RE_VALUE and LINKAGE of REGENERATING URBAN VOIDS

Design and Planning strategies to counteract local socio-spatial fragmentation, in the Iquique urban system.
RE_VALUE and LINKAGE of REGENERATING URBAN VOIDS
Design and Planning strategies to counteract local socio-spatial fragmentation, in the Iquique urban system.

STRATEGIC INTEGRATED PLAN FOR PUBLIC SPACE MANAGEMENT

Montserrat A. Pantoja Navarro
Title: RE_VALUE and LINKAGE of REGENERATING URBAN VOIDS
Design and Planning strategies to counteract local socio-spatial fragmentation, in the Iquique urban system.

STRATEGIC INTEGRATED PLAN FOR PUBLIC SPACE MANAGEMENT

Thesis Report
September 2015

Delft University of Technology
Faculty of Architecture
Department of Urbanism
European masters in Urbanism - EMU

Mentors:
Maurice Harteveld, TU Delft
Diego Sepúlveda, TU Delft
Miquel Corominas, Universidad Politécnica de Catalunya

Montserrat A. Pantoja Navarro
montserrat.pantoja@gmail.com
This document represents the report proposal of the thesis proposal performed during the studies in TU Delft as part of the European Master in Urbanism. It contains the initial basis of the focus of my research. It entails the main research questions, along with the proposed methodology and the theoretical and analytical framework which will enable to answer the research questions.
ACKNOWLEDGEMENTS

In particular, I would like to express my appreciation to my mentors Dr. Maurice Harteveld, Dr. Diego Sepúlveda and Miquel Corominas, who encouraged this research with the brilliance of their professional expertise, a patient guidance, enthusiastic critique, constructive insights and passionate support. I’m infinitely grateful for having the opportunity to share this project with you, and learn from professionals I truly admire.

To my friends in practice, who joined me in this formative process as colleagues and teachers, not only building academic knowledge but life lessons, exchanging memories for life. Thank you Juliana Guevara, Gabriela Gubel, Reshu Gupta and Ekaterina Andrusenko.

To my parents Anita Navarro and Jorge Pantoja, everything I am, and everything I can achieve, is because of you. Thank you for being here no matter the distance.

And to my fiance Wieger Bon, who has constantly pushed the perspectives of my thoughts further, for his ongoing support, encouragement and love.
ABSTRACT

The urge of planning and developing bigger and more ‘modern’ cities in developing economies environments, tends to define generic (usually housing) landscapes which start lacking urban qualities as a result of the influence performed by the political/economical situation of the country, creating this illogical rush on filling the urban gaps driven by private developers without addressing the issues related to the liveability of the city, spatial cohesion and the improving of the existing conditions for overall development. As a result of these, understood as symptoms of rapid metropolization processes, connectivity, sustainability and the shaping force embedded in the social elements, and their participation in the city, tend not to be included in the current developing planning operations in our latin american cities.

The market oriented planning currently defining the urban interventions in a Chilean context deals with short term planning based on ‘large project planning’, where those who are not participating in the investment processes are not considered, but equally fall into the shadow of the impacts that this modern interventions can create and the overall understanding of the city as a global system.

The topic of this research is how to deal with the void generation created by these different waves of metropolization (coexisting in different frequencies), it also aims to improve the socio-spatial networking and define platforms of interaction, public space. In order to give more opportunities to the direct stakeholders to decide the city, it’s necessary to improve the communication channels and how the city is read, recognizing the participation of multiple urban actors (or individual parties) and bringing them together to a common ‘Vision’ of their urbanscapes. Is like this how it will be possible to define ‘another kind of city’, that responds to the local aim in a global way, and can reinvent itself through time without losing the original qualities.

By developing a prototype, the void interventions will be tested in different points of the city in order to explore the feasibility and transferability of the typified strategy. These strategies are meant to be tested in the Chilean city of Iquique, one of the two free ports in the country. Although it has a medium city size (185.000 inhabitants), it represents a strong example of how communities can reinvent themselves through the change of economic drive. Proof of this is that even though the city has experienced numerous high economical exchange periods, meaning rapid expansion and subsequently shrinkage in its development processes, it has become nowadays one of the biggest tax free port zones in latin america, against all odds.
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>INTRODUCTION</th>
<th>THEORETICAL FRAMEWORK</th>
<th>METHODOLOGY</th>
<th>DELINEATING THE PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Keywords, Disciplines</td>
<td>24</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>1.1</td>
<td>Motivation</td>
<td>1.2</td>
<td>3.1</td>
<td>4.1</td>
</tr>
<tr>
<td>11</td>
<td>Research Location</td>
<td>15</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td>02</td>
<td>Literature Review</td>
<td>2.2</td>
<td>3.2</td>
<td>4.2</td>
</tr>
<tr>
<td>25</td>
<td>Definitions</td>
<td>26</td>
<td>30</td>
<td>44</td>
</tr>
<tr>
<td>03</td>
<td>Methods</td>
<td>04</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>28</td>
<td>Research Structure</td>
<td>51</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>04</td>
<td>Problem Field</td>
<td>4.4</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>32</td>
<td>Problem Statement</td>
<td>52</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>05</td>
<td>END PRODUCT</td>
<td>5.1</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>54</td>
<td>Value of Voids</td>
<td>58</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>06</td>
<td>RE_LINK THE VOIDS</td>
<td>6.1</td>
<td>6.2</td>
<td>6.3</td>
</tr>
<tr>
<td>110</td>
<td>Proposal Strategy</td>
<td>111</td>
<td>116</td>
<td>117</td>
</tr>
<tr>
<td>07</td>
<td>CONCLUSIONS</td>
<td>7.1</td>
<td>7.2</td>
<td>7.3</td>
</tr>
<tr>
<td>148</td>
<td>Reflections and Limitations</td>
<td>149</td>
<td>151</td>
<td>152</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>Bibliography</td>
<td>152</td>
<td>152</td>
<td>152</td>
</tr>
</tbody>
</table>
KEYWORDS

DISCIPLINES
Spatial Design, City Planning, Strategic Design, Spatial Strategy, Strategic Planning.
1.1 MOTIVATION

According to Albrechts (2010), nowadays societies are confronted with multiple forms of crisis - environmental, energetic, economical - which are constantly testing and changing the demands and challenges settings for planning. Current times also tell the story about cities with diverse needs, intrinsically related to the functioning of their own complex systems, is this how most societies are at the same time experiencing varied planning issues: the growing complexity, increasing concern about the rapid and, apparently, uneven development, the problems of fragmentation, ageing population, the growing awareness about environmental issues, an overall resilient capacity of the communities, imminent crisis dealing situations, the long-standing quest for better coordination, the emphasis on long-term thinking and the aim to return to a more realistic and effective planning method; and wonder how to supply the insufficient functions with copied models. Which at the time they try to be implemented, reveal an important inconsistency: the language used to achieve planning agreements. This miscommunication issue relies in the non effective methods to transfer knowledge or build up from similar experiences.

The urge of planning and developing bigger and more ‘modern’ cities, in developing economies, creates a generic landscape which starts lacking of urban qualities. Relies on the political/economical situation of the country, creates this illogical rush on filling the urban gaps driven by private developers without addressing the issues that keep the city ‘alive’, like spatial cohesion and the improving of the existing condition for an overall development, this are symptoms of rapid metropolization. Connectivity, sustainability and the shaping force embedded in the social elements, and their participation, tend not to be included in the current developing operability of our Latin American cities. As an example of this, in Chile the economical boom didn’t considered/expected the great metropolitam growth that took place and when the crisis-financial and environmental- landed, it resulted in a strong contradiction between size and spatial quality, fragmenting the urban fabrics in as different ways as diverse localities. Networks and scales of diverse affected environments are affected, is in this phenomena that define this work main issue: establishment of the gaps.

