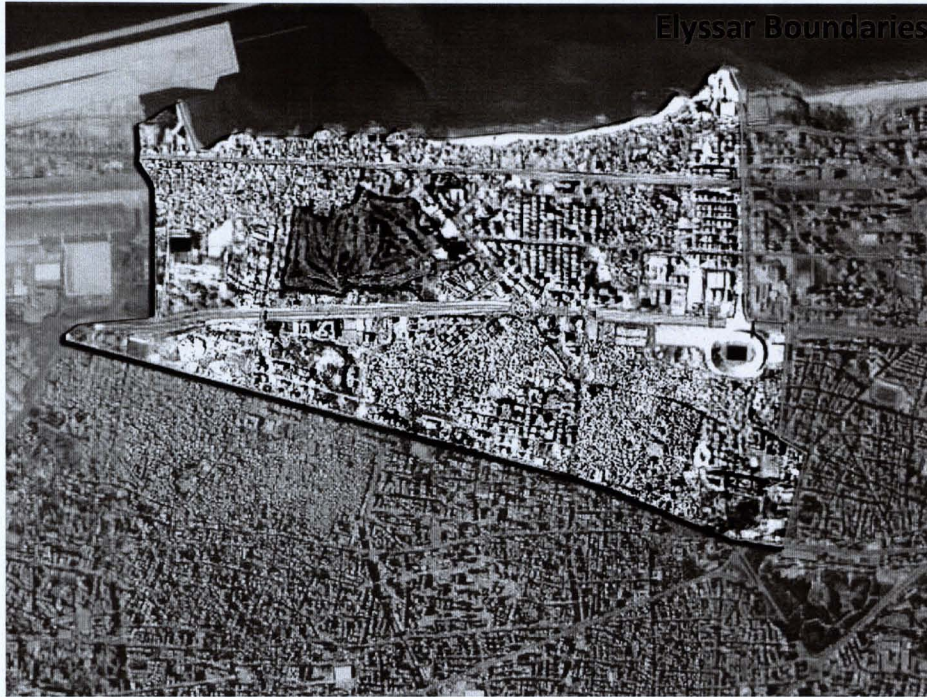
2.Maramel : The Site of Intervention

B-The Future : *By Elyssar*

a.The Planning Agency

2.Analysis of the Urban Strategy and of its opposition

As a summary of the planning strategy, the agency applies surgical interventions in the area of execution being the South-Western Suburbs of Beirut. An area that is considered mid to low income , and that has complex conflicts about legality, ownership and informal Settlements. (as mentioned in the first Chapter).

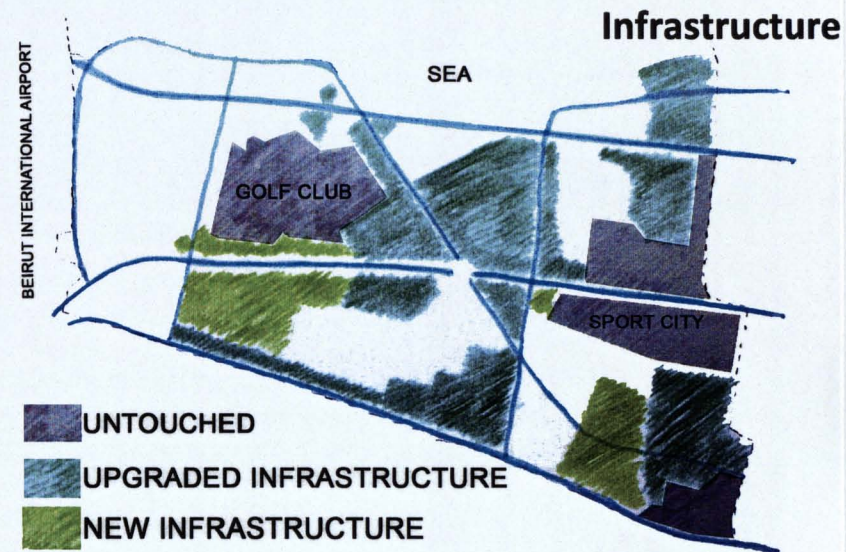


Besides *upgrading the infrastructure* manifested in the extension of secondary and tertiary roads, some areas are to be demolished to be built from zero. These areas are in a strikingly poor condition and no infrastructure upgrade can help. There is also the Airport Highway Construction that has been already constructed, as mentioned earlier.

The other plan concerns *the ouzai informal settlement and the relocation its residents.*

Only 50% of the Residents will be relocated in the new residential development projects, thus they will go through a process of evaluation of the area they own in the present site and will be assigned the apartment(s). *Fives sites are destined to receive the new housing projects* (shown in the superstructure diagram) The other 50% are going to be given monetary compensations in return to the area that they own today. (Mona Harb el-Kak "Urban Governance in post-war Beirut: Resources, Negotiations and Contestations in the Elyssar Project")

The actual site of the informal Settlement consisting part of the beach in the area of work of Elyssar and part of the in-land, will be demolished. *The beach part will be used for future touristic developments* ,and the in-land part will be included in the new residential development on the Maramel site.

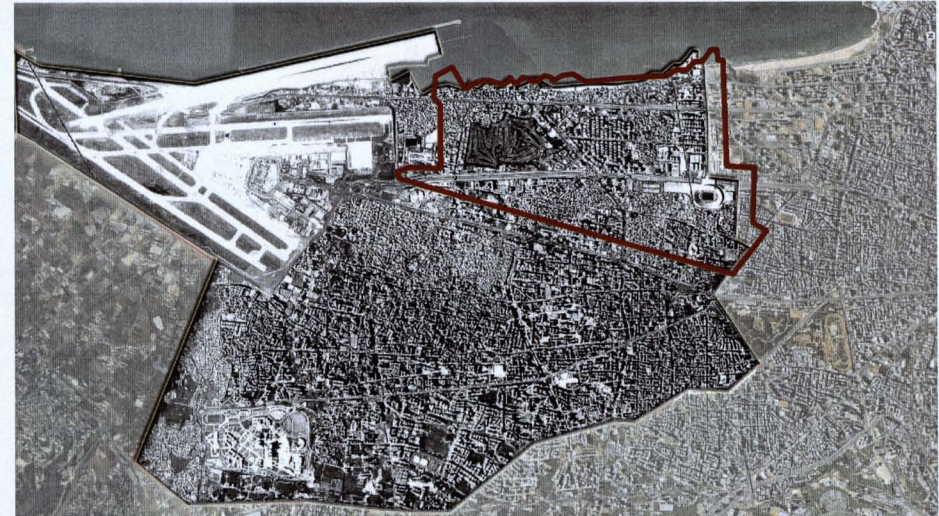


2.Maramel : The Site of Intervention

As Shown in the previous diagram, the important superstructure are the five zones shown in pink being the new residential developments that will house 50% of the ouzai informal settlement. The other small interventions are commercial shops that are added to the existing residential areas along the main streets to provide more job opportunities in the area.

Thus as a first evaluation of the Urban strategy, we can see a clear respect for the urban fabric of the area; the interventions are at a surgical level, yet the informal settlement is seen as a disease symptom in the city that needs to be wiped off. On the other hand, although being respectful in a big part of the strategy, the new planned residential zone, are designed as islands that disconnect with all the existing surroundings. This fact will be studied in detail in the following paragraph in the analysis of the architectural scheme and the planning at the level of the Maramel site. Further, because these sites are located within the boundaries of Elyssar, the relocation is not a radical one.

The Urban Strategy was criticised, especially by the members of Amal and Hizbollah, as an attempt to link the Southern Suburbs to Beirut, especially through the highway plan. However, the Highway was constructed and the Elyssar Area is still known to every city dweller as part of the Southern Suburbs not part of Beirut. This is due to the highway character that makes the area that is passing through it a mere passage or transition zone. Thus the construction of the highway did not incorporate the Southern Suburbs to Beirut. Not to mention that the area of intervention of Elyssar does not exceed 20% of the area of the Southern Suburbs.



Southern Suburbs and the proportion of the Elyssar project

Moreover, because the agency, as the case of many people, regard the informal settlements as a dirty place in the city, the attitude of the Agency was never to look close and examine the various parts of the informal settlements. They are all regarded as one, and classified under one category: Illegal to be wiped off. But in reality, some parts of the settlement have better living conditions than others, the fact that should be taken into consideration is such an urban strategy. A clear example, is that the in-land part of the ouzai informal settlement lives in a much better condition, with more recent structures and most importantly away from the expanding sea in the winter. Thus the strategy regarding the informal settlements should be sensitive to these nuances.

2.Maramel : The Site of Intervention

B-The Future : By Elyssar

b.Analysis of The Architectural Scheme proposed for Maramel

Maramel is one of the five sites designed for social housing development by the Agency. One of the sites that will receive the displaced people of the ouzai informal settlement. It is divided into three zones as shown in the master plan:

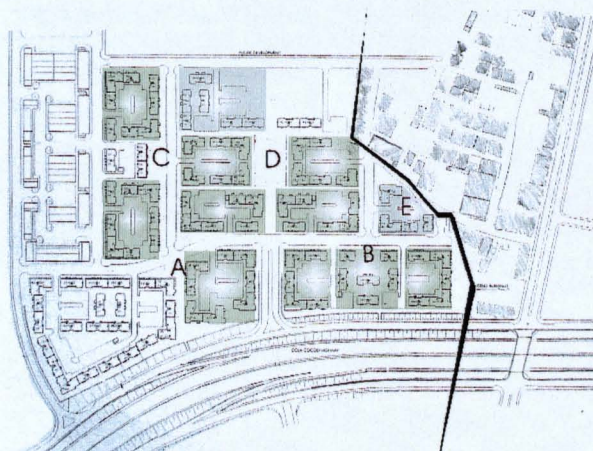
Zones that need to be demolished and rebuilt,

Zones that need to be demolished to allow the residential development to "land"

and Zones that are currently empty and that are part of the residential development.

All the industrial buildings (although being recent and in relatively good condition) are going to be demolished.

At the level of ownership, the lands that are illegally occupied or have a conflicting ownership scheme will be reclaimed and expropriated respectively, thus the ownership goes back to the public sector.



BREAK BETWEEN THE EXISTING FABRIC AND THE NEW INTOVERTED RESIDENTIAL ISLANDS

ISLANDS SYSTEM

The site will end up divided into center-inverted islands/blocks that are built around a central 35m span parking space. The islands/blocks are separated by 12m roads that "open perspectives to the sea" as the agency booklet describes. Some of these blocks have in their central space social services centers instead of the parking or in addition to it.

The grouping of the residents is not taken into consideration, and the islands are only central in shape and are not based on any central social force that might group the residents such as familial relations for example.

The Orientation of the apartments is also not taken into consideration, the same apartment plan is rotated along the four edges of the block

A clear break in the urban fabric is noticed, and the islands are literally detached from everything around them.

DENSITY AND WASTED SPACE

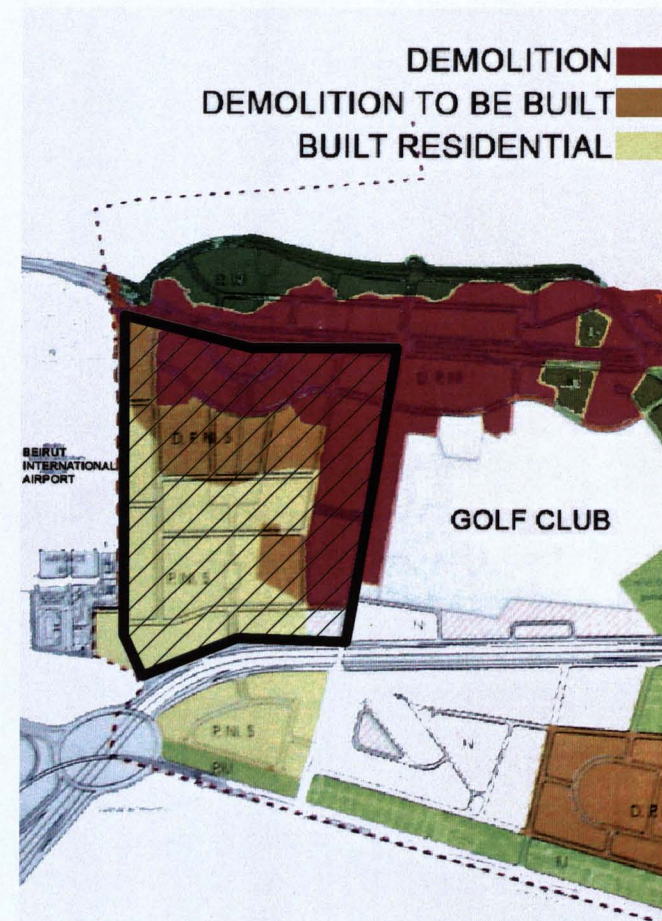
At the level of density, in Elyssar's proposal, an area of 8000m² in the site will have a footprint of built area of 3150m², the rest 4850m² are wasted between above ground parking and the planned "public space".

An 8000m² area houses 660 persons, in a residentially built area of 14175m², using only a fraction of 0.4 of the site surface area, and allowing an area of 21m²/person.

The Site as a whole provides 1440 residential units on an area of 130 000 m², with a built up area of 165 000 m² (including 10% given for separate workshops).

Thus the scheme follows the building laws in this area that requires a 30% built area of the surface and an FAR of 1.2, but regards the 70% surface area that is left as a left over space and uses it for surface parking in most of the cases.

The numerical data shows a considerable percentage of wasted space due to the rigid system of apartment building.



2. Maramel : The Site of Intervention

FADING COMMUNAL SPACE

The Architectural scheme consisting of *ground floor shops and residential apartments* at the upper floors is a *non-responsive scheme* to the social structure of the displaced people.

Its a *rigid system* that alters their familial structure , that is based on a system of flexible communal spaces and where the housing clusters around the extended family .

(A sample of the informal settlement will be studied in depth in the next section)

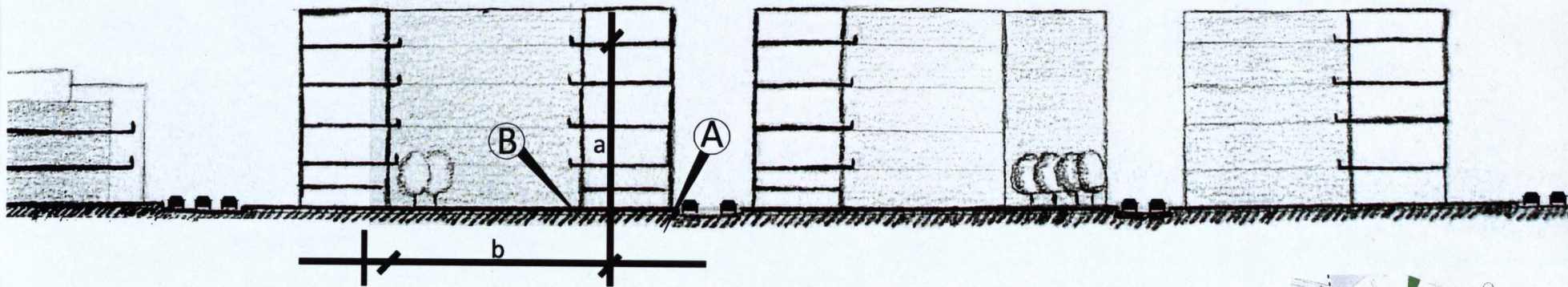
The residential buildings are of 4 or 5 floors height.

