SANTIAGO DE CHILE
Urban Asymmetries Studio

PROTOTYPES OF COLONIZATION
Implementation of urban, architectonic, and social strategies for mutual improvements of neighborhoods
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SANTIAGO DE CHILE - PROTOTYPES OF COLONIZATION
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The house is not only the place, but also the cluster of feelings associated with it.

- The Oxford Dictionary -
As the name suggests, the purpose of Urban Asymmetries is precisely to investigate and understand those urban realities, where unequal, or, better asymmetrical, developments come as result of the implementation of neoliberal policies to urban and architectonic fields.

In these regards the city of Santiago - where my project is located - probably represents one of the most striking examples of development fully driven by private housing market dynamics.

Grasping these dynamics, then, becomes fundamental for developing appropriate strategies of counteraction, where urban and social richness becomes a quality that must be preserved, protected, and even developed.
As regards to me, the last year has been constantly characterized by a continuous investigation, both practical and theoretical, on the role of the house and house planning as concepts that entail a multitude of meanings, consequences, potentialities that I found necessary to deepen.

Since the very beginning of the Studio, while the whole group was investigating the causes and processes that were responsible for the urban growth of the city of Santiago, I remember I was impressed by the ruthless politics of displacement implemented during the 70’s of the 20th century under Pinochet’s regime, which led me to investigate, in my theory thesis the house planning when driven by political agendas.

For what concerns, then, a blind top-down approach in the house planning, driven by an agenda far from the needs of the social fabric of a city, the consequences that the displacement of low income inhabitants occurred in the Chile of Pinochet, are still visible in a city like Santiago is, where the polarization of income groups, services and facilities are still evident nowadays.
Santiago is a city of 6 millions people, and the capital of Chile. And is where our case study is located.

La Victoria is one of the neighborhoods of the PAC municipality. A neighborhood characterized by an incredible history of social struggles and self organization.

La Victoria is the result of a land squatting that took place 52 years ago, whose inhabitants received the land tenure almost immediately, which, by the way, lately preserved them from the policies of displacement implemented by the Pinochet regime towards most of the other settlements located in the most central areas of the city.
Since the very beginning the entire area was planned, built and organized by the members of the community, which led, in my opinion, to one of the most amazing examples of self-governance and social bonds within the community.

The community itself takes care of the public facilities like streets and public green. Social activities are organized in the community center but also in the streets of La Victoria, which become the very public space of the community. Even a broadcasting channel that reaches nearly 1 million people has been settled there.

So there’s an incredibly rich social fabric in La Victoria, as well a space quality which is completely lacking in the surroundings.
Nevertheless it would be a easy mistake to romanticize such a context.
In fact La Victoria is still an area of drug dealing, of domestic violence, of unemployment and, last but not least, of unbearable population density, which is most of the times related precisely with the social cohesion I was referring to, and is precisely one of the problems my project is trying to solve.
A second aspect I’m dealing with in my design is the island effect La Victoria is undergoing. Although it presents no discontinuities of the urban fabric, together with an homogeneous housing typology, La Victoria is highly disconnected by the surroundings, which is the second aspect I’m tackling with my design.

To sum up, there’s a density issue and disconnection issue, which are precisely some of the aspects that the group strategy tackles. Within that strategy, every student developed his or her own proposal.
So, since the analysis brought our group to conclude that building within La Victoria is something that must be extremely limited, in order to cope with these issues and to export, at the same time, the extraordinary qualities - urban and social ones - that, despite all the problems, are acknowledged to La Victoria, my final decision was to choose as a project site a plot in the neighborhood of San Joaquin, some 80 meters far from the northern border of La Victoria.
I made this choice mainly for two reasons: the first one is that San Joaquin, differently from La Victoria, is completely lacking any urban structure, even more: is an area characterized by consistent amounts of neglected open spaces that have become a no-man’s land, so to say. Secondly, because what I’m proposing here is a sort of process of colonization from La Victoria towards San Joaquin, which beside a total absence of a urban fabric, is also lacking that social complexity that is so strong in La Victoria. So, in that sense I believed it was important to choose a project site as close as possible to La Victoria, in order to represent a successful transition case.