The topic that is going to be explored in this research is highly relevant considering current urban trends on the urban transformation, referring particular to the expansion of metropolitan networks, the shrinkage of some local urban fabrics and land uses and the reshape of their complex systems due to multiple causes and contrasted drivers. Processes that revealed the consequences of miscommunication between different and concomitant urban dynamics and actors. The influence of multiple variables into the city shaping forces is constantly resulting in the lost of meaning for the urban space in particular for the inhabitation of the weakest group on the society.

This situation asks for recognition of a more complex and diverse demands in order to counteracts the current effects that determine the complete disappearance of some inhabitable space (and some of the diverse daily networks).

As a personal conviction, I can argue that the city emerges in the shared spaces at its -public space-, where people meet and where the communities interacts, and the value of the spatial quality of these ‘places’ is my first motivation to deal with this topic.

The prototype case study is the city of Iquique, north of Chile, where I was born and raised. I define a methodological approach to phase this urban system challenge as a research-design articulated as a prototype because I consider important to be able to simplify the understanding of the lessons learned within a review of strategic planning (Albrechts) in order to be able to include the diverse urban actors demands so to transfer the knowledge on correlated urban systems and hint the local planning instruments on efficient and local driven development.

The current situation presents an operability and instrumentalization that always goes behind the real action, as well not able to respond to crisis situations -natural disaster, diverse social needs, the current economical crisis, etc.-, and due to the diverse individual meanings and demands on the urban places that if not consider its create a multiple urban gaps that provide temporal solutions to specific individuals - demands and practices that do not considering the urban system as a whole-.

An specific example of this could be a trend ob-
served in the last years: The city centre of Iquique represents an area of high cultural/historical value. On one hand, this classification becomes the main reason to be protected by law - as a historical neighbourhood -, however the law on preservation of these buildings restricts changes or improvements if it’s not done by the hand of specialists in restoration, associated paperwork and certified studies, which of course represent an important restriction and responsibility for the owners of these buildings -which in most of the cases are inherited properties. Meaning in the practice a constrain on the possibilities to owner; On the other hand the city centre is where the main services activities are concentrated, thus there’s a high demand on parking spaces in a traditional medium scale car oriented system and Iquique is, resulted from the changes on an emerging metropolitan system; is this how this two variables clash due to the ‘interesting’ high prices of the land located in the historical grid: the historical properties tend to be reached by accidental fire, being replaced by a parking lot which immediately represents a direct and more profitable income for the owner and in other cases, based on new strategic action driven by large urban projects results on a complete replacement of historical blocks by new constructions with new functions which do not respond neither to the overall historical meaning of the place or consider the diverse users of a highly meaningful place for the whole city inhabitants.

This phenomena define the main aim for this research, to search for a better advisor system for urban planning than can counteracts the market speculation, defining validations on the common vision for the city, where all the stakeholders can dialogue in a common language, find quality solutions for the overall locality; and finally to be able to show/understand the opportunity found in the urban void, by considering the diverse demands on the urban tissue, giving a clear spatial form to the search for better socio spatial interactions (M. Carmona 2010). The proposal looks for a process to re-link the quality urban tissue within the diverse demand of the users and shows integrated processes at any physical intervention. So the outcome is to offer an operational platform to discuss the future of the current models of urbanization in a more transparent, integrated and effective way.
1.2 RESEARCH LOCATION: IQUIQUE

Iquique, is the name of a port city and commune in the north of Chile, the city we are going to research corresponds to the capital of both, the Iquique Province and Tarapacá Region. It lies on the Pacific coast, the linear public space by excellence in Chile, with a population of around 180,500 inhabitants (2012 census).

The city’s raises importance and performs the first important developments during the heyday of the saltpetre mining industry in Atacama Desert in the 19th century, as the closest ‘big city’ from where it was possible to get supplies, with an available port and the perfect housing destination for saltpetre offices owners, consolidating a city image as an strategically located high class commercial port with the characteristic of an English prefabricated wooden town (system imported by sea as a fast quality settlement method).

The saltpetre industry, at his best moments, with a high international overseas exchange and by the hand of the improvement of the regional railway system defined a second expansion period for the city, where the arrival of multiple (and different) inhabitants defined the appearance of the first local neighbourhoods and with it the trace of the first representative areas (and meaningful places) of the diverse communities present in that time, what could be understood as the first attempt to place different social realities (and qualities) within the same urban fabric.

When the saltpetre business stopped (1960s), the population of workers living in the desert moved to the big cities looking for better job opportunities, defining the third layer of urban growth, in a more humble built expression, they tried to maintain the image of the city, however their different cultural background placed them in new specialized neighbourhoods added to the first more homogeneous ones. Here is when we observe the first appearance of socially segregated developments and with it the first linkage issues respecting to the urban fabric.

When the city was declared a free port, started the fourth big expansion of the urban fabric and a very intense international exchange due to the commercial activities developed in the area and the consequences of the big amount of population arriving in order to perform activities related to it (the need for more housing options, the big labour offer and subsequently the possibility of better life standards due to the price advantages of having an international import-export link on a 20 minutes transport distance). Until current days, there are only two free ports in Chile, which sets Iquique in an exclusive position about port economies in the country, advantage that the city has used to the maximum considering that now Iquique has one of the largest duty-free commercial port centres of South America -Zona Franca of Iquique-, traditionally called Zofri, which’s extension is about 2.5 square kilometres of storage, shopping areas and restaurants.
The fifth layer of growth comes drastically after the implementation of the Latin American scale commercial port facilities, activity that brings big development to the city, a rapid expansion due to the high immigration of workers from other parts of the country and the world in order to install companies and to perform working functions in the area. This rapid expansion defined a new urban extension trend, where vast areas were filled in short time frames, finally creating new centralities (new neighbourhood, sectors, centres) able to supply with services and basic infrastructure to the new settlements.

This trend was easily transferred to the neighbour settlement of Alto Hospicio, due to the capacity it had of creating new urban patches with noticeable speed, and the overall demand within the city for a low income housing alternative meant to host the new population looking for a better future. Is because of this, that the city of Alto Hospicio changes drastically from an agricultural piece of land, in general owned by (regional) rural population towards a small dormitory town on the service of Iquique.
EVOLUTION OF IQUIQUE’S HISTORICAL CITY CENTRE

Source: Adaptation R. Mancilla book on Iquique’s historical development
HISTORICAL EVOLUTION OF IQUIQUE

Source: Created by Author
In addition to the urban shaping performed by the demographic changes in the city, Iquique has historically been exposed to multiple catastrophic situations, the most relevant related to natural disasters (earthquakes and tsunamis) and the always presence of accidental fires, which have forced the tissues to reinterpret itself and replace-transfer-recycle its public spaces and meanings.