The ground level which is the only "common" and "shared" place other than the lobby of the vertical circulation is not in reality a "shared" space by all the user groups among the residents.

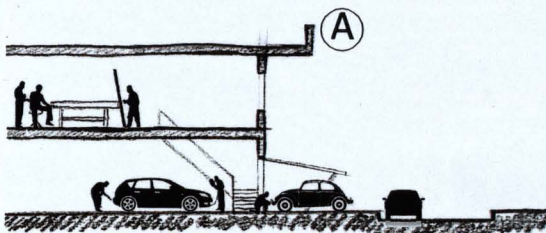
Despite the acknowledgement of the link between home and work that exists in informal settlements, *the concentration of commercial activity on the ground floor* that is designed to be "a public place with seated gardens", makes the latter *"too public" for women and children* . The fact that is strengthened by *the monopolization of space by males, and by the vehicular accessibility*.

The proportion of the open "public" space at the ground level to the height of the buildings , is another factor that contradicts with the properties of the communal space of the informal settlement that requires spatial containment and that is a outcome of people's adjustments thus results from the human scale.

Section through the site from the highway to the informal settlement with Elyssar's social housing.



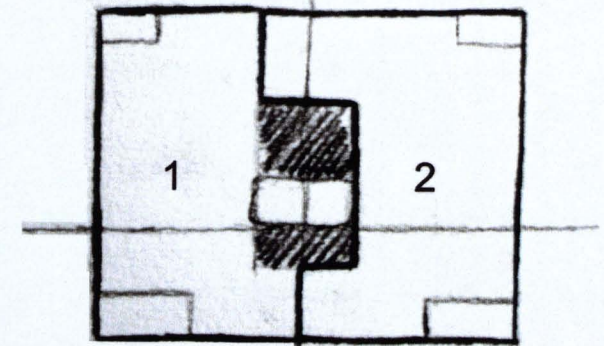
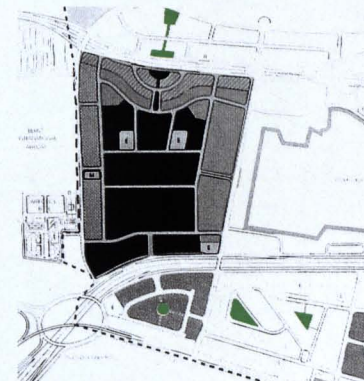
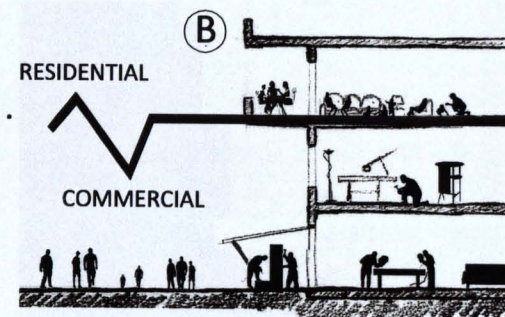
The Monopolization of male users at the ground level restricts any communal activity of the other user groups to the upper floors where there are no shared spaces.



The open space of the ground level is treated as a left over space in most of the cases .

The green zones that are destined to be gardens, do not match the properties of the communal spaces needed by the residents.

Because these spaces are also treated as rigid islands, just like the housing blocks and extend from the *too public* space of the residential islands.



Shared zone between apartments 1 and 2 next to the vertical circulation

2.Maramel : The Site of Intervention

B-The Future : By Elyssar

c.Conclusion and Position

At the Planning Level the 4 main points summarising the agency's agenda are of crucial importance at the level of the rehabilitation of the area. From the relocation of the informal settlement residents, to the beach reclamation, to upgrading the infrastructure and finally the surgical interventions in the 5 new residential development projects. Yet there are some reservations that lead me to be critical about them and not accept them as givens.

First, concerning the relocation of the informal settlement, and as mentioned before, the agency does the mistake of treating the whole ouzai informal settlement as if having one character, while there are major differences that lead to different strategies.

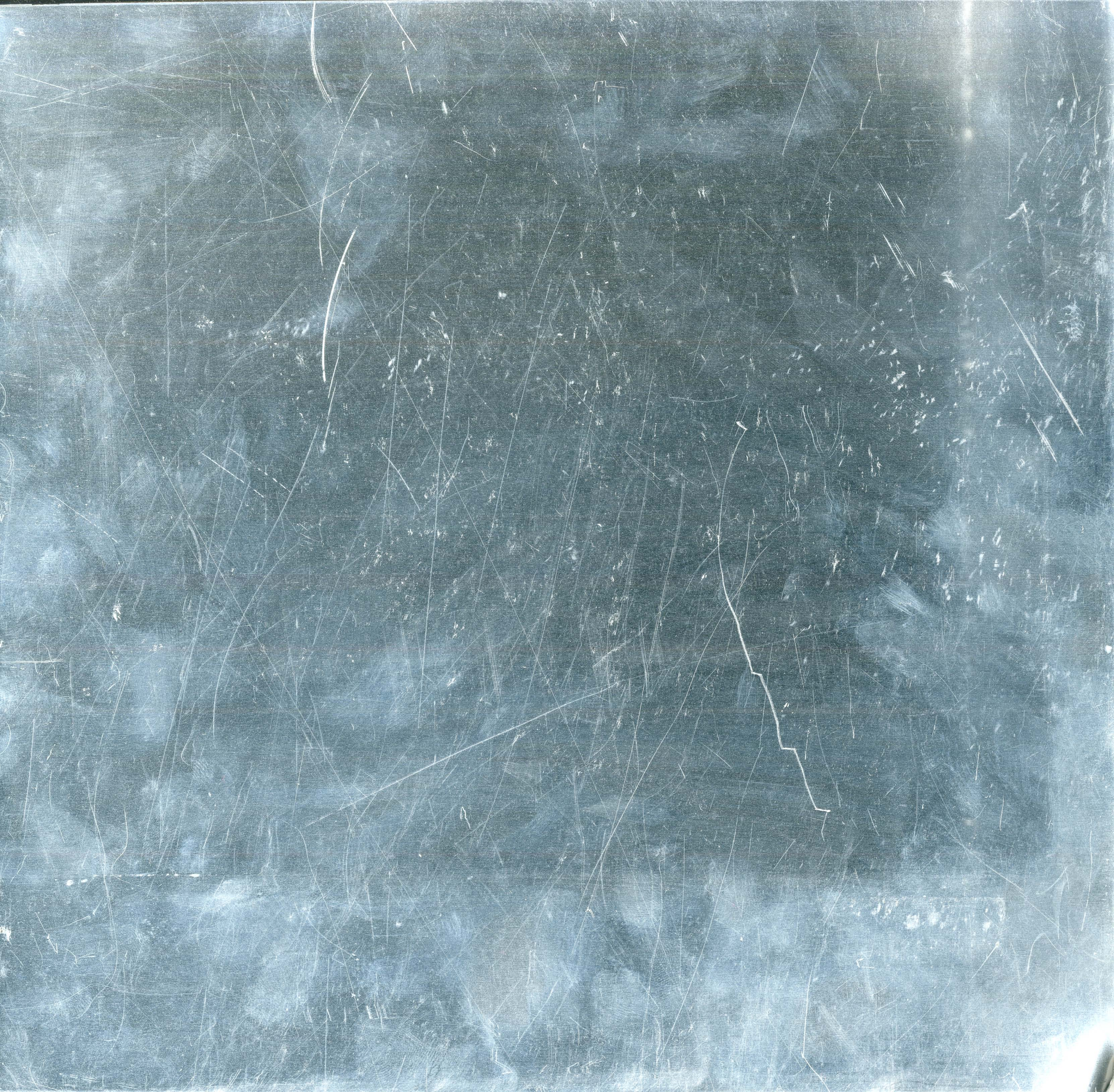
Second, concerning the public beach, reclaiming the land is not enough, it should become freely accessible to all city dwellers.

Third and finally, at the scale of each of the five residential sites, the proposed scheme should study the existing urban and social fabric in order to respond to it and enhance it. This would be one goal to be achieved in the agenda of intervention on the Maramel Site.

At The Architectural level, the scheme that is provided by the planning agency was designed by a private architectural company: Dar-el-Handasah, that used the "preset functional housing formula" of apartment buildings mentioned in the introduction chapter.

The scheme follows the detached islands system that doesn't respect the surrounding fabric, on the contrary it reinforces the break between the old and the new. As proved in the previous analysis, it harms the social structure of the displaced people that is based on the grouping around the extended family. Especially at the level of communal spaces, the scheme does not answer the need of the housed people in having communal spaces, and the planned public landscaped spaces do not match the characteristics of the needed shared spaces.

In the next section, a study of communal space, its production and its characteristics in Saint-Simon: The Site of Study will be fully conducted. Saint-Simon is part of the informal settlement.



3. Informal Settlements : The Site of Study

a. Saint-Simon

1. Site Analysis

Ouzai Informal Settlement

The start of the squatter settlements along the southern Lebanese coast happened throughout many phases, ie: not all the areas were occupied in the same time.

The coast from ramlit I bayda to the international airport comprises two zones:

THE JNAH BEACHES AND THE OUZAI ZONE Each zone having a different start, (ouzai started in the 1950s with rural-urban migrants. Fawaz.M.2000) and a different history of formation, are added to form the informal settlements along the southern Lebanese coast.

OUZAI
Settlers Origin :
displaced from the south +
Syrian Workers
Dwellings:
50% Rented
20% Owned
30% Squatted

JNAH BEACHES
Settlers Origin :
displaced from the south and from
other suburbs
Dwellings:
50% Rented
50% Squatted

Average level of income (ouzai+jnah beaches+horsh el katil)

11.2% make less than 84\$/month
21.5% make 84-150\$/month
16.6% make 150-204\$/month
19.4% make 300-540\$/month
11.8% make more than 540\$/month

(Mona Fawaz and Isabelle Peillen, "The Case of Beirut, Lebanon.")

SAINT SIMON, A SAMPLE

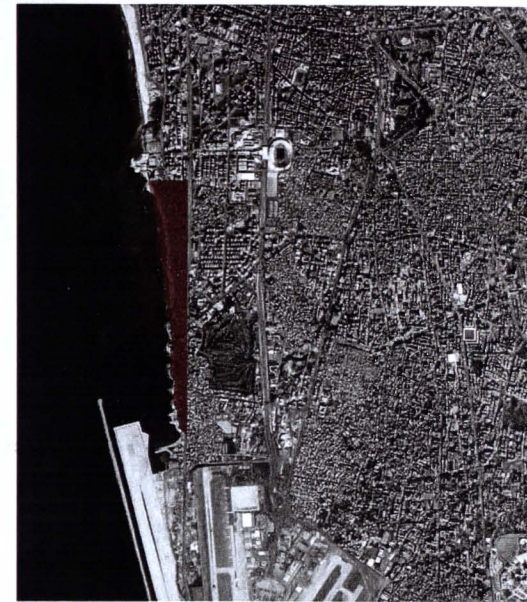
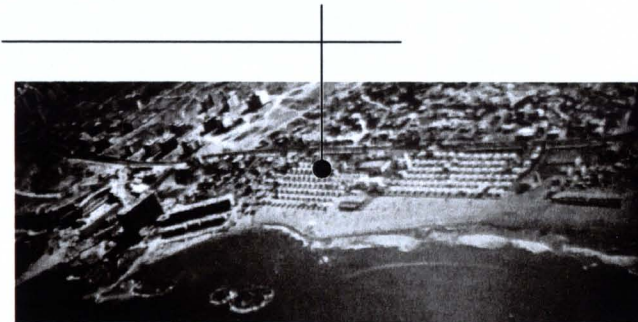
Due to the fact that the majority of the residents are families, the site represents an important case study that illustrates the familial grouping of the settlers that exists in all the informal settlement. This is where I can trace the social network and study the spaces that are the result of social practices that are of value to the residents.

Brief History

Saint-Simon Beach was originally a high-income resort, consisting of luxury Chalets on the Southern Beirut Sea front. However, when the civil war occurred in 1975, displaced people from various regions including Qarantina, the Maslakh, and the South, took it as a "temporary settlement place".

Yet, as the years passed by, the place transformed into one of the poorest neighborhoods of Beirut.

Currently, from the Summerland to Sultan Brahim, 450 families reside there with an average of seven members in each, adding up to a total of almost 3150 persons.



LIVING CONDITIONS ON SITE

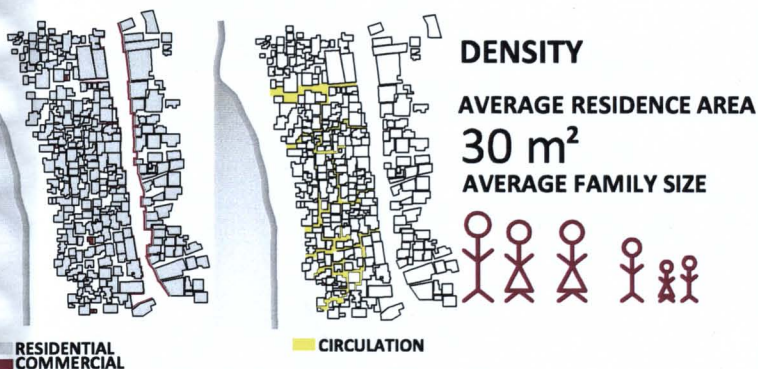
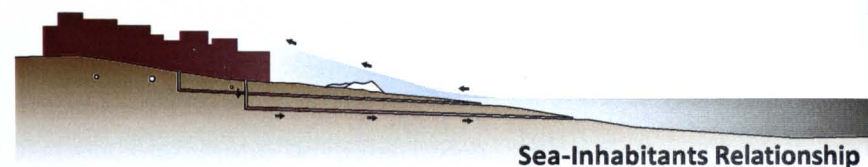


Table 2: Quality of Structures, Selected Areas

Quality of Structures	tin	dest.	poor	med.	good
Jnah (beaches)	104	0.9%	75.4%	21.6%	2.1%
Jnah (Hayy Zahra)	4	0.8%	33.9%	59.8%	5.5%
Jnah (other)	13	2.2%	40.0%	0%	57.8%
Ouzai	21	1.3%	29.6%	55.2%	13.9%
Horsh el Qateel	36	0.2%	44.9%	47.4%	7.5%
Bir Hassan	0	1%	30.6%	58.2%	10.2%
Sport City	3	7.2%	46.8%	27.1%	17.1%

Source: (BTUTP 1992). M.Fawaz 2000

The proximity of the settlement to the sea, created a give and take relation that is not beneficial in either ways. First the pollution that the settlement causes to the sea shore, second the sea expansion during winter causing destruction to the majority of the houses of the settlement



ELEVATION FROM THE SEA

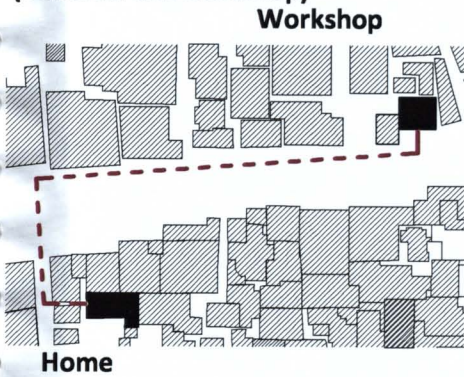


3. Informal Settlements : The Site of Study

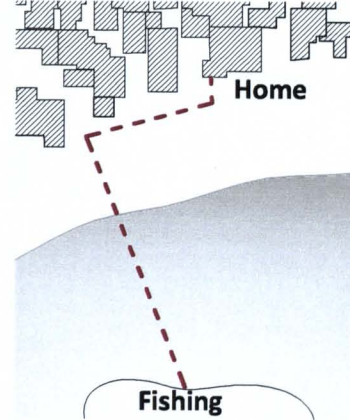


SOURCE OF INCOME

50% of residents
(30% own the workshop)