Furthermore, to give more strength and coherence to the whole design process I followed the recommendations developed by the students of urbanism for the area of San Joaquin.
This “colonization”, then, passes through the implementation of a housing prototype I developed, which refers back to the main characteristics of La Victoria typology, and at the same time solves practical weaknesses. And that, in principle, could be applied to whole San Joaquin, since it’s a typology that has been designed to fit within the regular morphology that characterize these empty plots.
This aspect of repeatability of the typology I believe becomes even more relevant when the dynamics occurring in the immediate surroundings are taken into account.
In this very period some of the most relevant developments that Santiago has experienced lately, are taking place precisely in these two areas, namely the Bicentenary Park, which includes the development of a consistent amount of housing as well as other facilities, including a shopping mall, and the Park Aguada, which consists in a re-development of the area surrounding the Zanjon de la Aguada, a canal that collects rain water, preventing floods.

The threat for San Joaquin, as well as for La Victoria, of undergoing a process of gentrification must be taken into account, and possibly, counteracted, by improving in advance the urban quality of these two neighborhoods, which is precisely what the aim of my project is.
Now, zooming into the plot I took as a case study, I will go through the process that brought me to the configuration of my design.

As I said I wanted to propose a prototype that could optimize the densification of San Joaquin, preserving, at the same time, that urban fabric made of two, three-storey buildings that give to La Victoria that human scale that is one of its best qualities.

The standard block of La Victoria is about 32 meters large. This because since its origins the area was divided in plots 16 x 8 meters, which means that the width of each block derives by combining two of these plots. My project site is about 34 meters wide, so a pretty similar situation, which was allowing me to divide it in two plots, each one 17 meters deep.

To increase the density, I decided, then, to bring the width of the plot from 8 to 6 meters.
And here comes the first problem: since all the houses of La Victoria are self-built, and have expanded during time, what usually happens in this kind of plots is that the first occupation occurs at the very start of the plot, and each time that a new part is added this happens to the detriment of the old ones: no light and no ventilation are guaranteed anymore, which of course is the main problem I needed to solve.
To avoid improper expansions I decided to occupy already the entire plot, shifting the house to guarantee light and ventilation, forcing eventual expansions vertically.

By doing that I’m introducing another crucial element of my design, or the courtyard.

The courtyard is the result of the mirroring of two units which in this way share the open spaces.

This was meant for two reasons: firstly by doing that, I guarantee more light and ventilation to both the units; secondly I’m introducing an element of transition from the public dimension of the street to a more intimate space, a sort of open-air living room, shared by the families facing it.
> light and ventilation are guaranteed for the whole length
eventual expansions take place vertically
> mirroring the unit
> projecting staircases

shared open space
facing the street
I wanted to introduce this element of permeability - which comes back as well in the squares of the pedestrian path I developed - because I found amazing the way in La Victoria the street becomes the real public space, where kids can throw parties, and adults seat outside their doors, having a talk with neighbors and so on. And that’s also why I put already some elements that stimulate the use of the courtyard in this way: a barbecue, a sink for laundry, a table. Simple elements, that nevertheless prevent that space to become a left over.
Then going back to the whole plot: as I already mentioned the final configuration of my design has been influenced by the urbanists’ strategies, which means that, if in principle my typology is applicable on a regular plot, in this very case I also tested the flexibility of it in the case varying the standard configuration becomes necessary.

So in this very case only part of the project follows the standard configuration, and this because one of the recommendations of Anouk Distelbrink, one of our urbanists, was to create a continuity of commercial activities, that already take place in the market of Galo Gonzalez in La Victoria, up to the north of San Joaquin.
What I did was to translate this continuity in a pedestrian path that generates a series of little squares, where small commercial activities find place, which become a further element of reconnection with La Victoria.