In the case of earthquake strikes, we can mention as relevant the 1868 Arica earthquake, the 1877 Iquique earthquake, and the 2005 Tarapacá earthquake, the June 13 of 2005 earthquake, and the last 2 earthquakes on April 1st 2014; this, plus the overall crisis that might influence a normal city development/growth tells the story of how a city can take the adversity and use it to transform and reinvent itself, which in my opinion is done by the most valuable instrument they have: Human capital.
CHAPTER 02 THEORETICAL FRAMEWORK

2.1 Literature Review

2.2 Definitions

STRATEGIC PLANNING REVISITED: A FUTURES PERSPECTIVE

Marie Conway
Association of University Administrators Conference
April 2007
before taking a step forward into the definition of alternatives for this reality. It is important to stop in the definition (or redefinition) of the concepts that will be addressed in this research in order to achieve a logical, feasible and integrated locally relevant proposal.

In the search for common knowledge, diverse literature was consulted, placing Iquique (Chile) in a new theoretical framework that gathers the theories from the American city (Trancik, 1986), the Latin school in Italy (Paola Vigano on Porosity) and Albrechts theory on participatory development, looking for a theory that can considers the local knowledge (street smarts and participatory development) as an active knowledge tool.

2.1 LITERATURE REVIEW

- Albrechts, L., 2010 How to embrace creativity, diversity and sustainability in spatial planning: Strategic Planning Revisited
- Viganó P., On Porosity. IUAV Venecia
- Trancik R., 1986. Finding the Lost Space
- Urhahn G., 2011. Spontaneous City
2.2 Definitions

Before elaborating further in the construction of the research process, it is important to define the input of some concepts, that will frame the further understanding of the proposed analysis approach.

PUBLIC SPACE

To define this point is important to mention that not all open spaces are public spaces. The theory we are addressing for this definition deals primarily with the design and management of public space and the way public places are experienced and used. Is like this how we define:

.. Public space includes the totality of spaces used freely on a day-to-day basis by the general public .. (Carmona, 2003)

Complementing the previous with urban theory, we add another dimension to the definition in terms of design:
- Public Space by Use. Based on how the community regards and gives meaning to the open spaces.
- Public Space by Ownership. In this case the literature can refer to the subject as ‘collective space’, meaning it has a public use but is privately owned, so the decisions made on it attend to the aims of the proprietor.

At this stage we reflect on the questions about What is an attractive public space? What are the potentials of these spaces?

PORE

According to Paola Vigano’s Theory (2006), Porosity emerges at the conclusion of an economic or social cycle, followed by a breakage of the ways of using the spaces and enables to rethink the city. This theory also classifies the porosity, according to the causes generating it, into two great families:

- Porosity of Fracture. Refers to the porous nature of the material, the result of events that are traumatic and affect the capacity to absorb the use and eventually changes it. This qualification could be applied in the analysis of a terrain in natural disaster situation.
- Porosity of Material. This one focuses on the structure of the material, the way it has been designed and its intrinsic capacity of being porous, making it available to host different and individual urban rhythms. An example of this can be the characteristic urban tissue of a sector or a city (and its principles on how to consider the land use).

THE LOST SPACE

For Roger Trancik (1986), the appearance of empty points in the urban fabric has a negative connotation, he defines the lost space as the leftovers of an unstructured landscape, away from the flow of pedestrian activity in the city. A no man’s land, abandoned, without maintenance or use.

This premise can be easily applied in Iquique’s context. However Trancik also addresses that this spaces are undesirable areas, and this sets a distance between the theory and the practice, due to the ongoing intention in the city (by its social component) of recovering these lost patches.

By saying this, we establish that the lost spaces in the city of Iquique are unattended socio-spatial fragments of urban fabric, aiming for recovering intervention.
The voids were originally understood from Roger Trancik’s theory about ‘Lost Space’, however the voids we are mapping and observing in this research by design process are understood as neglected spaces from a better future perspective. We acknowledge the existence of these lost spaces, but we regard them as platforms for strategic interventions, an opportunity for re-qualification of the socio-spatial values in order to paraphrase (or guide) the vision on future developments.

‘.. underused and fragmented public urban platforms with potential for transforming development ..’

Thus, this research, by defining a characterizing the voids, also looks to define what and how are these platforms, and what is potentially rescuable from their particular and general condition.

In order to incorporate within the planning scope the community commitment, and thus the perseverance of the intervention in time, is that we incorporate the concept of Integrated Spatial planning (Albrechts, 2010), under the premise of giving opportunity to the actors not currently considered in the decision making to be acknowledged and relevant.

The implementation of this concept into the frame of the strategy making will allow to expand the use, and scope of the local city planning strategy dealing with fragmented public space and voids.

Trancik’s scheme on how american cities transformed the relation between buildings and public space. The old city had a system, the current one has so much space in between it looses the relation between the parts.
CHAPTER 03  METHODOLOGY

3.1  Methods

3.2  Research Structure
3.1 METHODS

The methods involved in this thesis are going to be structured under a parallel system between theory and design, both disciplines will be treated simultaneously and inform each other during the process, delivering analysis results that will be regarded as the guide design principles. This system eventually will provide a flexible analysis base that will frame the scope of the research.

Theoretical questions will be answered by literature review, meanwhile the design questions will be answered by in-situ testing and best-practice cases comparisons and analysis. A small review on this follows:

• **Methods for literature study**: The methods used in order to build the theoretical framework will be: Literature review, and the study of already existent design proposals/projects, looking for common ground and strategies to answer the questions embedded in this research.

  The literature referred will reveal possible complementary topics to address, however it will emphasize in the concepts of Urban Regeneration, Strategic Design, Integrating planning processes, Strategic planning revisited, Cohesive Urban Space, Participatory Development, Socio-Spatial Fragmentation, Urban Porosity.

• **Methods for the design**: Design methods will be used to test and underpin the input from theory review and the design principles from best-practice study cases into the research context. By mapping, sketching and graphic analysis will isolate the understanding of the local systems and reveal an urban diagnose -in the case of Iquique-, and will deliver form concepts able to test the cohesion and multi-scale connection of the elements of the plan -in the case study stage-.

• **Methods for the analysis**: The analysis tools chosen and suggested by the mentors, will be used at this stage to trace and overall exchange and evaluation system, which will make possible to interlink the different variables involved in the theoretical/design project. The analysis stage is regarded as pre-conclusion stops that will deliver the final components for the definition of a prototype: Translation of the analysis into a spatial intervention.

  At this stage there will be performed spatial analysis in order to underpin what are the variables that define the quality public spaces and the ‘type’ models to be addressed in the void case studies; complementary, a Network analysis will be developed in order to identify how the influence of the metropolization infrastructure shapes the understanding of the urban void and how the interlinkage can be regarded as an activation tool; and finally it’s important to perform a morphology analysis, that will provide with maps of the form, density, concentration patterns and will reveal the identity of the different urban tissues.

  Within this point is also important to add review on local micro-stories that will reveal the different visions about the city patches quality and meaning given to the void and the public space they represent by the collective understanding.

The design methods will be retaken in every stage of the research as a tool to explore the effects, influence or efficiency of the proposed typologies and strategies.

Together with the creation of the design toolbox, this part of the research will rely on the scenario creation in order to examine trends, the scenarios that can be tested at this stage are related to social behaviour, urban growth and economical change.