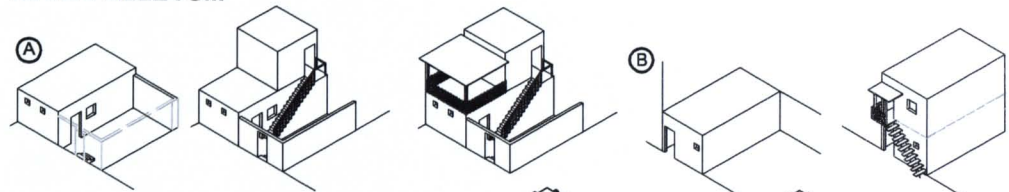


20% of residents

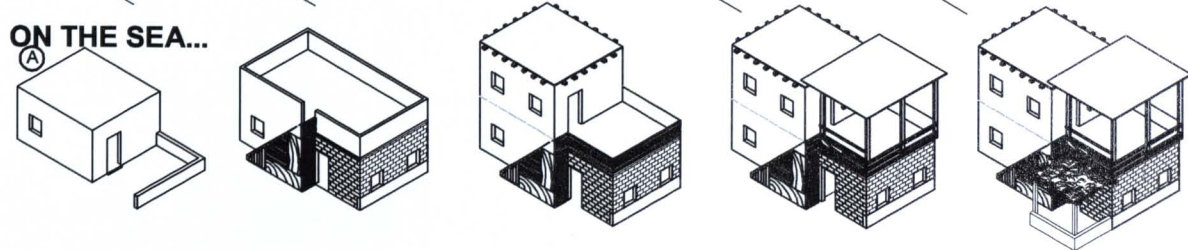


EXPANSIONS AND SITE EVOLUTION

A CHARACTERISTIC OF THE SETTLEMENT
IN THE ALLEYS...



ON THE SEA...



ELEVATION FROM THE OUZAI HIGHWAY

3. Informal Settlements : The Site of Study

a. Saint-Simon

2. Analysis of Social Spatial Production ; Communal Spaces: A Social necessity

COMMUNAL SPACES are result of value maden social activities.

some of these practices take place **EVERYDAY** :

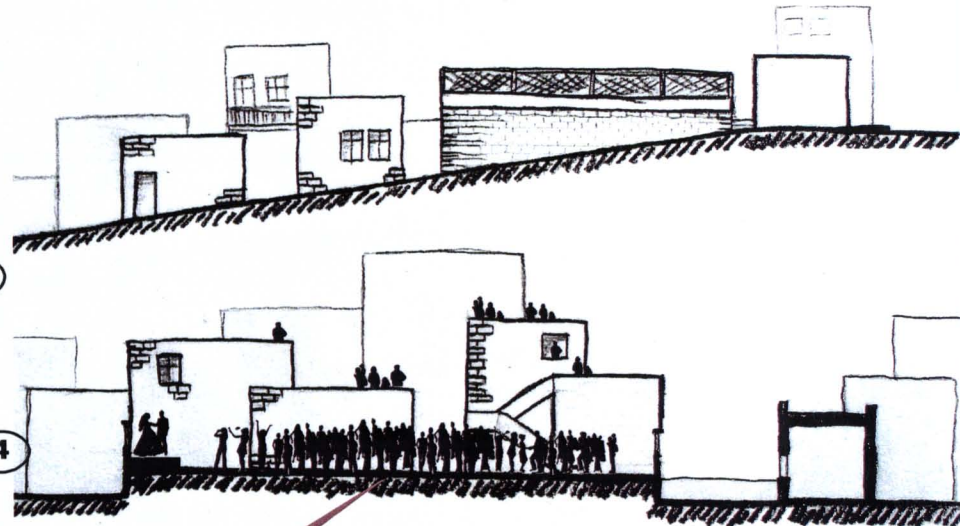
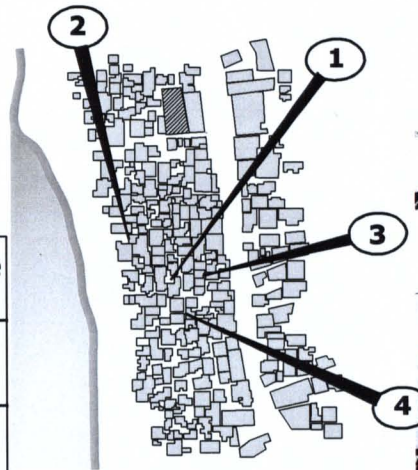
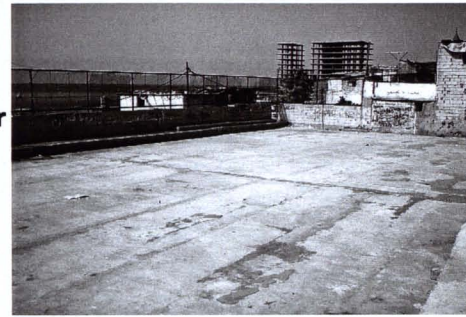
- housewives getting together (sobhie)(a)
- children playing (b)
- young unemployed men drinking arguileh(c)
- men gathering with their family after work...

COMMUNAL SPACES reserved for **OCCASIONS** :

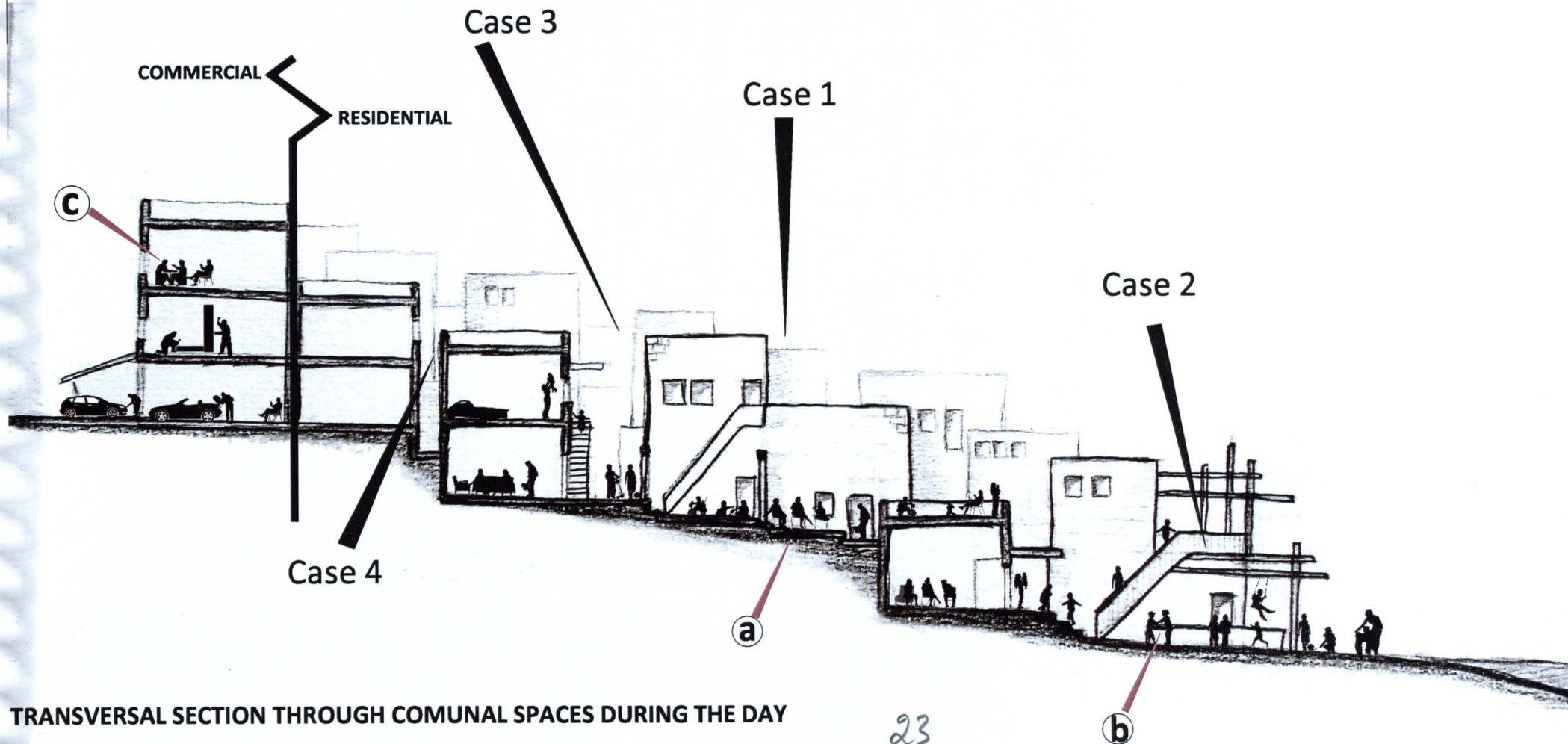
- Sports games
- Ashoura food distribution
- Eid speeches (if any)
- Weddings

Study of the everyday communal space :
Is it **A SOCIAL NECESSITY** OR an **ESCAPE** from the bad conditions of the interior ?

	Bad Interior	Relatively Livable Interior
Neighbors are family or good old friends	Case 1	Case 2
Not Interested in Neighbors	Case 3	Case 4



d SECTION THROUGH COMMUNAL SPACE DURING WEDDINGS



TRANSVERSAL SECTION THROUGH COMUNAL SPACES DURING THE DAY

4. The Intervention

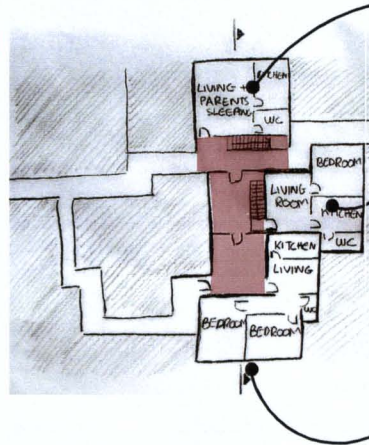
a. Saint-Simon

1. THE FLEXIBLY ADJUSTED

When men are at work (summer)

When men are at work (winter)

When men are back (summer)



Hanadi House

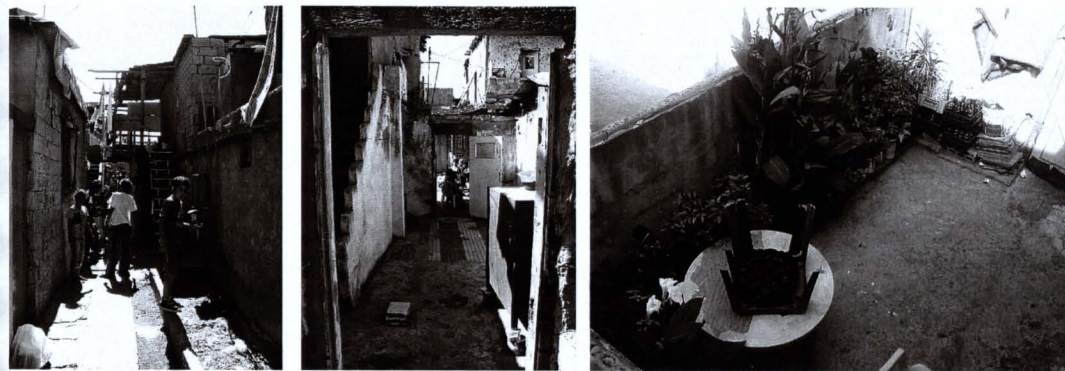
- (Hanadi+Husband+four children)
- Displaced from the south
- 1 bedroom, 1 living, 1 wc, kitchen
- Lack of space and light
- Husband Work on main street, Hanadi is a housewife.

Em-Moustafa House

- Em-Moustafa+Abou-Moustafa+3 daughters+one boy
- Displaced from the south
- 2 bedrooms, 1 living room, 2wc, kitchen, have interior courtyard
- lack of space and light
- Husband owns a workshop on main street, and 2 daughters work in hamra

Em-Ali House

- Em-Ali+ her husband+3 small children+ her mother in law+ her sister in law
- Displaced from the South
- 2 bedrooms, 1 living room, 1wc, kitchen, have an interior courtyard
- Husband is a fisher man, women do the work

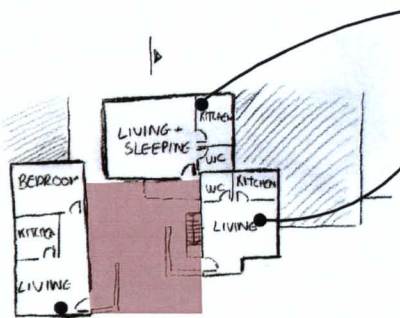


2. THE EXTENDING/SHRINKING

When men are at work (summer)

When men are at work (winter)

When men are back (summer)



Em-Hasan House

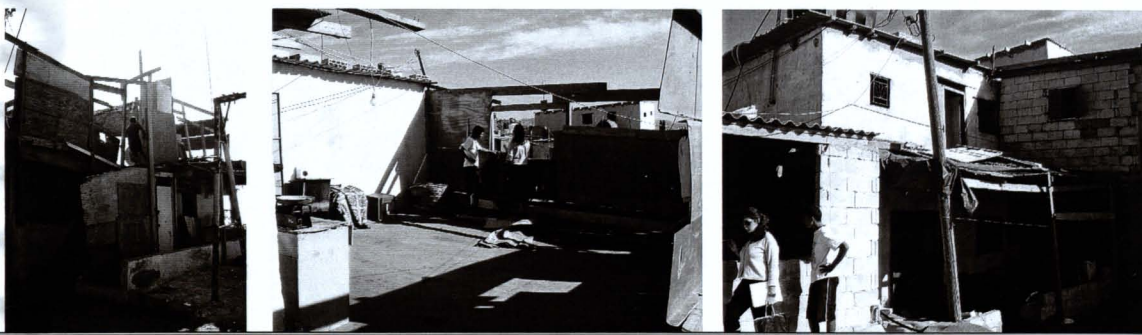
- Em-Hasan + Abou Hasan
- Displaced from the south
- 1 room, wc, kitchen
- Both cannot work due to age, their family take care of them

Hasan House

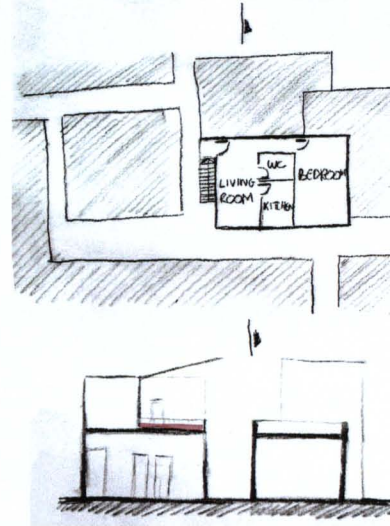
- Hasan +his wife Zainab+ his mother in law +3 children
- 1 bedroom, 1 living room, wc, kitchen
- relatively good light and space conditions
- Hasan works in the workshop of his dad on the main street. Zainab is a housewife.