Similarly to the courtyards that I presented previously, these squares are meant to emphasize the dynamics of appropriation of public spaces that already occur in La Victoria.
To do that I selected from a list of commercial activities suggested by Shirin Jaffri, another of our urbanists, those ones that are characterized by daily use functions, to guarantee a certain life taking place during the entire day in these squares, to make it sure that they remain used spaces.
A further element generating social complexity is represented by this building where a small community center and a broadcasting channel are housed. This choice I made is a result of the participatory workshop we had together with the inhabitants of the neighborhoods.

There was a girl living in San Joaquin explaining that in her neighborhood the streets are too dangerous to throw a party out there as people do in La Victoria, and the existing community center makes paying a rent which many of the young people cannot afford just to make a party, while in La Victoria the community center is open to the inhabitants, who can propose activities to use it.
Then I thought a small community center, run by members of La Victoria here will be a further element of revitalizing the area. About the broadcasting channel, as I said, it already exists in La Victoria, but its conditions are really bad.

While we were speaking with the persons in charge they said: “oh, you are architects? Then we tell you what we need and you make us a new broadcasting center...” They were joking probably. Well, I took it seriously.

So here are contained also the new offices for Señal 3, whose staircase, beside housing on the roof the antennas for broadcasting, becomes a landmark that emphasizes the entrance to this public space, while the building itself, together with the main square, will function an open-air cinema that can take place in spring/summer, or as a place for social activities, such parties or concerts.
For what concerns the typologies, as I previously explained, the configuration of the built space responds to practical needs of light and ventilation, but I wanted to generate, within that, different options of inhabitable spaces, according to different needs that different household have. Here are listed the main ones:

1. a two-storey building, where 2 simplex are located, each one of 55 m²
2. the same typology, one simplex built, one to be self-built.
3. a duplex for 10 to 12 people of 96 m²
4. again, the same typology but expandable during time.
5. a three-storey building, which is meant to be the trait d’union between the existing row houses and the new units, where one simplex (55 m²) for 4 to 6 people and one duplex (92 m²) for 9 to 11 people find place
6. two duplex units: 57.4 m² for 4 to 6, and 47.6 m² for 4 people
7. eventually the same configuration but partially to be self-built.
TYPE 1B

- ground floor
- first floor

\{ 1 duplex
TYPE 1B

. ground floor
. first floor

1 duplex
(1 floor built 1 floor to build)
TYPE 3A

- ground floor
  - 1 simplex
- first floor
- second floor
  - 1 duplex
TYPE 4A
- ground floor
- first floor
} 2 duplex
TYPE 4B

- ground floor
- first floor

\{ 2 duplex
(1 floor built 1 floor to build)
If, in general, the technical choices have been made to meet the ambitions of the studio, there is a specific aspect that it becomes crucial to explain more in depth.

The structure of the prototype, in fact, is constituted by masonry walls, while the concrete columns that are visible function as stiffening elements of the former. The choice of structural masonry walls was driven by the will of developing a typology that can expand during time. Something similar has been already experimented in Chile by the firm Elemental. The latter, though, imagines a system that relies on the construction in a very first phase of the whole structural system. In my case, instead, in a first phase only the ground floor could be provided, and an additional floor could be easily self built by rising up the masonry walls of another level. This offers two main advantages: first the initial investment becomes less demanding for the finances of a low income family; secondly the expansions become independent from the adjacent housing.
LAND TRUST

community representatives > land from PAC

CO-OPERATIVE

La Victoria de San Joaquin

I believe for such a project the concept of feasibility becomes crucial, and therefore, the last part of this booklet is focused on cost issues.

There are two main aspects it is important to take into account, or the organizational model and the financing strategy.

The organizational model is based on co-operative principles, which means that the whole process, from the acquisition of the land to the construction of houses will involve the participation of community members.

As a first step, a Trust headed by representatives of La Victoria will acquire the land from the PAC municipality.