The field work for this research will be developed in a remote way, due to the deep understanding and knowledge of the basic structure of the city, its systems and a fluid communication with relevant inhabitants by the researcher.
3.2 RESEARCH STRUCTURE / PLANNING

Below is the outline of the intended methodological process along with the different phases of research:

- Integrating planning processes (J. Friedman)
- Strategic planning revisited (L. Albrechts)
- Cohesive Urban Space (M. Carmona, Heath)
- Socio-Spatial Fragmentation (D. Kozak, Jenck)
- Urban Porosity (P. Viganó)
- Finding Lost Space (R. Trancik)
- Participatory Development
- Public Space and Network values
- Evolutionary Resilience

PHENOMENA - Lost of public socio-spatial cohesion in the city of Iquique: URBAN FRAGMENTATION

RESEARCH LOCATION

THEORETICAL FRAMEWORK

PROBLEM STATEMENT

AIM

MOTIVATION
ANALYTICAL FRAMEWORK → RESEARCH QUESTIONS → CASE STUDY ANALYSIS → DESIGN → PLANNING → NEW STRATEGIC INTEGRATED PLAN FOR P.S. MANAGEMENT → EVALUATION

- Actor relationship approach
- Public Space Systems
- Value of Void
- Porosity
- Planning Framework

- Reflection
- Conclusions
4.1 PROBLEM FIELD

The development pressure on certain urban patches to be urbanized or reinterpreted, and the uncertainty about the legal aspects of the plot management (who really has the power of intervening and changing the unit and with it the consistency of the urban tissue) reveals an overall concern about the lost of heritage-cultural values, the market oriented development guides the transformation decisions against the emotionality embedded in the collective memory of the city, removing the options about a common vision and improvements of the liveability (qualities regarded by the people) in Iquique.

However, all this formative force embedded in the community is not reflected in the urban space, the recycling process affecting the tissue is not bringing the public spaces together, but fragmenting the community building empty gaps where the feeling of a strong unitary city is being replaced by a general segregation.

The diverse periods of the urban expansion of the city have respond to diverse new trends and new meanings, every single one of them determined a new expansion model, leaving behind several sub-systems and pieces of systems that in multiple occasions determined the stagnation of specific development areas (e.g.: old industrial areas or original residential neighbourhood). These processes were (are) progressively leaving city scars that eventually became voids -empty plots, abandoned buildings, unused spaces, neglected neighbourhoods-. This manifests not just some outdated typologies but also some complex spatial relations within the diverse waves on the urban expansion and the cohesion between its components.

This trend triggered a noticeable real estate speculation (Sabatini 2002; Sugranyes 2011), given to the fact that the large majority on the plot owners are private sector, where the trends at the stagnated buildings or areas tend to end in demolition and empty spaces waiting for higher land values. The last 20 years planning processes have been defined within a strategic planning logic, essentially market oriented, giving the market the power of being the main activator of the urban change, making decisions with broad influence, not considering existing regulations, social issues or broader perspectives about relevant urban fabrics, for example: the neglecting of the historical city centre.
In these images is possible to appreciate the condition of some (damaged and abandoned) plots located in Baquedano Street, the one that was, and still is, one of the main public spaces in Iquique. The left graphic diagrams the economical values of the urban plot according to the municipality’s evaluation. As we can see, these properties are located in one of the areas with highest price range, which doesn’t necessarily correlates with the quality of the property.
As an example of the previously mentioned, we can point out the case of the social housing complex 'Las Dunas' which after the 2005 earthquake was dangerously damaged, forcing the inhabitants to leave their homes for safety reasons. The first reaction from the people was to stay in place in order to take care of their belongings from a safe distance and at the same time maintain the support from the neighbourhood life during the time it would take the local government to provide for a solution, the people camped in the hills next to the damaged buildings for several months, until an emergency housing was placed in the area (a prefabricated 6 square meters house per family). After about a year and a half, the municipality provides a reconstruction program for the inhabitants approval and finally an architectural project is designed. The complete process of reconstruction in the area took three years, which makes us think: Is this the correct way of dealing with an unannounced urban void? Is this solution considering the integrity of the society who uses these spaces?
This is the case of the aviation casino which got accidentally caught on fire. Since the plot is owned by the national air force, further intervention is not possible and the plot remains empty next to Baquedano street (the most important public space street in Iquique, originally the meeting point of the high class in town)
A few months ago this news about a traditional 170 square meter property in the ‘El Morro’ neighbourhood appeared on the local newspaper.

The general city concern about a perfectly patrimonial house being converted to a parking place because of the inability of the owner to pay for its maintenance, aroused by the professional and local voices in an attempt of revoking the constructions permit.

Who decides and control this?
In the case of the highly awarded project on progressive housing performed in the city by ELEMENTAL, we can argue that in order to solve a socially regarded lost space (by the municipality), a well functioning interior particular space that happened to be neglected in terms of social safety and strategically located was forced to transform in order to ‘fix the problem’. However the solution to this spatial insecure situation ended up in fragmenting the existing working social system (cohesion) looking for control.

This approach of progressive housing, in the context of a regular Latin American cultural behaviour triggers a maximum densification of the plot, which finally expresses in a solid built up division, sealing the programmed fragmentation.
The laws on urban planning, beside being market oriented also respond to a descriptive and restrictive approach in which all the prohibited actions towards the public, lost and available spaces are described, however a definition on what public space is, is missing. Which makes us think that the urban fragmentation, and void generation, is originally rooted in the lack of conceptualization of it, regarding the current planning instrument. Thus, it’s important to underpin a common vision (and sub definitions) related to common space means, and subsequently express this concept in a series of optional physical intervention, promoting the social formative power to participate in the decision making, to finally reconnect and enhance the values embedded in the lost fragments of urban space. We could say ‘reactivate the voids’.

In the case of Iquique, and most Chilean cities, the concept of ownership is essential in the formative process of the city. The feeling of being the one and only ruling power in your own piece of land brings a widely used practice of speculation and ‘big urban project’ driven planning, on the scale of a plot, where the force of the market expresses drastically in the image of the city.

This individualism in development aims doesn’t act on its own, it is actually part of a bigger national plan, where the guidelines are traced, however they are general and broad, leaving legal freedom to the owner (in different local contexts) to alterate the urban fabric and with this the validation of the space by the community, thus the progressive lost of identity and quality of the urban pores.

Saying this, we can visualize that our smallest intervention unit is the ‘small plot development’, which can be regarded as the starting point in order to activate a future strategy

In order to understand the conflicts that might be find within the legal framework of Chilean planning, we address the most relevant aspects:

- It is based in a regulatory approach. The laws on urban planning respond to a descriptive and restrictive definitions and the overall control of their implementation, without necessarily describing combined strategies.

- The power of Ownership. Ownership in Chile is essential in the formative process of the city. The feeling of being the one and only ruling power in your own piece of land brings to a widely used practice of speculation and ‘big urban project’ driven planning, on the scale of a plot, where the force of the market expresses drastically in the image of the city.

- Weakness of the framework as guidance tool. This point reveals the struggle between individual development and the national plan for city growth. Planning guidelines are traced general and broad, leaving legal freedom to the owner to alterate the urban fabric and with this the general structure of the city image, the progressive lost of identity and quality of the urban pores.

- The flexible Top down approach. In general terms there is an implementation method within the urban space where the bigger institution dictates the rules to follow for the rest. However in practice these principles don’t give the higher range stakeholder (Municipality) the power of decision making, but to the one that manages to propose a more attractive intervention (and economically feasible). Instead of regulating, the legally skilled actor performs disappearing the communicational bridges between the stakeholders, under the established legal protocol. This means, the Top-down approach defines who has the final word in an established process, but as long as the legalities are fulfilled, finally the owner is who determines the urban intervention.