Fatmeh House

- Fatmeh (Hasan's sister) + her husband + 3 children
- 1 bedroom, 1 living room, wc, kitchen
- fair light and space conditions
- Her husband works with her brother and she is a housewife.



3. THE DETACHED



Em-Omar House

- Em-Omar + Abou-Omar+ Omar and his bride
- 2 bedrooms, 1 living room, 2wc, kitchen
- lack of space, ventilation and light
- Use terrace on the first floor as a gathering place for the family members

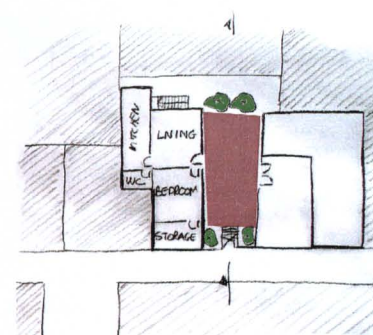


4. THE INTROVERTED

When men are at work (summer)

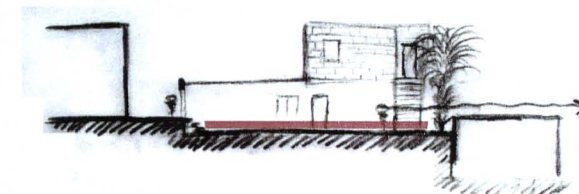
When men are at work (winter)

When men are back (summer)



Fatmeh House

- Fatmeh+her sister+ her uncle + the wife of her uncle
- bedroom, 1 living room, 2wc, kitchen
- lack of space, ventilation and light
- Not on good terms with the neighbors. so they inverted the courtyard to the inside and only share it with her cousins residing in the unit to the right



Characteristics of the communal space in the settlement

In 24hours : Men presence

Along The Seasons: Weather and Sea Proximity — Practices in the communal space

Throughout The Years: Expansions

Spatial Practices affecting the communal space and continuously changing its: Boundaries, Degree of Permeability, Degree of Privacy...

CONCLUSION

Communal space (outdoor in most of the cases) is a response to value maden social practices that trace back to the rural practices of the residents.

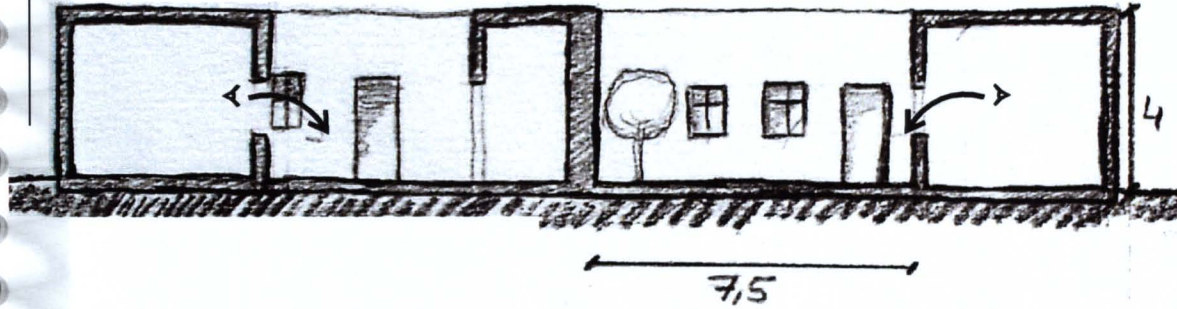
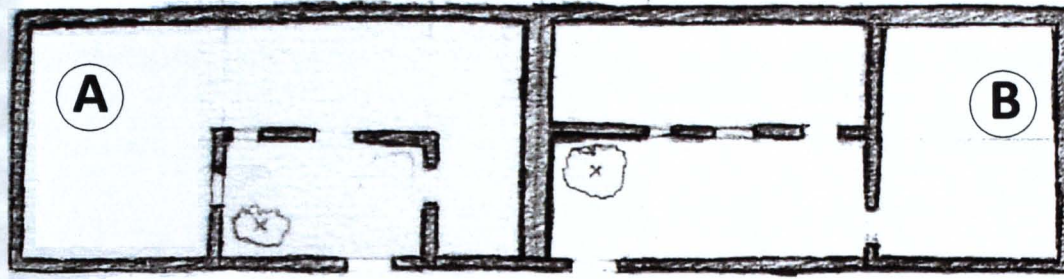
It gathers the members of the extended family, or/and the neighbors. It is flexibe, used , affected , molded and remolded by the users in their everyday practices

4. Case Studies and Alternatives

1. Algiers , Under Colonialism

First phase , 1930s

REPLICATING THE KASBAH (THE OLD TOWN)



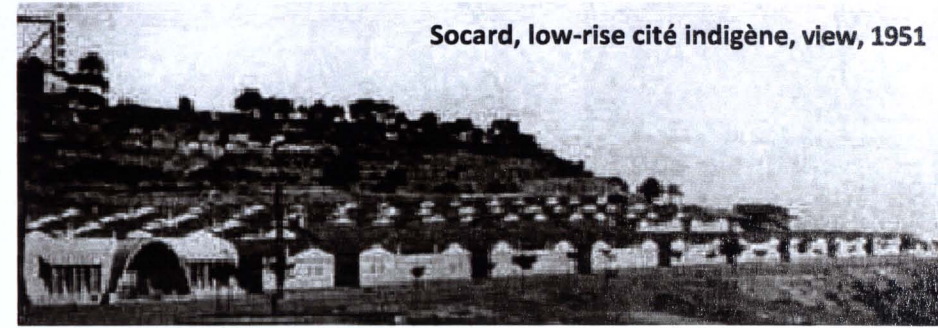
During the first phase of the French Colonialism, much care was given by the French Architects to the traditional language and the private familial, INTROVERTED LIFE of the indigenous people.

" [...] because the predominant characteristics of the "traditional" Algerian house (as studied by the French) DICTATED that "horizontal" housing met the needs of Algerians better than "vertical" schemes." (Celik,1997,p135)

This is why all the social housing built by the French during the 30s were following a horizontal structure that tried to mimick their traditional architecture.

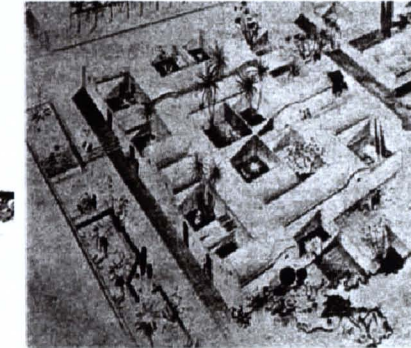
Courtyards either overlooked by the rooms of same the house (a) or the different houses of the same extended family (b)

The shared courtyard had a scale that didnt exceed the area of two rooms . It is very well integrated with the plan of the house. It has direct access to the bathroom , for ventilation purposes.the position of the courtyard with respect to the different rooms of the house allowed relatively good lighting to the interior.



Socard, low-rise cité indigène, view, 1951

F.Bienvenu, climat de France 1933



Berthy, cité indigène, 1936

Albert Seiller+Lathuillere housing project in Clos Salembier, initial scheme 1935



Sketch of the Kasbah



Narrow Alleyways of the Old City

4. Case Studies and Alternatives

Second phase , 1950s

Experimenting Vertically

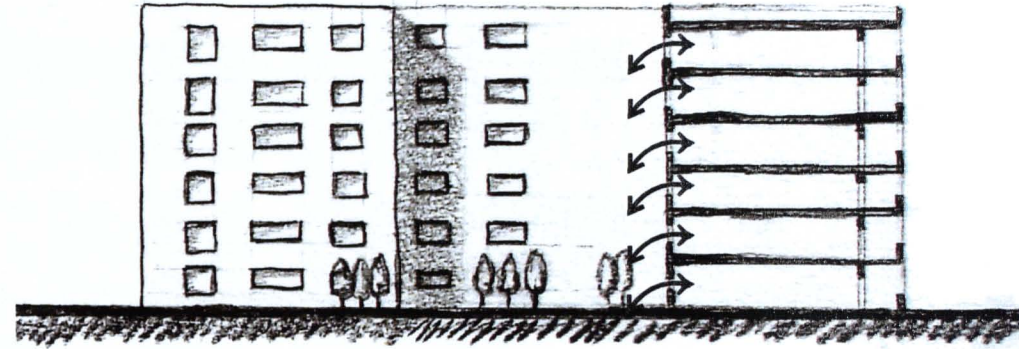
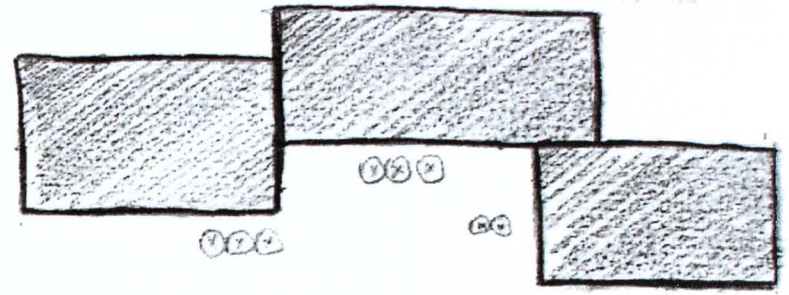
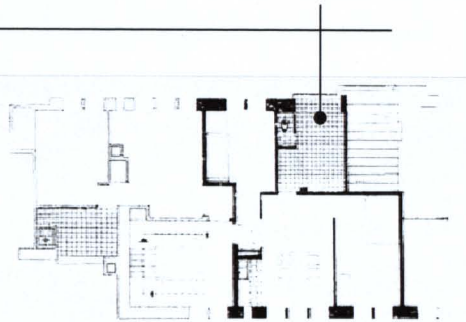
In this phase, the French architects started experimenting vertically with how to carry the traditional horizontal structure into a vertical structure, due to the increasing number of migrants from rural areas to cities, and also to avoid any possible revolt from the indigenous people (especially because of the formation of many slums).

Affected by the ideas of modernism, the apartments came as a functional solutions to house the increasing number of population. Most of the plans designed evolved around a symmetrical plan with the core of vertical circulation in the center.

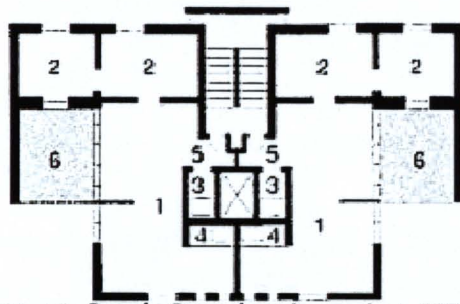
Each housing project was treated as an individual unit without much consideration of the neighboring settlements, which resulted in a conglomeration that lacks urban cohesiveness.

On the other hand, when they started building blocks for housing, they kept few of the features of the traditional house, without questioning their initial function and if it still persists in the new structures.

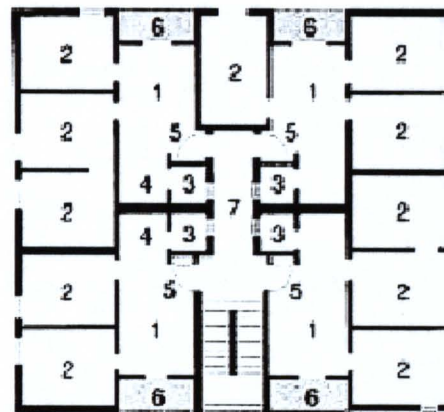
They kept the bathroom accessible through the balcony (same relation to the old courtyard)



Deep balconies (loggias) replaced courtyards, that were sometimes closed due to lack of space and the increasing number of residents/apartment. The public, landscaped space at the ground floor, that is overlooked by the apartments of the blocks, replaced all other communal spaces in the narrow alleyways.

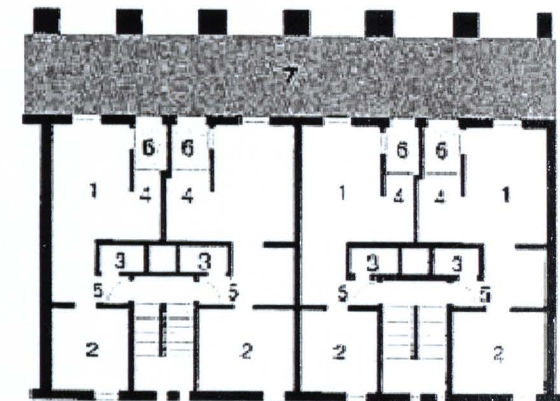


Bienvenu, Boucle-Perez housing project, 1952

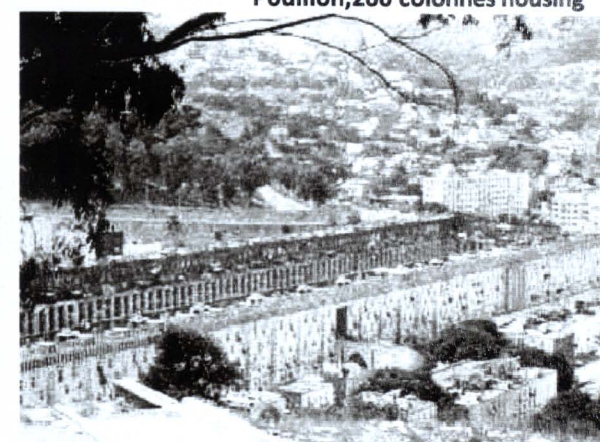
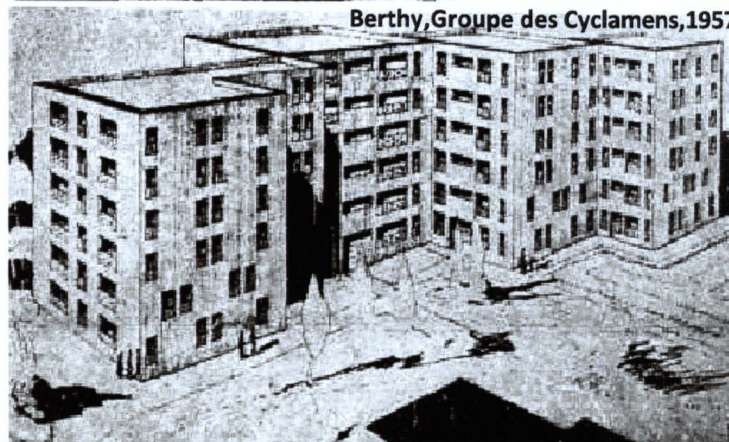


Berthy, Groupe des Cyclamens, 1957

- (1) Living
- (2) Bedroom
- (3) Water Closet
- (4) Kitchen
- (5) Entrance
- (6) Loggia
- (7) Public Hallway



Pouillon, 200 colonnes housing



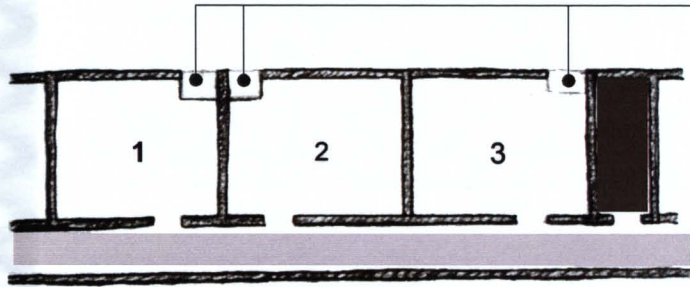
4. Case Studies and Alternatives

Third phase , 1958-1961

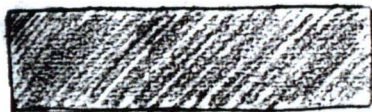
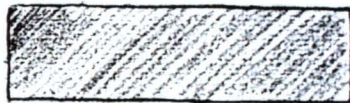
"This quantity dictated that the form of housing be large blocks exclusively [...] the pressing issue was the uncontrollable expansion of bidonvilles" (Celik,1997,p173)

In the beginning of this phase, there was a bit of care about carrying what is left of the traditions in the vertical structure, but later in this phase the only care was about the number of apartments provided.