After that a co-operative - named La Victoria de San Joaquin - will be the financial entity in charge for the implementation of the project. In order to do that, a training program must be set up among skilled workers of La Victoria, who will be responsible for the construction of the complex.
The entire project, as it now, provides 20 houses, beside 3 shops located at the ground floors of three of the units.

70% of the dwellings will be privately owned by members of the co-operative, while 30% will be rented to eligible members either from La Victoria or San Joaquin.

In case one or more members of the co-operative express the will of selling their dwellings, they are obliged to sell it back either to the co-operative itself or to families that have previously become part of the co-operative. In the case of a process of gentrification of the area, this will prevent that the properties of the co-operative will be sold to private entities according to market prices and, thus, undermining the existence of the co-operative itself.
30% rental > beside offering certain levels of SOCIAL MOBILITY, a monthly income is set aside for MAINTENANCE of co-operative’s facilities/properties.

For what concerns, then, the dwellings and shops that are meant to be rented, the deriving profits will be part of the co-operative capital, which is destinate for the maintenance of the co-operative properties, as well as for the financing of social activities and costs deriving by the use of the community center.

Furthermore, the concept of social housings meant to be rented is something that has a pioneer value, so to say.

In Chile there is no concept of informality, nor of urban poverty, which means that the state provides housing and, thus, nowadays social housing are owned by dwellers, which precludes the latter any social mobility.

Setting up, thus, a certain amount of dwellings for rent is an attempt of reversing this tendency.
In regards to the financing model, this is based on public subsidies allocated by the Ministry of Housing and Urbanism (MINVU) for those families facing conditions of social vulnerability.

In particular, the subsidy that is at the base of my economic strategy is the so-called Housing Solidarity Fund I.
This fund encourages the implementation of micro management of housing projects led by community organizations, by providing to eligible members (minimum 10, maximum 300) financial assistance for covering the costs of either buying a new house or building it.

The subsidy is set in UF, a unit of account indexed to inflation; 1UF has the equivalent value of US$ 41.3 (January 2010).

- to build their own house
- to buy a new/used house

\[
\begin{align*}
10 \text{ UF} & \quad \text{(prior savings)} \\
330 \text{ UF} & \quad \text{(basic subsidy for built houses)} \\
150 \text{ UF} & \quad \text{(construction site)} \\
5 \text{ UF} & \quad \text{(improvement common areas)}
\end{align*}
\]

\[495 \text{ UF} \]

* eligible for other financial support from other MINVU programmes, targeted to improve community facilities and urban setting.
A thorough valuation of the costs was difficult, nevertheless I made a rating which, although partially incomplete, sets as costs of one two-storey unit 263 UF, based on retail prices for materials.

This fact makes realistic to guess that the incompleteness of data should be compensated by lower prices that can be found once that materials are bought directly from the producer in large amounts and, thus, is likely to assume that the costs will remain within the 340 UF, which is the amount set for the construction costs.

CO-OPERATIVE’s houses:

\[
\begin{align*}
340 \text{ UF} \quad &\text{subsides of 14 families combined} \\
155 \text{ UF} &\text{cut down costs by sharing them} \\
&\text{financing apartments/shops to rent} \\
&\text{enforcing social cohesion between members}
\end{align*}
\]
In conclusion I find relevant to highlight the qualities the project aims to achieve.

Present qualities, deriving by the definition of an urban structure for the area, by the implementation of an urbanization of social and functional complexity, by a relieving of density issues, by the implementation of healthy houses. But also future ones deriving, as consequence, from this element of change that is the project itself, compared to the starting condition of La Victoria: a better quality becomes the spur for proper expansions, as well as for a daily preservation of the area.

The aim of the project, then, becomes the attainment of mutual benefits for both the neighborhoods. Regarding San Joaquin, the enrichment of the urban and social fabric by importing skills and complexities from La Victoria. As concerns the latter, the profit derives by creating the conditions for a process of urban and social normalization to take the place of stigmatization and seclusion.
The present design, eventually, should be seen as a starting point for social and architectonic processes to come, since for such projects only the acceptance and appropriation by the community will be the ultimate proof of success.