Its important to mention that since the 80’s a change of approach occur in the Chilean planning. In search for development and speed growth of cities the planning became a flexibility tool towards a flexible framework meant to host market needs. Making urban space available in more friendly way would incentive the private investment in public aim and thus development and metropolization would integrate to the city dynamics. This system performed as expected, however it created some side effect inconsistencies, like the one meant to be treated in this document : The urban voids.
Currently the idea of planning oriented only to the market aims is fading away, changing towards a more socially inclusive strategies, looking for more citizen involvement in the decision making for future sustainability of the interventions. This is expressed in official document from the ministry of housing and living (seen in the graph) on 2007 were the concepts of previous planning practices are contrasted with the expected outcomes for future cities. Is like this, that this thesis proposal looks for an alternative to this process, that can achieve the government will and at the same time include citizenship commitment.

Summarizing, Chile’s legal context for development can be understood by these points:

- **REGULATORY APPROACH.** It has an intervention based in a descriptive and restrictive legal framework.

- **THE POWER OF OWNERSHIP.** Ownership in Chile is essential in the formative process of the city: speculation and “big urban project” driven planning.

- **WEAK OF FRAMEWORK AS GUIDELINE TOOL.** Guidelines are general and broad, leaving legal freedom to the owner to alterate the urban fabric.

- **MARKET AS A PLANNING TOOL.** The planning is understood as a the result of a market oriented vision, where has been implemented a change of paradigm towards private investment in public aims.

Source: Created by author based in Chile’s Ministry of Housing focus aim document, 2007
4.2 PROBLEM STATEMENT

In the transformation and consolidation processes of the city of Iquique, because of an speculative trend that transforms the different functions and uses around the city, this trend generates urban voids that go from the scale of the single plot up to a brownfield level, that’s affect the continuity of the urban space network and the cohesion of the local and urban structure not allowing to preserve the historical value of use (function and meaning) that these places used to have, where the community regarded them as places of temporal use, meeting and social linkage, reinforcing the values of the fragment in relation with a broader general network of public space.

This project aims to deal with the fragmented city, generated by these urban voids, and looks for a spatial method to integrate these fragments through the recognition of a multidimensional public space system as the main base for the search of a more cohesive space.

The proposal finds some evidence on the new metropolitan emerging structure of the whole urban system recognizing the value of adopting a multi-scalar dimension of the problem. Which eventually can inform/re value the role of the fragment within the system (at neighbourhood scale, and at the urban scale as a whole). This is a question that apparently has not been addressed by the current planning strategy.

The structural ambiguity of the current city development is widely expressed in the lost of meaning in the public spaces, and together with the ongoing process of void generation, it aims for effective strategies that can address a relinkage of the public space networks and the emerging available spaces in a long and short term planning that respects an overall vision of the city. The lack of a cohesive-public-urban context, are responsible of interventions tend to be punctual, with almost null influence range and fade away with the diverse use, defining a collective placement of lost spaces – creating and enhancing a city of frameworks. These trends do not capitalize on the changes and above all define a weak urban tissue that misses the opportunities given by the urban and economic growth.

Continuing with this idea, nowadays there is a particular overall concern about resilience of the urban systems, where the Urban responses to diverse economic or environmental crisis through planning and the ability of some applied techniques to be translated to long terms perspectives is clearly missing. Is this how this research considers the lost of a relational link between urban regeneration, the treatment of the self generated voids and the inclusion of participatory development schemes, as main aim to find an actual relation between these three concerns and translate it into a new development strategy capable of intervention from responses in emergency -crisis- situations as well on long term and resilient perspectives. So to be able to support the local planning with concrete instruments to trace guidelines for ongoing city regeneration.
By comparing the maps from 1981 and 2008 of the city we can observe how some patterns are maintained in time and transformed in terms of land use.

The highlighted area represents the old city’s airport land track, now and then, where nowadays the space is regarded as a new commercial centrality in Iquique.
TRADITIONAL CARNAVAL GAME ‘CHALLA’ (WATER FIGHT) – EXAMPLE OF USE OF EMPTY URBAN PLOTS FOR SOCIAL SIGNIFICANCE

Source: www.memoriachilena.cl
JORGE INOSTROZA NEIGHBORHOOD - THE PERSEVERANCE OF THE PUBLIC SPACE TO BE USED BY SOCIAL GAMES

Source: www.flickr.com on ‘Iquique’
A city that had an original grid model which was repeated along with the growth, but in the 80's there's a change of paradigm about regarding planning as a centralized development, where the planning tools aim to be more open, flexible and thus market oriented, to allow development to encompass with economical grow (enhancing private investment). Implementing permeability in the design which was finally expressed as the change from a traditional grid approach to the definition of a new superblock one. This change added multiple contrasted functions within the urban fabric, affecting particularly loosening the slow mobility subsystems, understood as pedestrian and community gathering spaces.

Is this how an originally compact city extends loosening the mixicity of uses (due to the contrasting specialized super blocks mentioned before), generating fragments of urban space, which in this study are understood as voids. The historical significance of these spaces is used to underpin the value of these voids and particularly the public space structure within them which is missing.

In the past, the urban void is regarded as part of the public space, with a sustainable use, and a function that is able to reinvent itself through time and social needs, however these days, the voids have progressively transformed into ‘lost spaces’ where the qualities of the spaces are diminished and the overall public space network is interrupted, thus discontinued from being a system.

A Process of public space enclosure took over and with it the grid erosion (Pope, 1996) gradually started a process of transformation from traditional grin into superblock, framing an ‘available space’ within the urban fabric, that will progressively express into an alteration of the socio-spatial urban pore and the un linkage of these spaces with the public space network.
4.3 RELEVANCE

SCIENTIFIC RELEVANCE:

As mentioned in the problem statement, the project deals with the fragmented city generated by the urban void, building on the theories about Integrating planning processes (J. Friedman, 1987), Strategic planning revisited (Albrechts), Cohesive Urban Space (Carmona, Heath, 2003), Participatory Development, Socio-Spatial Fragmentation (Jenck, 1993)(Kozak D., 2012; Jenck M., 1993), Urban Porosity (P. Viganó); and hopefully will contribute to change how we see the opportunities of 'making the city', to re-link concepts that are usually treated different and design an integral approach for Urban planning approach, and broaden up the reach of the field study. The possible adaptattive capacity assigned to the proposal might be helpful to discuss specific topics and/or design more general guidelines for bigger scale interventions.

SOCIAL RELEVANCE:

The issue of social segregation is usually regarded to city fragmentation, the inability of the shared spaces of the city to connect with each other, usually a symptom of a rapid metropolization process, where cities are more worried about concepts of quantity growth rather than reflecting on the quality of the growth(Boisier 2005: 2001). Developing cities are usually under the stress of being plan wise weak, loosing easily the structure of the development because of the need of being rapidly metropolized.

This project is socially relevant because it can give the social element a tool to read/understand the city and experience it as a whole, recover the responsibility of making it and stir a long term bottom-up plan of meaningful regeneration. As urban -public- space represents the interface of communication and all investigations, it is crucial to bring participants nearer to the concept of it.