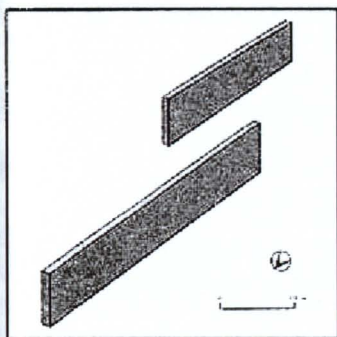
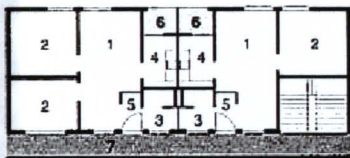
More efficient design was the aim of the architects, even conditions of climate and hygiene were sacrificed for the sake of space and number, therefore, Zeinep Celik says in her book : "Without exception, these buildings acquired the appearance of slums." (Celik, 1997,p176)



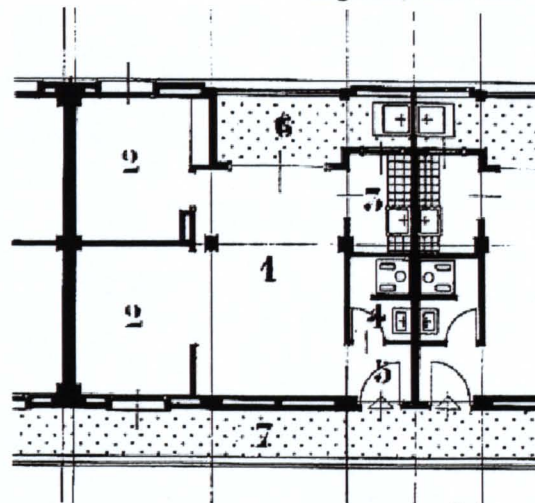
THE BALCONIES are getting even smaller and their function was now merely HANGING THE LAUNDRY TO DRY.



The shared space is restricted to the long corridors linking the apartments to the vertical circulation cores, and it cannot serve any other purpose then mere circulation , due to its scale, location , lighting ,,etc



Gouyon, Bellisent and Regeste, Cite Faizi



27



Marcelle Lathuillere and Nicholas de Martino, Cite Haouch Oulid Adda 1959

There was no attempt to provide public space anymore. The negative space is seen as a left over space , the two rectangular blocks became a scheme, resting on the landscape taking nothing into consideration but themselves.

Cite de Nador 1958



4. Case Studies and Alternatives

2. John Habraken and his Alternative for Mass Housing (MH)

From the way John Habraken calls Mass Housing "(MH)", we can sense what he aims to criticize. He is against what modernism and the age of the machine did to the process of housing design, making it a pre-set functional formula that is mass produced in the urban context. For his argument, Habraken uses two premises that he sees as drawbacks of the mass housing is mass produced, in order to reach his conclusion and to propose an alternative.

His first premise is that Mass Housing negates any sense of individuality in the city and the person is looked at as another number. Since the design only cares to satisfy the basic comfort needs, then as Habraken says, (MH) "[...] reduces the user in essence into a statistic." Further, he is against the distance created between the process of design and the user of the designed house, as he says: "Man does not house himself, he is housed."

His Second premise is that Mass Housing is about rigidity. It is a preset form of dwelling that forces a standardized way of life, where the individual doesn't intervene to put his imprint on his everyday space: "It seeks to provide a comfortable form to be used by people who don't have to lift a finger to influence it, [...], we simply cannot get used to what appears intangible, to what receives no imprint from our hands."

After presenting the previous premises he reaches the conclusion that the age of the machine and of the prefabricated objects, should be beneficial for social housing. The process of production should be used to stress on individuality, not on negating it.

He proposes that the site of construction becomes the site of assembling the various prefabricated objects. Under the supervision of engineers, families and individuals, who have bought the prefabricated objects, assemble their individual houses.

At this point we have to start being critical of the solution provided by Habraken.

Although I agree with the drawbacks that Mass Housing has on the individual life, yet treating housing in an urban context as individual cases is far from being a realistic scenario.

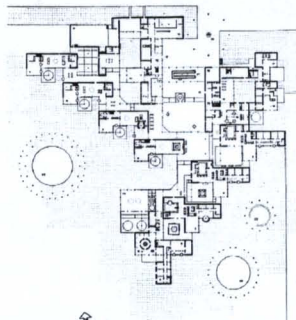
It is just an extreme reaction to an extreme existing reality.

3. Team 10

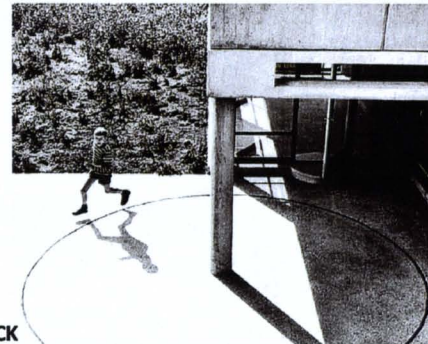
A & P Smithson, Aldo Van Eyck, Jaap Bakema, Giancarlo de Carlo, Ralph Erskine, Georges Candilis and Shadrach Woods were all from the younger generation of CIAM (Congres International d'Architecture Moderne) and later formed the core of 'Team 10'. They were against the effects of Modernism on housing, especially in an urban context and have presented each a new way of dealing with housing that brings back the human and social dimension to it.

"'belonging' is a basic emotional need - its associations are of the simplest order. From belonging and identity comes the enriching sense of neighbourliness. The short narrow street of the slum succeeds where the spacious redevelopment frequently fails."

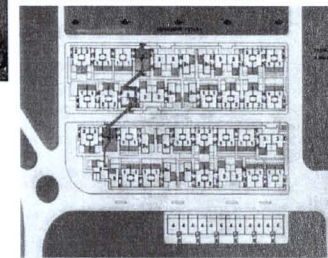
*team 10 response to the CIAM 8 report 1951
(modern architecture, a critical history p.271)*



ORPHANAGE BY ALDO VAN EYCK



MATTEOTTI HOUSING ESTATE
BY GIANCARLO DE CARLO

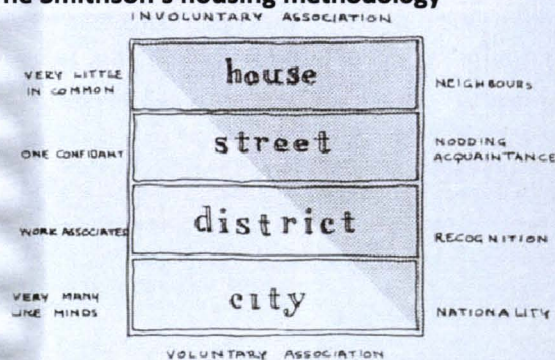


Byker village by Ralf Erskine



- VAN EYCK looks at the activities of intended participants to generate the generic form of a place and consequently builds a counter form.
- RALPH ERSKINE's approach is to study human groups, their relationship to the environment and design a building based on all the information he has gathered.
- DE CARLO is taking a more involved interest in the everyday use of a building and believes in a continual interaction with the user during the design process. De Carlo is concerned with breaking the barriers which exist between architects, builders and clients.
- THE SMITHSONS defined 'New Brutalism' as architecture which responded to the way in which people lived and built.

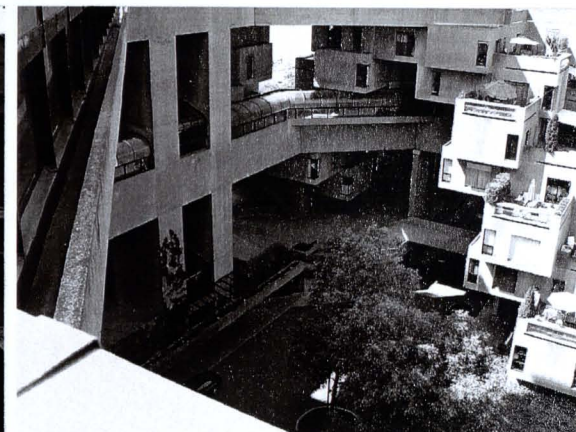
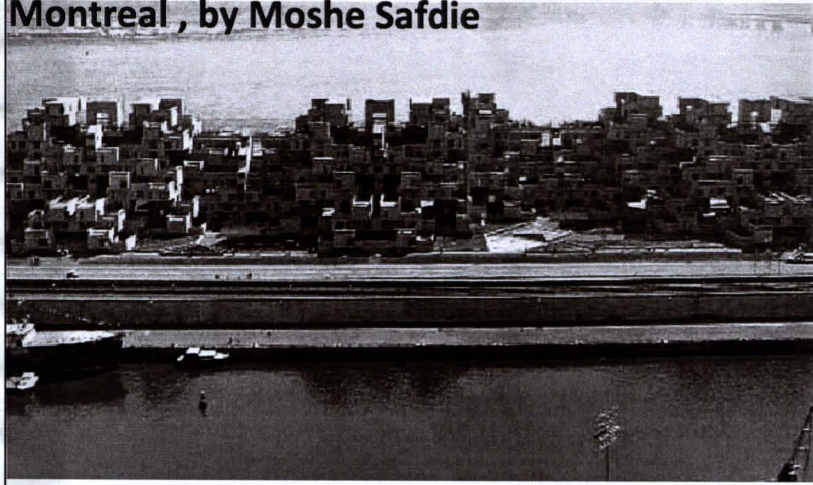
The Smithson's housing methodology



4. Case Studies and Alternatives

4. Contemporary Case Study :Habitat 67

Montreal , by Moshe Safdie

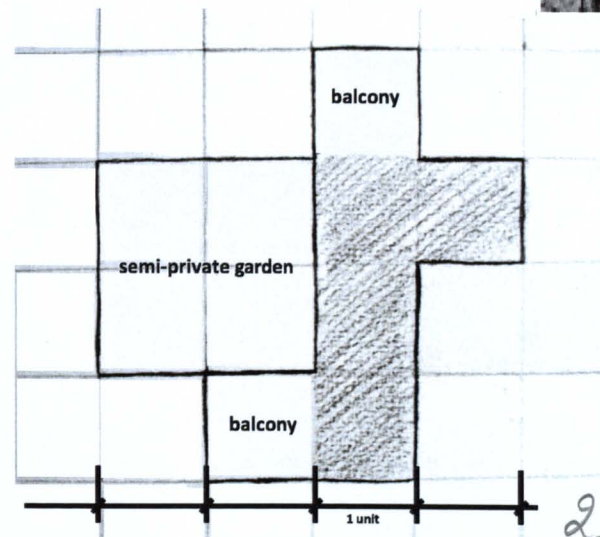
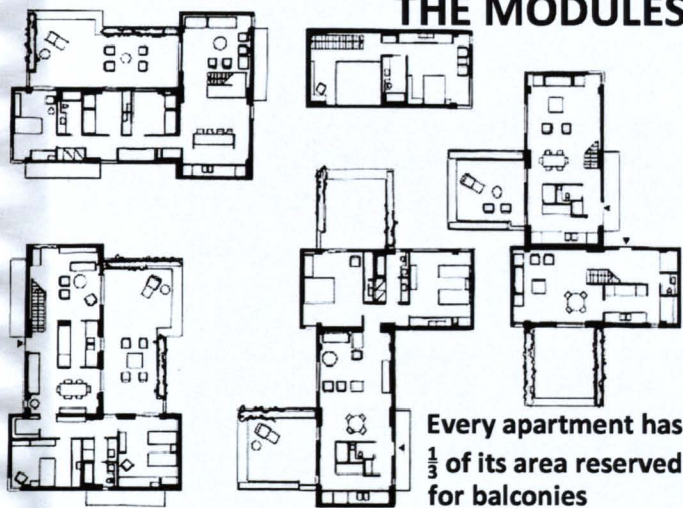


The Use Of the Prefabricated Modules in the Unit, and the stacking process allowed the architect Moshe Safdie to play with the interstice spaces between the residences and to create the communal terraces and alley ways in an irregular way at different levels.

The scale of the terraces, the semi-private gardens and the children playgrounds are multiples of the unit, but not exceeding the area of 2 apartments in a single spot. The Area/person is an average of 15m²/person.

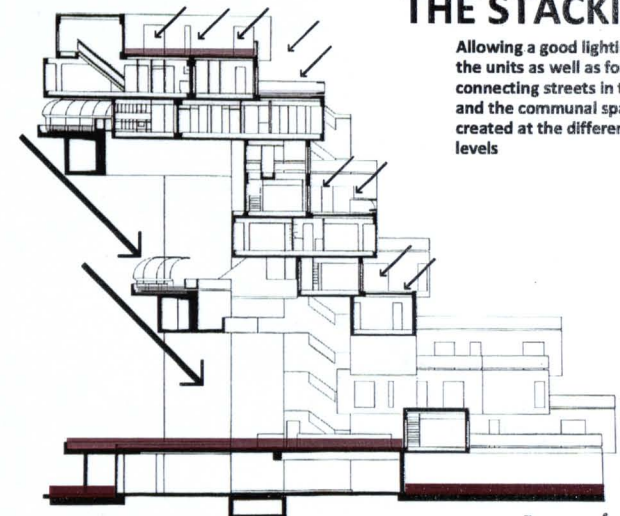


THE MODULES



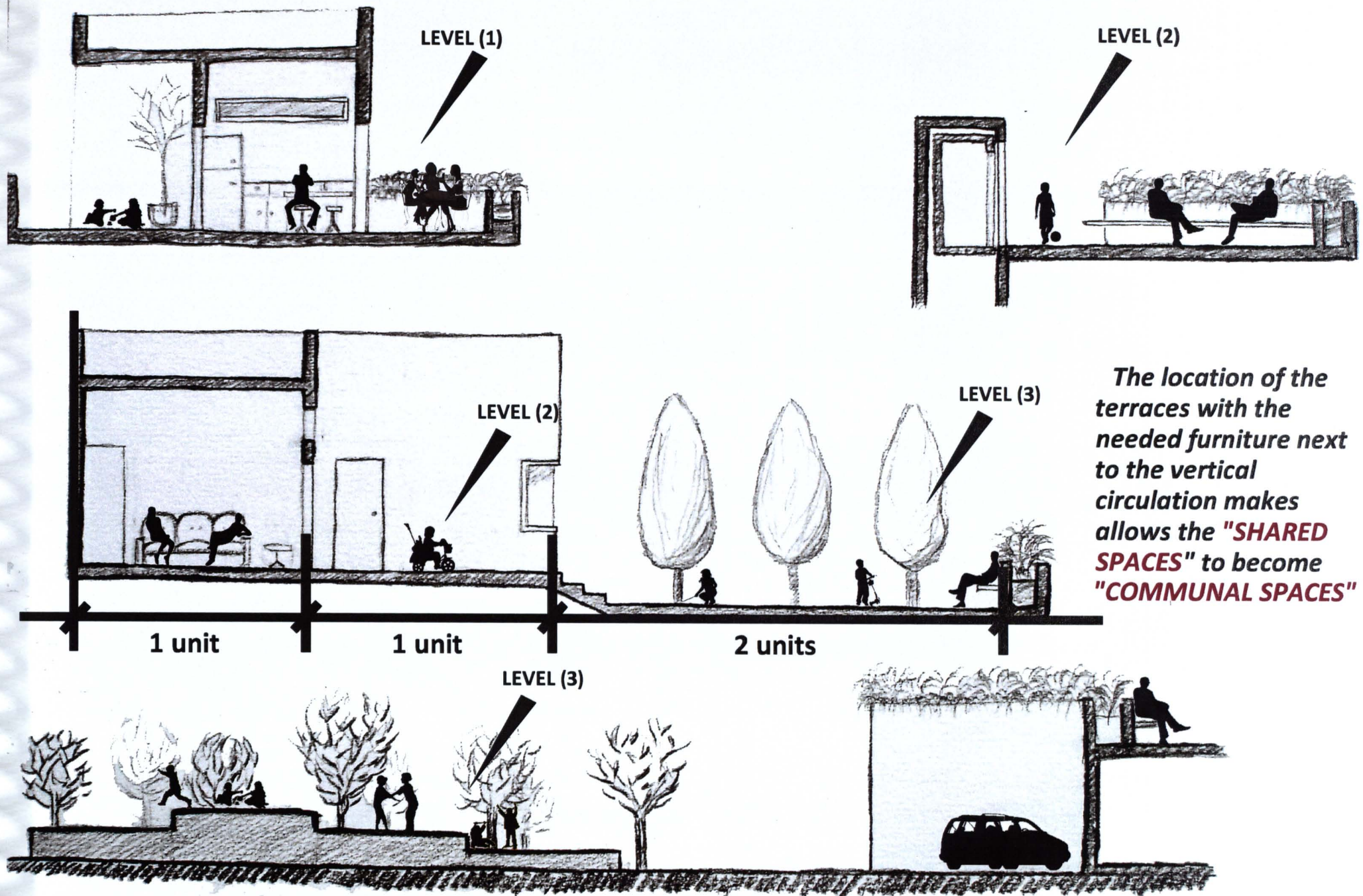
THE STACKING

Allowing a good lighting for the units as well as for the connecting streets in the air and the communal spaces created at the different levels



4. Case Studies and Alternatives

SCALE OF THE COMMUNAL SPACES RELATIVE TO THE UNIT



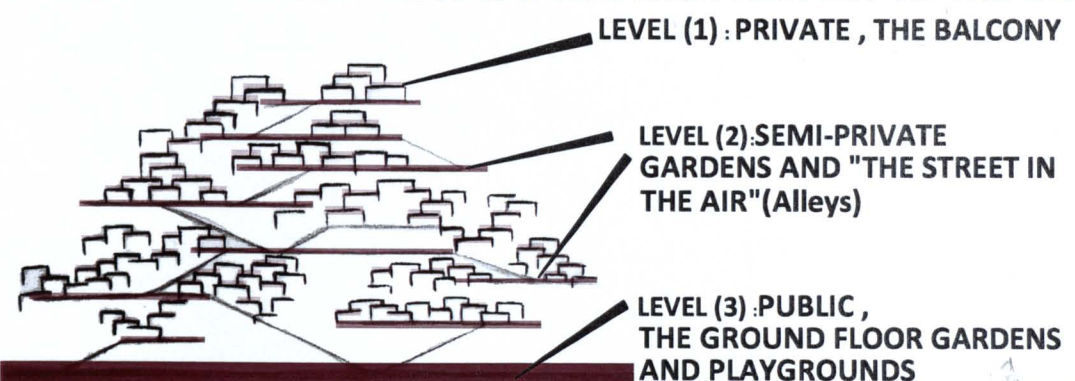
The location of the terraces with the needed furniture next to the vertical circulation makes allows the "SHARED SPACES" to become "COMMUNAL SPACES"

Providing communal space in a vertical structure was successful in many ways in the case of habitat 67. After the Analysis I found that the reason for the success is on many levels:

- The "only residential" program restricts the user groups into the residents, which helps in manipulating privacy .
- The scale of the communal space in proportion to the units (which already are designed in modules based on human scale) ; in addition to its location with respect to the units makes the communal space usable.
- The division of the communal space into 3 different levels each having a different scale , location and use is one successful way to deal with communal space.

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LOCATION OF COMMUNAL SPACE WITH RESPECT TO THE UNIT



LEVEL (1) : PRIVATE , THE BALCONY

LEVEL (2) : SEMI-PRIVATE GARDENS AND "THE STREET IN THE AIR" (Alleys)

LEVEL (3) : PUBLIC , THE GROUND FLOOR GARDENS AND PLAYGROUNDS

4. Case Studies and Alternatives

5. Conclusion

After Analysing various cases of Social Housing , and various opinions and strategies, ranging from the extreme to the extreme , I can formulate the following conclusion points.

Social housing has been through various stages and its design cannot be looked at without its social , economic, political, human , demographic, geographic and industrial factors. The rural-urban migration witnessed in every country in the world at a certain stage, is one crucial factor that reinforced the functional housing formula that I am trying to break. The ever increasing number of city dwellers and the exponential city sprawl , made the apartment buildings the easy housing formula that represents the only way of urban living.

While on the other hand , looking at the architects who saw a problem in the mass housing production process, we see the other end of the spectrum , where people tried to break the formula, by turning the housing process into a human and social process, trying to reinforce ,if not individual identity, group identity at least. Looking at the case of Habitat 67, we can see that communal space can be designed in a vertical structure, and that the urban high density sites do not restrict the apartment building as the one and only solution.

In addition, looking close at the life of the displaced people in Saint-Simon, and the process of spatial production, we see that the apartment building cannot be a responsive scheme to an informal settlement dweller. We see human scale, spatial containment,manipulable degrees of privacy, flexible modelable spaces...that disappear in the housing formula.

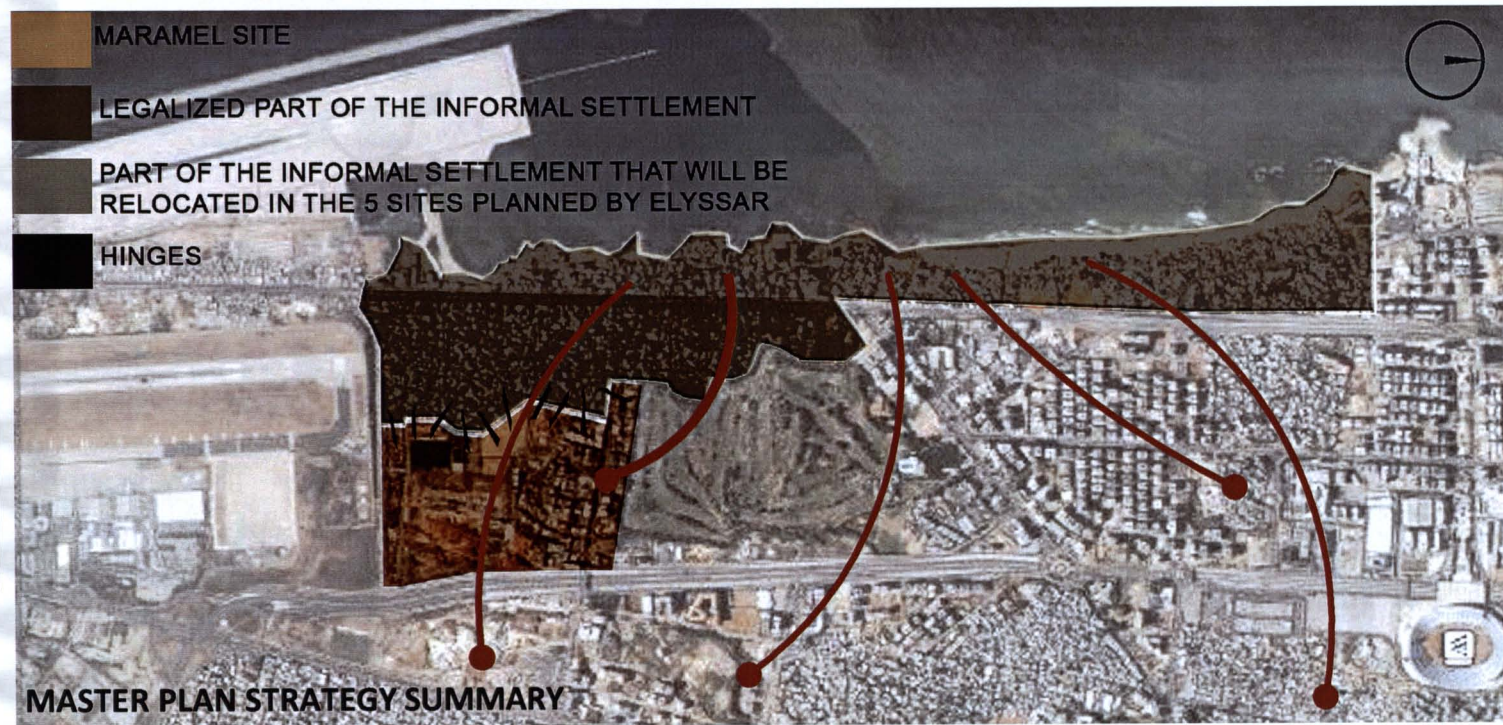
Those are the elements that will be investigated in the proposed alternative housing and that will aim the revival of the social and human layer that are lost in the housing formula and that are indispensable in the life of the informal settlement dweller

5. The Intervention

1. At The Master Plan Level : Legalize, reclame and relocate

As previously mentioned, The informal Settlement as shown in the diagram below (in grey) has 50% of its area right along the beach , and its other half in- land. This fact is not taken into consideration by Elyssar's Master Plan , and the informal settlement is treated as one entity that should be wiped off.

Relocating the part of the Settlement that is in direct contact with the sea is a step that should be done , because the beach is a public property and should be accessible to all citizens. Not to mention the bad conditions that any permanent settlement suffers from if located at this proximity of the sea. A fact that was demonstrated by the study of the Saint-Simon and the problems that they face in winter when the sea expands to reach the limits of the ouzai highway, in addition to the decay of all permanent construction materials used in these weather conditions. On the other hand, the fabric of the in-land part of the informal settlement is more recent and is in a much better condition at the level of infrastructure, in addition to its relatively "livable" distance from the sea.



Thus , the first strategy at the Master Plan Level , would be to acknowledge the difference between the shore part of the Informal Settlement and the in-land part of it limited by the ouzai highway from the west , the Golf Club and the Maramel Site of intervention from the east. The intention is to keep the in-land zone by legalizing ownership in that area, and intervening only at the level of upgrading the infrastructure to create a permanent , legal settlement.

On the other hand, relocate the 50% part that is along the shore into the 5 zones planned by Elyssar. The freed beach should remain a public property that is accessible to all citizens for free.

By doing such, the residential development projects will provide housing for the same number that was accounted for by Elyssar but will eliminate the compensations for the resting 50%, that the agency was planning for.

The Maramel zone is one of the 5 sites that will receive the displaced people of the informal settlement. The intention is to take the surrounding fabric and the existing industrial area on site as givens. The intervention will house the displaced on the one hand and will help boosting the industrial activity by adding more workshops and bringing the working force that is currently on the beach and that shares the same type of work specialty. The intervention will also hinge to the informal settlement through two spots being the existing mosque on one hand and the technical school on the other . The project will strenghten the presence of these two nodes that will be the attraction points at the level of the city and specifically the suburbs. In addition to boosting the industrial specialty that is already a target for all city dwellers who are seeking car repair.



NODES IN THE SITE THAT HINGES IT TO THE SURROUNDING



INSTITUTIONS IN THE SITE AND THE CONTEXT

5. The Intervention

2. At The Marmel Site Level : Hinge

The purpose is to create a central residential space in the heart of the site protected from the noise of the highway and the street that separates the site from the Airport through a layer of mechanical workshops that add to the specialty of the area. Thus the mechanical type of industry that exists on the northern edge of the site (and that is an extension of the ouzai highway) will have a continuation on the eastern and southern edge.

The layer of workshops and the layer of housing will be separated by a green buffer zone. Yet the transition between the layers is gradual since the fabric reads as one in all the site . (Refer to the section to see the transition)

Dividing the types of workshops/commercial into 3 types is the second strategy at the level of the site , and its purpose is to insure the privacy of the internal core.

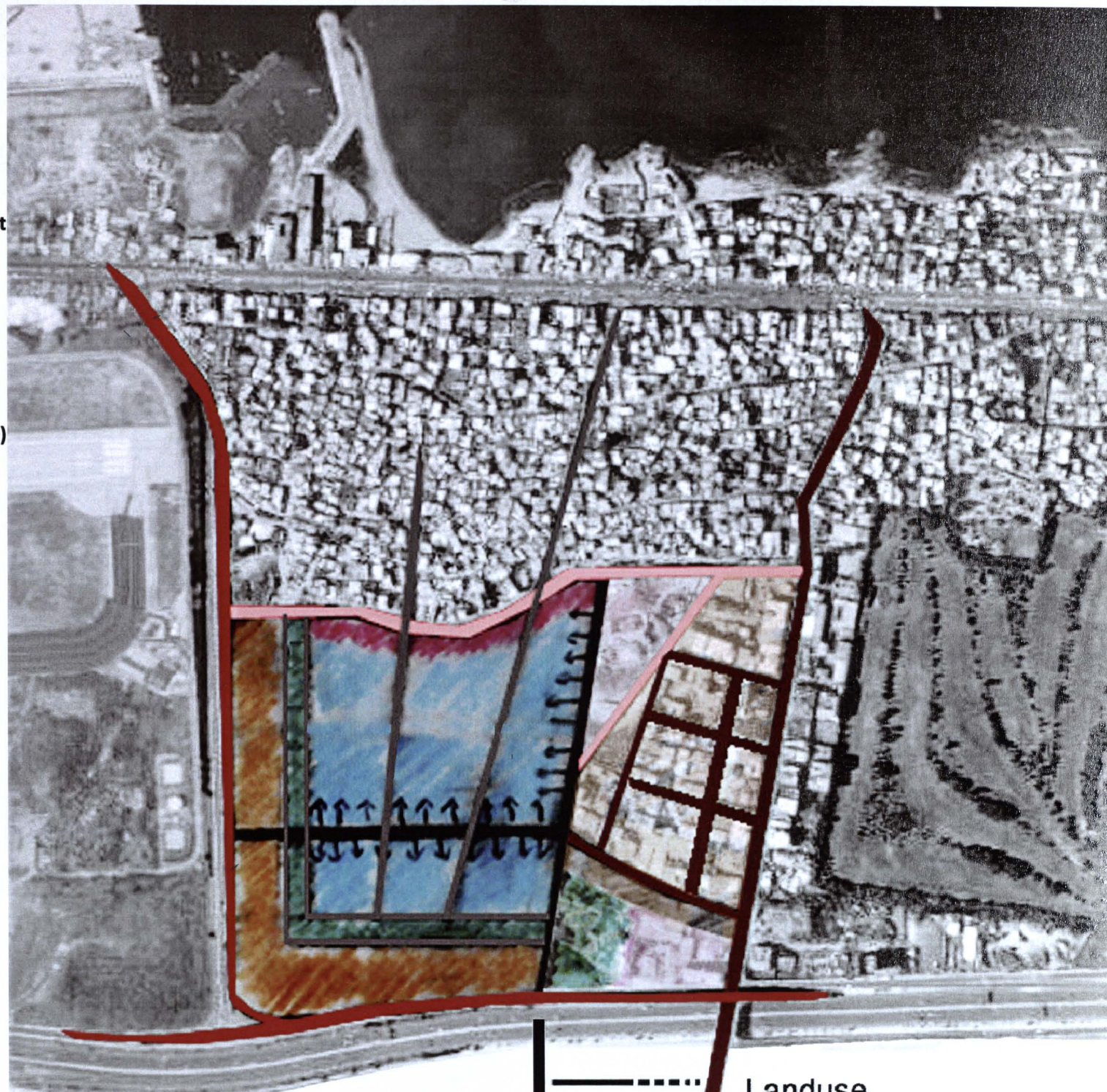
On the western edge , there is a layer of workshops that mirrors the one that exists on the edge of the legalized informal settlement. This type of workshops is used for furniture making and carpentry.