‘Tradition does not imply that everything should remain as it was. Tradition provides a basis for the manner in which a system can accommodate change without the necessity of forgetting, without breaking with the past’

- Henco Bekkering, 2001
This project looks to build-up from a proactive approach -design the future and stir the elements to make it happen-, to call for the transformative practices needed to patch and improve the urban fabric, and define strategic -short and long term- solutions to read and understand this porous urbanscapes -urban voids-, by the hand of intervening and identifying the structural elements and the processes that can be driven by change (catalysts, strategic interventions, priority frameworks). The areas resulting from diverse crisis strikes, which are not usually considered under the scope of the planning, can be re-observed and re-linked to the urban fabric as part of a revitalization strategy as key elements on a self sustainable -and adaptable- approach which achieves permanence in time through the social -stakeholders- commitment.

In a more broadened context, it’s considered highly relevant the ability of this research to provide communication tracks between the multiple stakeholders shaping the city, to define a common vision towards a common city intervention. Once defined an universal language to deal with the city socio-spatial fragmentation, will be possible to understand and exchange the lessons learned between communities, empower the social element in order to (con)validate the strategy and define a continuous public space that can be improved and modified in time without losing structure, vision or qualities.

An strategy that allows the use of these spaces to maintain the general cohesion and values of the public space network and urban structure, allowing to recover the socio-cultural expressions associated to these spaces, making these progressively closing spaces can still be part of the urban structure in a cohesive way.

Strategic spatial planning is the tool that enables societies to make strong decisions towards the most important needs, challenges and aspirations, providing multi leveled governance, diverse actor involvement and implementation procedures

-Albrechts, 2010

"The project aims to deal with the fragmented city, generated by these urban voids, and looks for a spatial method to integrate these fragments through the recognition of a multidimensional public space system as the main base for the search of a more cohesive space."
4.5 RESEARCH QUESTIONS

As told previously, the overall problem is the emerging processes expressed on the urban voids, the lack of specific planning framework to consider them and with it the progressive loss of the urban meaning and qualities of the public space as socio spatial connector and activators. The methods to read the role of these unclassified spaces and improve their performance in a multi-scale urban tissue lead to a main research question:

**MAIN RESEARCH QUESTION**

• How to define design planning strategies to develop a cohesive public space through the values of spatial voids in a highly porouse developing city?

**SUB_RESEARCH QUESTIONS**

• How can the values of a public space network be regarded within a fragmented planning framework?
• Which roles can review the values of the voids in the process of urban regeneration?
• Which planning system can help to define a more inclusive development, particularly on the conformation of public space?
• How can we enhance creativity for diversity and sustainability in a void dealing strategy?
• What is the role/impact of a typified model in a multi_scale strategy approach?
CHAPTER 05  RE_VALUE AND LINKAGE OF THE VOIDS

5.1  End Product

5.2  Value of Voids
5.1 END PRODUCT

Hypothesis: the rapid metropolization and the lack of meanings (understand by function/uses of the space) in the city available space defines a visible accumulation of urban fabric fragments in different contexts, altering the structure of the public space network. By making these fragments interact, and involving all the participant stakeholders in an integral approach, gathering ownership, use and supporting communication networks is possible to discover design elements that will perform in multiple scales to maintain a backbone public space system, not necessarily influenced by particular development aims (for example market and ownership wills), but from the public space structure itself.

The current -chilean- planning does not have a development vision embedded in the national agenda, is this why it is important to ‘show’ how long-term based strategies can help to achieve a balanced and cohesive urban development without losing the traditional heritage, the meaning, and spatial qualities that the city has expressed in its public space.

The intended outcome of this design-planning project is to deliver an urban void ‘intervention prototype’, the one that will emerge from the paraphrasing and conceptualization of all the methods previously mentioned in a spatial design. The ‘type’ will be used to deal with the different socio-spatial fragmentation examples find in Iquique, as pieces of a bigger multi-scale strategy of urban cohesion.

More than a strategy, the intervention is regarded as a framework that will work as a guideline for future interventions in these voids. By overlapping the different layers that are consider influence the void generation, we typify a model that will help to identify and diagnose urban voids in the future and underline specific formative forces proper from the place, in order to diagram accurate intervention options for the studied void, without losing (diminishing) the qualitative potentials. For example, ‘this void, considering it’s is relation to a high mobility road, with a commercial centre in the proximity, would be a good platform for the following interventions, that relate to the value of this void within the network’.

By classifying the voids in a multi-scale catalogue, we can define a planning strategy that is able to maintain the vision -quality- of the intervention in time and space, connecting the different stakeholder in a common language and transferring the knowledge, building up from it in the upcoming future. The underpinning of a testing module can help and advice the local planning instrument into how to read the context and fulfill the multiple urban aims -social, strategical, economical- in the required moment: to read a typology to design a strategy.

This typified answers -expressed in a spatial intervention- placed and tested in Iquique’s city centre voids (to define), to prove its efficiency and see if it eventually can be applied to other research contexts. the definition of a test ‘intervention prototype’ is relevant because it could be regarded as a local regulator/advisor for an integrated participative development design-strategy.

The topics that are going to be dealt with in this typified void models are:

- Morphological values
- Socio-Cultural Values
- Integrated Planning strategies

The analysis method will be used to evaluate the quality and interactions of the subsistens of the voids, the interrelation between the different ‘porosities’ (according to the concepts established by Paola Viganó) of the city, and the possible design strategies to be applied in order to evaluate the potentials of working with the voids and re-linkage of them in a common public space vision.

These analysis are expected to deliver general parameters of evaluation for the current and future voids, complementing with the underpin of urban design strategies that will guide the intervention of these voids in a common city vision (meeting all the stakeholders in a common language).

It is crucial to study the influence of the voids in a broad scope of scales, The analysis will be performed from the city scale of Iquique and progressively interiorize in the dimension of the neighbourhood aiming to qualify the void existent in a plot dimension, the qualification of the
void will allow to underpin a typology and subsequently a design strategy to intervene the multiple typologies with alternatives for the stakeholders to intervene and form in a common intention.

The proposal looks to rethink the current use of this empty spaces (voids), searching on how a framework can perform, allowing certain uses to be part of the urban structure, even if they are temporal functions. This, based in the current trend of filling these empty plot with parking places or functions that, even they represent a high relevance within the public space demands, affect the public space grid and specially the pedestrian circuit networks in the locality and also, depending on where they are in the general system, affecting the continuity towards the main public spaces (for example the coast) or in the continuity to major open spaces where it generates complex local fragmentations, for example altering the porosity of the urban tissue, creating conditions of social insecurity (which are addressed by the community by enclosing the possible available public use spaces), affecting also the values of the surrounding areas.
5.2 VALUE OF VOIDS

The voids analysed in this study are considered as fragments within the general network of public space available in the city. Under this premise, the re-linkage of the void is intrinsically related to the ability of these void to perform in an adaptive way to remain part of the general public space system, and at the same time provoke an impact in the different scales of the urban shape plan.

The public space we are trying to create from the voids, in this context, is considered as a multi-scalar dynamic element, which performs different roles in relation within its significance in the general public space network.

The voids we are dealing with in this research are classified in a matrix that relates the values of the patches take within the public space structure and the type of urban fabric they are part of. The search for typification and re-qualification of the voids in order to perform as platforms that activate the meaningfulness of the public space is divided in two main components: A Morphological revalidation process and a Planning implementation process, one related to the value of the voids within the public space network and the other related to the implementation of the strategy in a Chilean context.

The objective of the proposal is to review the value of these spaces from a morphological point of view, how they in their form and constitution represent a typology that is possible to evaluate in relation with the role they perform in the different parts of the urban tissue, but also their influence in three different urban scales (local, neighbourhood and city).

The reading of the multi-scalar interacting void values will be understood as follows:

- Urban: Related to the values the voids have within the public space network
- Neighbourhood: Related to the significance given by the use or functions of the patches in direct relation with the void.
- Local: Related on how the void, in an individual plot expression alters or defines the porosity of the urban tissue.

In addition to this scale classification, we address three more elements considered highly relevant in terms of ‘valuing’ or ‘re-evaluating’ the significance of the voids:

- Accessibility: Related to the capacity of networking or connecting to established mobility networks, and its opportunity to be recognized in a daily basis.
- Availability: Related to the influence of the ownership action in the disposition to intervene these patches. A closed void will prevail untouched if the owner decides it, and thus it won’t become part of the public space.
- Uses: This is the most important element in this research, the use of the space is intrinsically related to the meaning given to the void by the community, makes it transformable through time and because of that, consolidates a sustainable (and possibly flexible) intervention.

It’s important to emphasize the idea that the void gets valuable in terms of how it is related to the public spaces in the proximity, because it makes it a potential platform to interact with them and be activated by the already established functionality (and meaning) of the surrounding environment. In other words, a void that is in the vicinity of a central, commercial area, with its correspondent roads and accessibility will have more potential of becoming a new commercial micro-center or meeting point through exchange, and can become a starting point for relevant functions in the big scale, rather than a void space that only serves a peripheral part of the community.

Is like this, we attempt to make a brief diagnose on how the existence of these voids is affecting the general grid and public space development, setting goals related to the scalar relation that can steer the idea of uppinng values related to the potential embedded in this voids.
CURRENT DIAGNOSE

The voids we can observe this multi_scalar approach are related to deficiencies involving:

URBAN:
Exchange-linkage with network structures

NEIGHBOURHOOD:
Unexistent or weak function and use

BLOCK-PLOT:
Porosity alterations, enclosure.

GOALS

URBAN:
To develop a void interaction with the city networks

NEIGHBOURHOOD:
To generate quality, enhance joint centrality platforms

BLOCK-PLOT:
Achieve local commitment and involvement benefits
intercomunal connection

industrial transport

touristic mobility

residencial mobility

commerce and services edge
To continue with the mapping analysis is important to make an overview on the mobility and networking of the city, considering that the main (road) movement arteries have a big influence in the meaning and appearance of the urban ‘lost spaces’ (Trancik, 1986).

The relation with/within the mobility networks takes special relevance at the moment of evaluating the potentials of the voids, considering they are a defining factor in respect of drawing accessibility. The accessibility concept in this matter is specially regarded in terms of counteracting the ongoing process we have described before of ‘enclosure of the available spaces’, thus paying attention to the access the city has to these spaces might represent a game changing strategy tool.

To add the value of meaning on the accessibility analysis, in the following graph the main uses of the road network are described, together with a classification about intensity of use, which describes the relevance these connections have in a urban, neighbourhood or local (possible) intervention.

Source: Created by author
In order to go a step further into the neighborhood scale of the analysis, we observe the fine grain of the urban fabric, where it is possible to address five different representative tissues and porosities (derived from the historical expansion of the city) in the city. With every of these tissues comes a different expression of what public space is, what shape it has, and how it has or can be addressed in time looking to counteract the influence of the voids.

From this classification we underpin five case study types, based on their specific relevance as inflexion points of the city, the analysis of every case study unit will inform about the particular existing problematic of the patch and the ways addressed to deal with the void, from which accurate intervention options can be proposed.

The outcome of this particle analysis will deliver a design strategy capable of rescaling and reinterpreting itself in other voids of the city and finally test the influence of the prototype in a multi-scale approach. This is why the strategies are going to deliver from the design research in only two of the five case studies, to allow to test finally the lessons learned from the first examples into the remaining two, this is how the effectiveness of the strategy will be qualified.

In order to evaluate the voids in Iquique, we diagram a series of layer maps that will help to relate information about function, shape and meaning.
Here we describe briefly the characteristics of each of the urban pores existing in the city:

[ 1 ] CENTRE

This responds to the original urban fabric, the unit presents the block as an unitary cell. The back of the individual plot becomes a private community space for the block and with it a common interior space.

When the overall block unit is fragmented and a path to the centre is created, the space opens to the city becoming a city service space. In regular basis, at this tissue the open spaces tend to become city markets and mainly parking lots.

[ 2 ] INDUSTRIAL

This tissue is an exception to the porosity theory, specifically because it is related to the commercial tax free zone which is separated (by a wall and land regulations) from the urban-used fabric.

This tissue, on the other hand has a strong influence on the developments around it, creating a protective mobility belt around it which tends to be a trigger for void generation. The periferal position these patches have translate immediately into linkage issues that define a more reactive urban fabric which reacts to the available space more than a efficient spatial connection.
There is an intense attraction power related to the coastal line public space. It is the highest rated space in town and because of the privileges it represents to the community the spaces exposed to it (visually and spatially) tend to be recycled and heightened very often, the aim of constructing a skyline in these areas provokes an ongoing process of void creation, where the traditional low rise buildings are rapidly replaced by private investors interventions and pressure.

The rapid densification processes happening on the 1990s define this tissue. The focus in this development was raised around the creation of new centralities, the reinterpretation of the historical centre system in a bigger scale, where an attempt of including landuse strategies in order to achieve ‘urban balance’ was performed.

The image of this patch can be understood as a Latin American interpretation of the garden cities, the creation of new neighbourhoods (in some cases private or closed) with a close by supply of green spaces, ‘public spaces’ and basic commerce.

The aim of more housing at lower prices triggers the development of this patch. This very dense urban tissue looks for public interaction and shared spaces outside the plot, relying on the city services and availability of recreational infrastructure in the city or the closest centrality.

Due to the size of the basic unit (in this case the plot, comparing to the basic unit in the centre/extension which was/is the overall block), it is difficult to create meeting points for the population, the notion of neighbourhood gets lost and the individual living takes over.
In the following graphics we see in detail how the urban tissue is expressed in each of the defined case studies. We can observe how morphologically underused spaces define the different pores of the city, and at the same time how they can represent a conflictive situation depending on their relations with the overall available spaces system.

The impact of the effect of the void in the general public space grows bigger depending on the relation to other high value elements within the city. For example, a large unused space, related to an important mobility road in the city represents a big potential for activities which may have a urban, or maybe regional impact, meanwhile a large size void, located in the periphery of the accessibility networks might easily become a dangerous place with less government attention, which means the strategy should be different.

It is important to emphasize that the natural evolution on void dealing strategy (performed by the local planning tools) resulted in the enclosure of the void. Defining an expression of framed available spaces in different scales of the city.
Selection of Design Cases

The previously shown cases represent five types of Morphological values recognizable within the urban fabric, from which we set a starting point for the typology definition (and future decision making). From these five types, we select five case studies representative of the local (pedestrian reach) patch, as a test model to include in a comparative analysis matrix.

The selection of these specific locations refers to their significative and strategical location between urban tissues, historical relevance and social meaning, as representative showcase of city identity and evolution of available space meaning through time.

The strategical design will be performed in two of them, leaving space for the intervention proposed to be tested in the last three cases.
FUNCTION AND MEANING

The correspondence of use and meaning of the public space is considered, by aims of this proposal, as the main element delineating the values of the void spaces. The use (or landuse) of the spaces through time create an image in the collective memory of the society who inhabits the area, at the same time that can create future quality points within the urban tissue as long as they respond to the demands the citizens have on the available spaces. By enhancing a participatory development and reconnecting these spaces to a bigger scale daily routine network, is possible to consolidate a context related intervention that is actually going to be ‘used’, thus maintained and appreciated by the community.