Inside the residential core there are dispersed shops that cater for the everyday needs of the residents , such as groceries, bakeries, barber shops, mini-markets... These are the types of shops that can create communal gatherings without disturbing the privacy of the housing. Thus the three types are :

- a. The Mechanical Workshops
- b. The Carpentry and Furniture Workshops
- c. The Commercial Shops that cater for the everyday needs.

The size of the blocks are almost the same as the ones in the "existing" zone of the diagram.

The housing is crossed at the two third of its length by a vehicular road that allows for street parking and/or underground parking entrance . The other streets that divide the blocks are pedestrian in order to increase the sense of home and security inside the housing area. Two of these pedestrian spines are continuations of narrow streets that exist in the settlement, thus physical hinges are also to be create between the new and the existing settlement.



Landuse

- Residential +Light Industry
- Industrial Workshops
- Residential
- Proposed Green Area

Street Network

- Proposed Vehicular
- Proposed Pedestrian
- ↑↑ Wide Vehicular Allowing Street Parking and Underground Parking Entrance

EXISTING

Landuse

- Existing Institutions
- Existing Industrial Area

Street Network

- Existing Crowded Vehicular
- Existing Highway
- Existing Pedestrian Spine

PROPOSED

5. The Intervention

3. At The Architectural Block : Breaking The Rigid; Visions and Investigations

Scale and Boundaries

Moving to the Architectural scale, the choice of the scale of intervention that will be developed in the following phase of design has to cover an area that shows the various strategies along the site.

The purpose is to show the difference between the three zones of the site being:

- The area at the edge of the Airport Highway.
- The internal area being the private residential womb.
- The area at the edge of the legalized informal settlement that shows the hinge of marmel to the existing fabric

A section at the edge of the existing industrial zone and the existing mosque can illustrate the different zones in the site. Thus the boundaries of this section, shown in the diagram to the right, will be the site to be developed in the following part of Project.

Visions

Overlooking levels allowing visual interaction between people on the various levels will strengthen the relations between people and reinforces the ties among the neighbors. Yet this overlooking does not affect privacy.

The ground level is the most public, yet it allows children of certain age to play because of its pedestrian character. Its public character is due to the location of the commercial activity that caters for the daily needs of the residents. So, even though it is more public, then the upper levels, it does not harm the feeling of containment and security created in the residential zone (the central zone in the section).

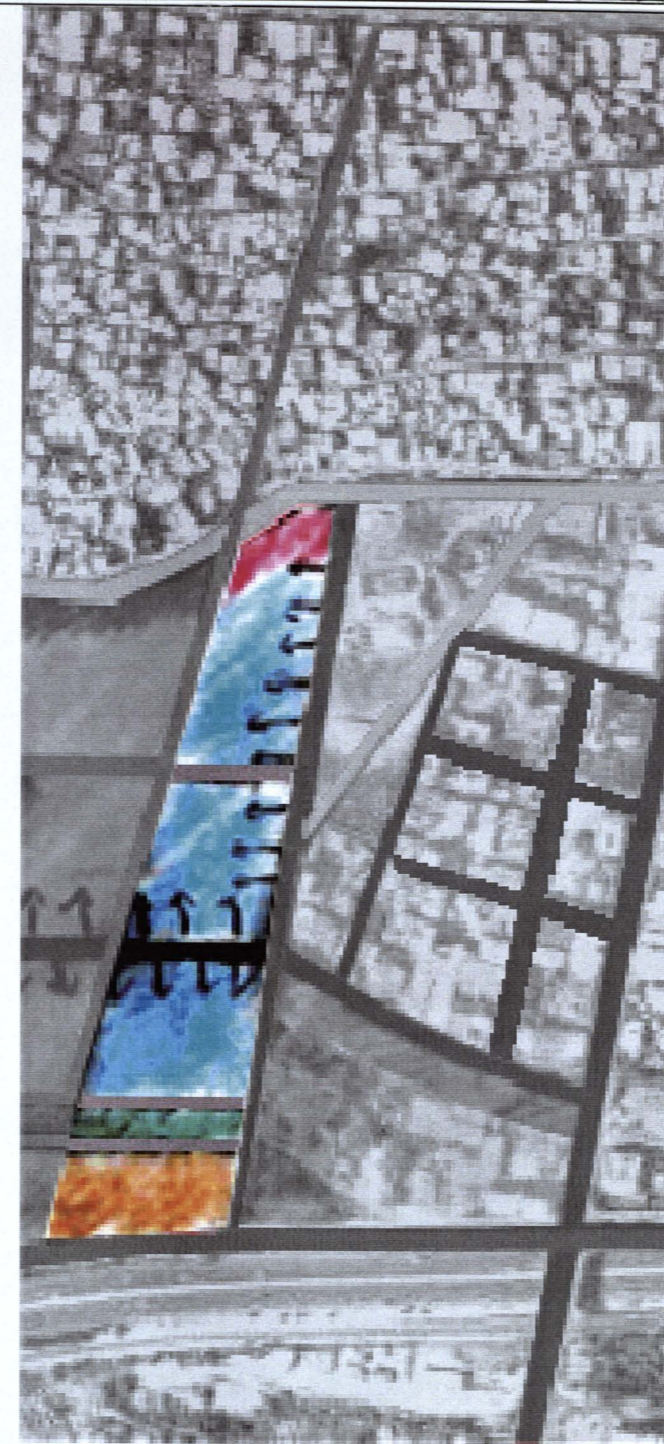
At The first level above ground are platforms that connect the main elements (the residential units) together. These platform are sheltered at some point and open to the air in others. This is where the children that need parents supervision, play. The residents can add children playing structures and toys on these platforms and thus model the space and personalize it the way they prefer.

Parents watch their children playing from the upper two levels. The highest one can be part of the internal space of the residential unit (a balcony) or it can be an external extension at the same level of the residences. The lower level is another platform where the housewives can get together. It can be one level down or half level down the residence level so it is easily accessible from their houses.

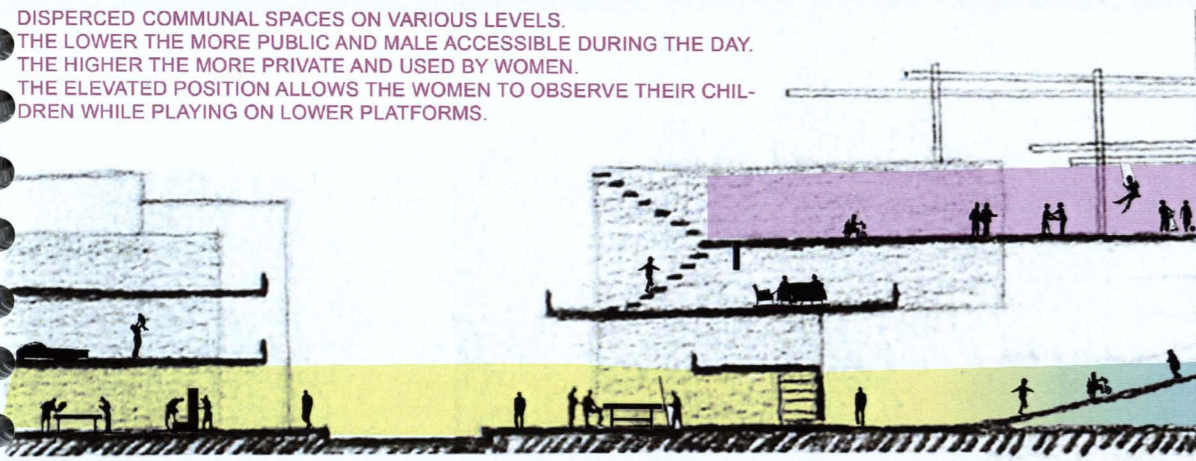
The higher we go the more private we get, yet we still have common spaces at the intersection of the alleyways taking to the units.

The gradual transitions between the three parts of the project (shown by the use of gradient in the section), makes the fabric be perceived and read as one. It is one space where the residents can easily move through pedestrian spines and enjoy the overlooking levels that give a feeling of discovery characteristic of informal settlements.

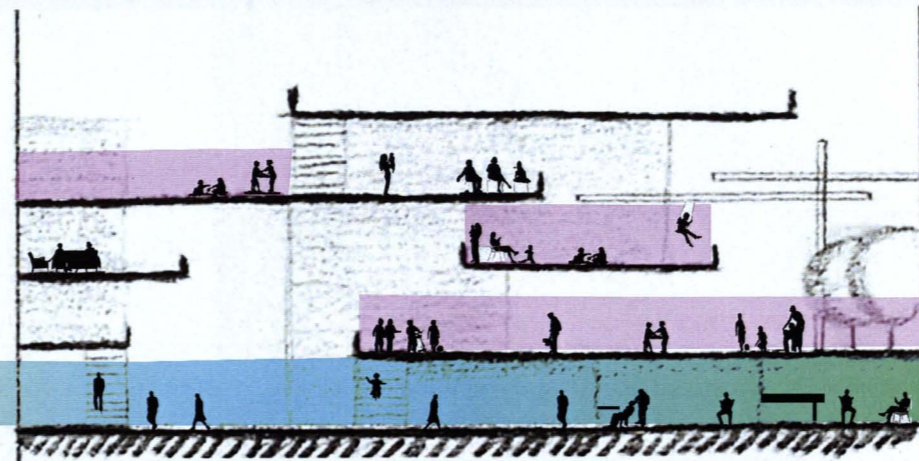
The materials will allow a mix that relates to the effect of patchwork that gives space for individuality through user intervention in specific instances.



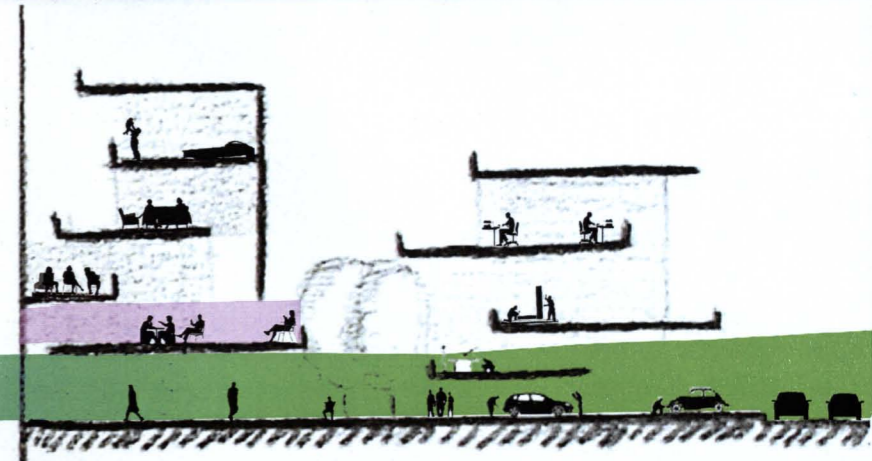
DISPERCED COMMUNAL SPACES ON VARIOUS LEVELS.
THE LOWER THE MORE PUBLIC AND MALE ACCESSIBLE DURING THE DAY.
THE HIGHER THE MORE PRIVATE AND USED BY WOMEN.
THE ELEVATED POSITION ALLOWS THE WOMEN TO OBSERVE THEIR CHILDREN WHILE PLAYING ON LOWER PLATFORMS.



IGHT INDUSTRY SUCH AS CARPENTRY AND FURNITURE HINGES WITH THE INFORMAL SETTLEMENT, THROUGH THE QUIET NARROW STREET AT THE BACK OF THE SITE



INTERNAL CONTINUATION OF THE PUBLIC/COMMERCIAL LAYER.
AT THIS INNER PART THE TYPE OF COMMERCIAL ACTIVITY DOES NOT AFFECT THE PRIVACY OF THE RESIDENCES, AND AT THE SAME TIME CATER FOR THE DAILY NEEDS : BARBER SHOPS, GROCERIES, BUTCHERS, MINI-MARKETS...



PUBLIC/COMMERCIAL LAYER AT THE GROUND FLOOR ON THE HIGHWAY SIDE, BOOSTING THE SPECIALTY OF THE NEIGHBORHOOD IN CAR REPAIR AND MECHANICS WORKSHOPS.

5. The Intervention

Numbers and Areas

The Elyssar Project planned to house 50% of the dwellers of the Ouzai Informal Settlement and to give money compensations for the remaining 50%. Since the new strategy is to legalize the in-land part of the settlement that consists around 50% of its area and since the density is almost the same in all the settlement, we can consider that the five sites will house 50% of the settlement, thus eliminating the compensations.

According to Dr. Mona Harb's article, the illegal settlers are estimated to be 80 000 displaced person. Therefore, the five new housing development projects will house 40 000 person.

If we assume that the five sites will house roughly an equal number of dwellers, then the housing project on the Maramel Site has to account for around 8000 person. On the other hand:

The Total Area of the Maramel site is 152 700 m²

The building law allows for 30% Surface area and an FAR =1.2

Thus the surface area Allowed = 45 810 m²

The Total Built Up Area = 183 240 m²

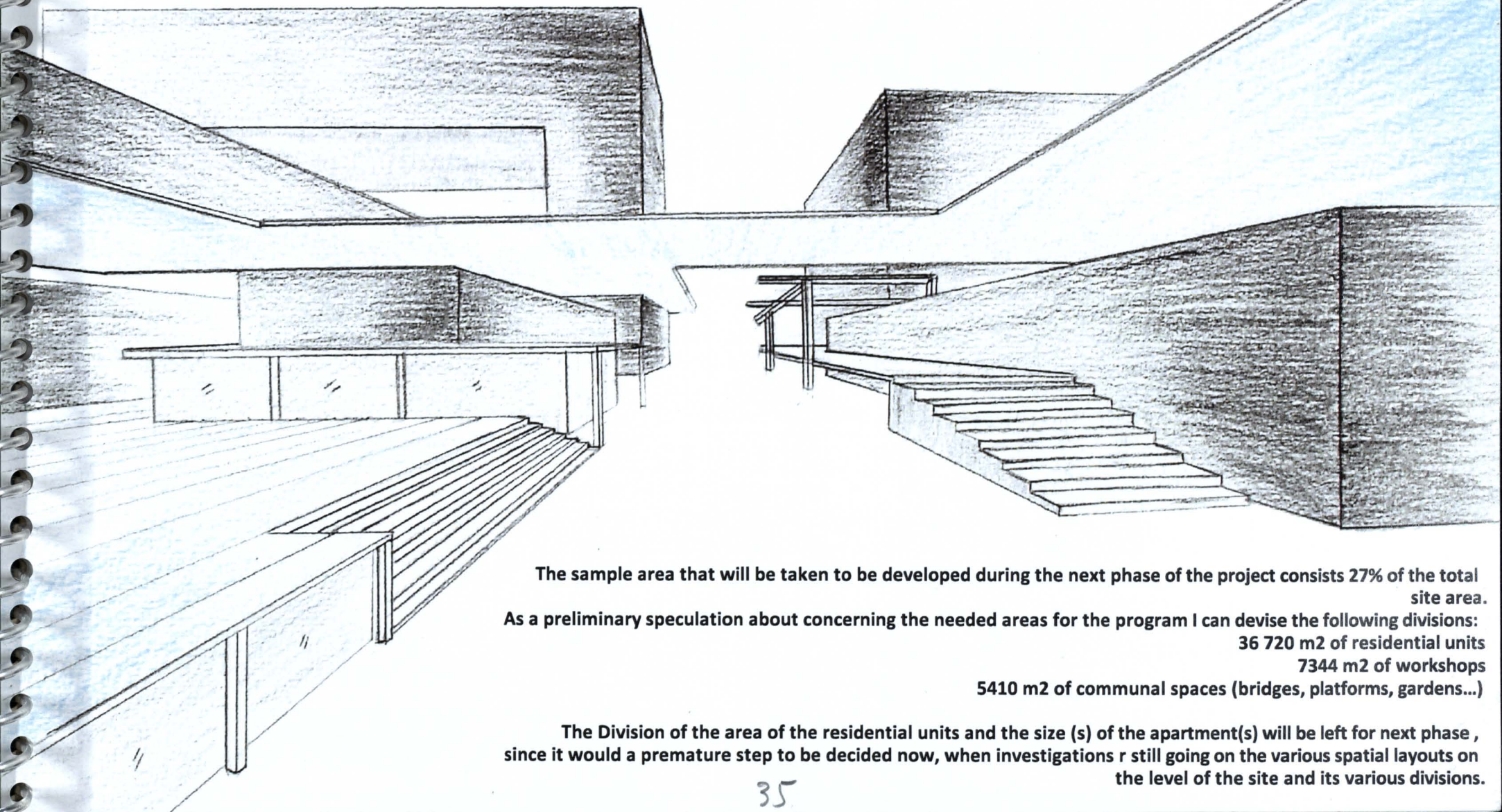
Adding up to a Total of 4 floors (As Shown in the Building laws extension, when building a social housing project on an area that is above 10 000 m², the number of floors is not rpecised

Elyssar provided different areas/person according to the type of apartment being 2 bedrooms, 3 bedrooms or 4 bedrooms. But on Average it provided 20m²/person (Elyssar Booklet, Project Summary). This number is considered a bit larger than what is needed for low-income housing (compared to other projects having 15m²/person), so taking 17m²/person is a good start.

Thus to house 8000 person, the needed residential built up area is = 136 000 m²

If we propose 20% of the residential area (as shown by the master plan) as workshops, we end up having a built up area for workshops of =27 200 m².

The rest of the allowed built up area is used for bridging platforms = 20 040 m².



The sample area that will be taken to be developed during the next phase of the project consists 27% of the total site area.

As a preliminary speculation about concerning the needed areas for the program I can devise the following divisions:

36 720 m² of residential units

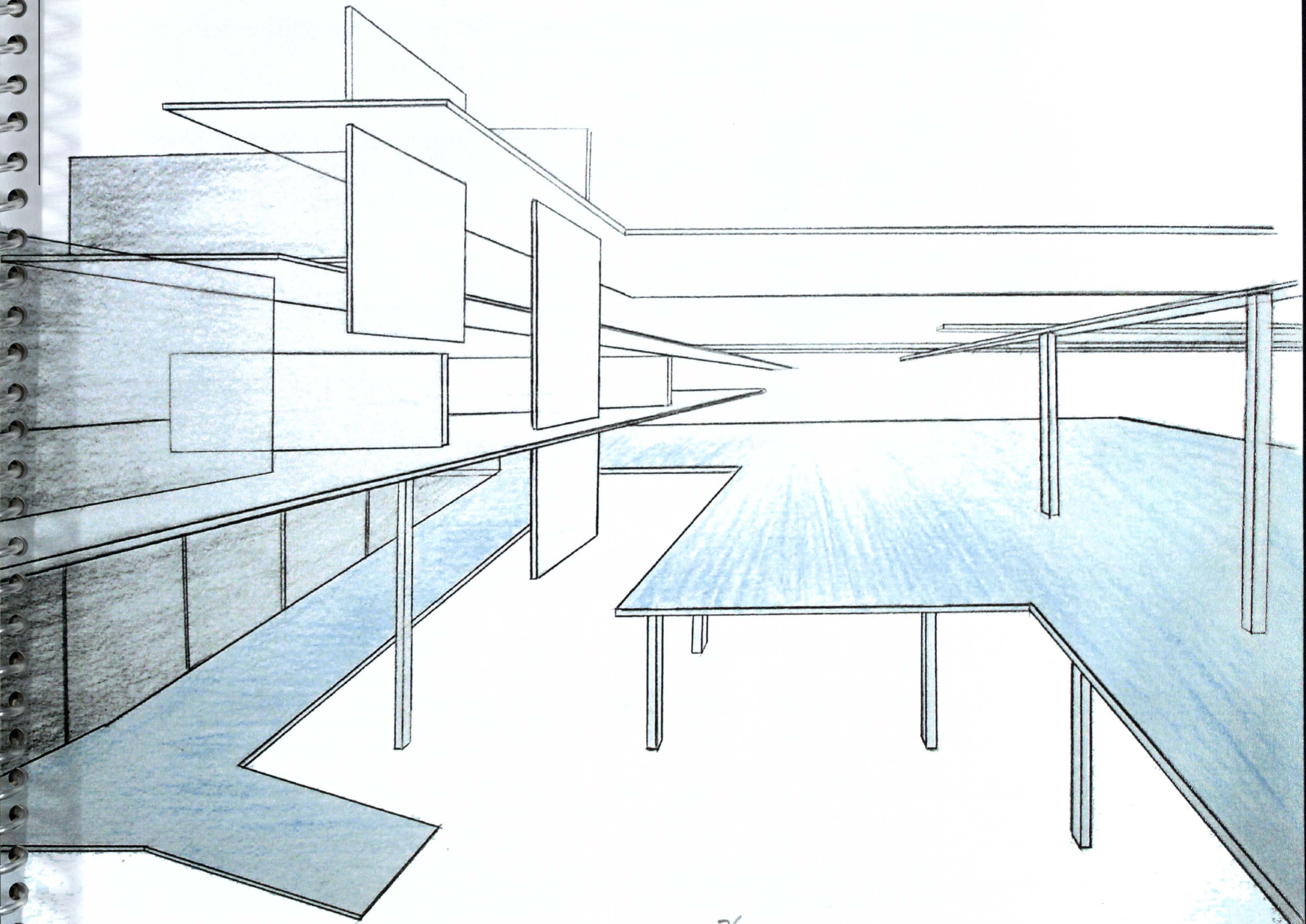
7344 m² of workshops

5410 m² of communal spaces (bridges, platforms, gardens...)

The Division of the area of the residential units and the size (s) of the apartment(s) will be left for next phase, since it would a premature step to be decided now, when investigations r still going on the various spatial layouts on the level of the site and its various divisions.

5.The Intervention

A vision of a scattered space...
A vision of overlapping levels and overlooking platforms...
A vision of a Legal *Informal*...

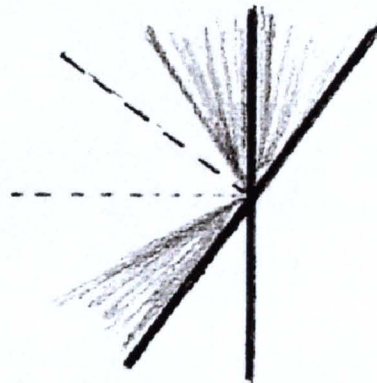


5. The Intervention

SUN DIRECTION 

WIND DIRECTION

COMMON SPACES



TWO FAVORED DIRECTIONS AND ALL POSSIBLE ANLGES BETWEEN THEM

 SHARED SPACES DETERMINING FAMILIAL TERRITORIES



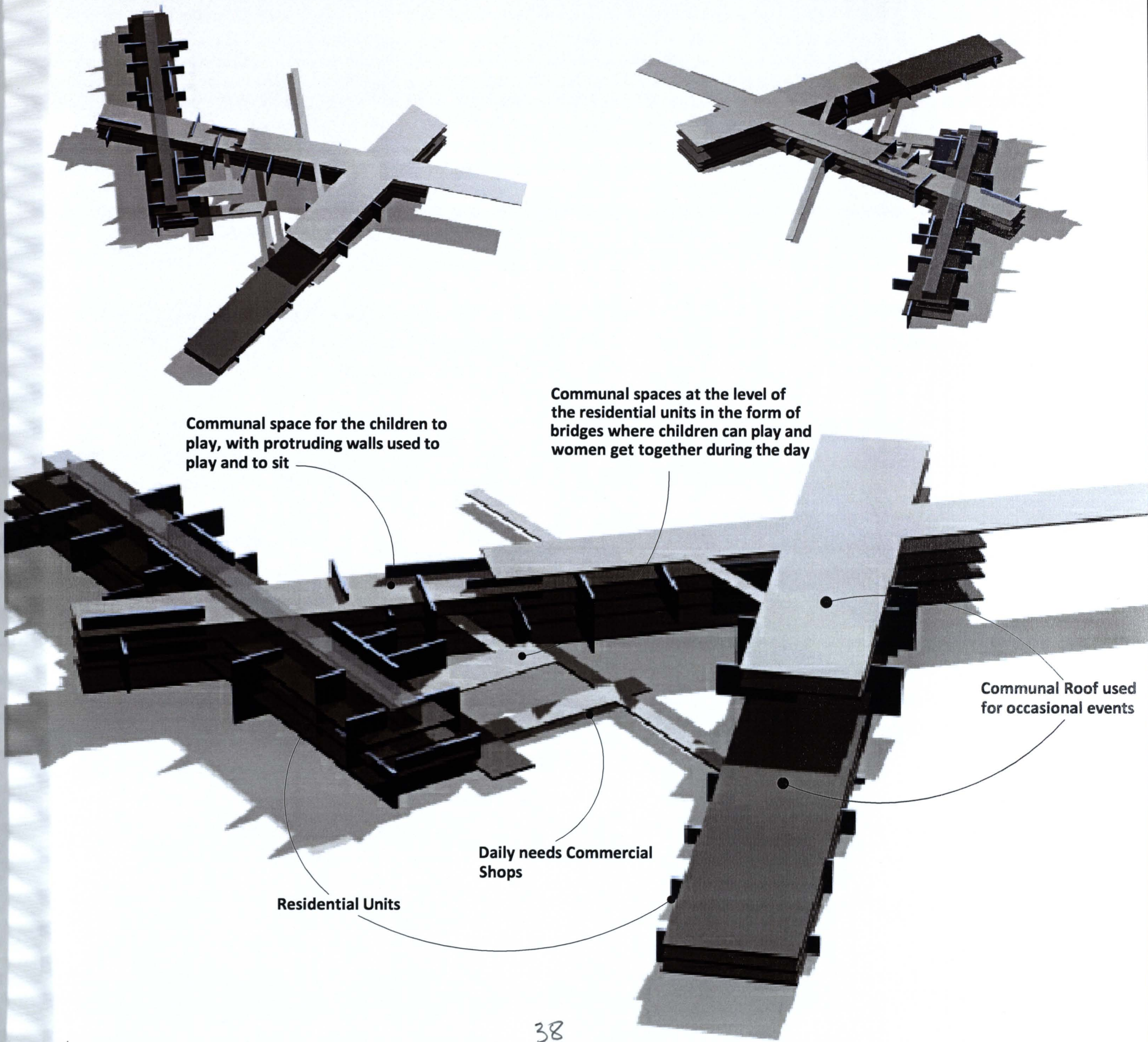
Creating dispersed elements that intersect and form common spaces. The main elements are mainly consisted of the residential units. The points of intersection of these elements form important spots between families and neighbors, they can be meeting rooms , festival zones , everyday or occasional , indoor or outdoor gathering places.

The common spaces defined in between the elements define the communal spaces of individual extended families. These spaces can have multiple functions and sub-elements, ie: they are not empty zones.

The sub-elements can be permanent,temporary, user specific,children playing structures, collective, constructed by the families as individual additions ... etc

The main elements have various relations with the context and their position is defined by the exisiting fabric and the aimed relation to them , in addition to the Sun and Wind Orientation to provide the aimed healthy domestic life.

5. The Intervention



5. The Intervention

Future Insights

After having decided on the primary layout of program on site, that reinforces the essential gesture of hinging the new to the existing, and to create a core of residences mixed with workshops that boost the existing industrial activity, and after having tried a scheme of massing, taking into consideration the sun and wind direction and the sense of neighborhood that is aimed to be achieved, the next step would be to work with the given data (above), to experiment with density, relationships, hinges, angles.... The proposed scheme revolves the role of the extended family in the layout of the spaces and the relation among them. Studying the angles, in relation to the immediate context and the size of the communal space created between the residential units, is a first step in the following agenda.

Also, in parallel to the design, the research process continues, but now focusing more on the domestic life inside the units and how the scheme allows it to extend to the outside. The design also aims to allow the user to intervene in various degrees of permanence in shaping his space, whether it is part of the indoor or of the outdoor. How can the user intervene? Where? And under what conditions? All those questions and many others that help reinforcing the social structure and the feeling of neighborliness and belonging in the proposed housing project will be tackled in depth in the next part of the project.

Bibliography

- Harb, M. 2001, "Urban Governance in Post-War Beirut : Resources, Negotiations and Contestations in the Elyssar Project", in SHAMI S. (dir), *Capital Cities : Ethnographies of Urban Governance in the Middle East*, Toronto : Toronto University Press, p.111-113
- Celik, Z. (1997). *Urban Forms and Colonial Confrontations : Algiers under French Rule*. Berkeley and Los Angeles: University of California Press.
- Harb El-Kak M., "L'espace dans les discours sur l'aménagement de la banlieue-sud: le projet Elissar" in ARNAUD J-L. (dir), *Beyrouth, Grand-Beyrouth, Beyrouth, Cermoc, Cahiers no.16, 1997, p.191-207*
- Fawaz, M., Peillen, I., "The Case of Beirut, Lebanon" 2001
- John Habraken, "Structure, An Alternative for Mass Housing"
- Clerc-Huybrechts, V. (2008). *Les Quartiers Irreguliers de Beyrouth*. Beyrouth, Liban: Institut Francais du Proche-Orient.
- Akar, H. B. (2005). *Displacement, Politics, and Governance: Access to Low Income Housing In a Beirut Suburb*. Massachusetts University of Technology.
- Elyssar Planning Agency Booklet : Project Summary
- Dwelling on the Abode Studio, Fall 2007-2008 American University of Beirut.