In terms of urban meanings, a pair of phenomena can be observed, between is the fact that there is a tension in respect of landuse and historical meanings towards the centre: it has the highest concentration of urban functions meanwhile the rest of the main city spaces constitute specialized micro-centres, which depend on the interrelations with this higher value one (historical city centre), thus the user’s mobility and experience of the urban public spaces depends on the good connection between them due to the daily routine where they need to go through two or three of them in order to perform their normal personal behaviour. In this research, we want to emphasize the use and daily access (recognition) to the available city spaces as an important element in the value qualification of the public space (and in addition a tool to re_qualify the value of the voids), aiming to rescue and strength the internal connection between the different specialized centres and micro-centers, that currently is getting lost and going through a fragmentation process.
rooted in the conflicts created by the non-cohesive scale transition in the current general public space management vision.

Talking about the influence and relevance of multifunctional, big scale, public spaces (which is the scope of this research), it’s unavoidable to refer in the case of Iquique and every coastal area to the magnetic power of the coastal areas.

In the case of Iquique, due to the fact we are located in a desertic zone, the coastline appears as ‘the public space by excellence’ associated to the mainstream comprehension of what an urban scale linear park, where the beach and the coast are hosts all the urban activities related to the values of a green space: recreation, commerce, nature, etc.

The attractive of the coast also has a high influence in the morphological structure of the city (and its public spaces), beside all its goodness it generates unbalances in the development of the city, alliterating the urban grid, over densifying the proximity, affecting the porosity of the coastal section and breaking the internal relations with other parts of the city. For example, the demand on the coastal border gets so strong that the available spaces are forced, by buying multiple small plots, in order to create space for large urban projects, enclosing the public aim and completely neglecting the permeability of the historical connecting public space.

This phenomenon draws an abstracted image of the city structure, mentioned before, based in lines and microcenters. Defines a use of the city in a longitudinal section, reinforcing the car oriented development, transforming the understanding of the areas in between the microcenters as ‘unvaluable in between spaces’, and forcing the erosion of the traditional grid transforming it into a superblock development. Process that finally translates in the lost of pedestrian oriented infrastructure and with it the diminishing of the daily basis recognition of urban spaces.
MORPHOLOGICAL VALUES

By analyzing the morphology potentials and conflicts of the research, we look to recognize the value of the grid around the ability to conform a network of public space with specific physical space characteristics surrounding the study patch.

In the urban scale, the metropolization process tends to influence the current planning into plan based in lines and nodes (sub-centres). Every important point must be connected by a line (usually a road), but when a central node is defined, everything in the reach of it reacts on the sub-centre, creating sub-systems that don’t communicate between each other. Those ‘in between’ grids become ignored spaces, in terms of connectivity and public use/demand, and thus generate meaningless voids. This is the urban effect of the void.

In the local level, this effect is seen in the alteration of the porosity of the grid, were the generation of micro-centres, disconnected from a bigger public network define perimetral places without meaning (for example, the creation of an enclosed market, were the only places with significance are the ones related with the entrances, and the walls between them become lost space due to the lack of function). This, in addition to the speculative situation that the plot might have results in the appearance of multiple parking areas.

This phenomenon occurs in every Chilean city (an probably it can be applied to multiple cases of coastal cities in Latin America), where the in between spaces lose value and become parking lots, the same effect happens when the mobility and accessibility is interrupted, thus the idea of this framework is to integrate the public and private mobility networks. By unifying the different mobility demands, because currently when one is well defined the other one tends to diminish its value (car oriented spaces versus pedestrian oriented spaces), we aim to start an integrated transformation process, where the idea is to search for an integration of the lineal spaces on the urban level with the secondary and tertiary ones.
The regard of the coast space as main attractor is because of the fact that it hosts all the functions associated to the commonly understood ‘green space’ (due to the fact we are in a desert area). It has the capacity of hosting all the recreative urban functions.

the linearity of the coast influences strongly the general structure of the public space in the city. The magnetism of the coast defines a transversal relation between the main mobility roads and the beach spaces, loosing the continuity of the secondary networks. This line structure, as mentioned before, draws specialized microcentres which also create a discontinuity space around them, considering they are the main attractors in a city scale.

In other words, the current attractive public spaces in the city are creating a spatial communication conflict, between scales, between networks and producing empty fragments in the spaces in between.

If we observe the image about the distribution of voids within the city extension, the voids around the city centre area seem to be unexistent. However this graphs a phenomenon related to the value and the proximity of these voids to a strong urban attractor: the voids located in the city centre are rapidly transformed into spaces for public use, due to the high demand for service space in the area.
VALUES MATRIX

In order to underpin common frameworks for the intervention, the approach looks to perform a comparative analysis between relevant neighbourhood scales where the voids appear and can be revalued through their own potentials. By drawing a matrix of morphological, meaning and potential values of the urban patches, its possible to hint for future transformation or regeneration potentials to intervene these voids creating a continuity of the in between spaces with the general network existing in the city.

When we analyse a pedestrian scale area we use a scope area of 400x400 meters, in which to identify the temporal land uses regarded for redefinition of the locality. When the influence range of the void is bigger, and it has a possible metropolitan use there must be considered mobility networks and parking spaces within the void, taking care of not generating negative areas (with an attractive potential to become unused or unvalued spaces). The size represents such an attractive power, that the fact of being unused and in direct relation with functional networks becomes them a difficult node in the system, impossible to ignore, thus an important blank in the understanding of the general public space having a negative protagonism in the urban fabric. The places where there is more presence of these voids, represent a higher effect in the public space structure, is this how these spaces should be at the same time the more flexible in terms of use. The intervention in these large voids should remember to permit the circulation in a local scope at the same time it can perform as a multi_scale activator (P.Space, Matthew Carmona).

LIVEABILITY ANALYSIS
In order to give a brief review on the patches representative of case study in Iquique we will describe the particularities of every patch under the definition of public space evaluation criteria. This criteria is achieved as a summary of a joint analysis between local micro_stories and interviews, where the evaluation of different actors, families, living conditions and urban flows (public space use/recognition) constitute a fieldwork where the specific potentialities can be addressed.

Thus, How do we measure urban void values?

- **Accessibility.** The level of accessibility will be measured by overlapping road network hierarchies and pedestrian flows, meaning that the voids exposed directly to a higher concentration of these mobilities will represent a space with higher accessibility value for the community, thus a more interesting platform to intervene.

- **Morphology.** High morphological values are considered those which can relate the void space with a public space network in a cohesive, fluid way. In simple terms, a void that is capable to generate a porous relation with other voids in the vicinity is more attractive as a platform to extend the qualification of the public space in the area (a catalyst).

- **Urban Function.** It refers on how the different land uses correlate with the functional network the belong to, and its ability to connect to the surrounding by complementing urban functions. In this case, the value becomes higher when there's a higher mix use and it hosts activities in different time-frames during the day. That means that when the patch presents essentially a mono-functional behaviour, the urban function value diminishes, and so the flow of urban life in different moments of the day (e.g. empty neighbourhoods during night time).

- **Socio-Cultural.** These values are referred to the identity that might be kept in the locality. A high socio cultural value is understood from the perspective of the social regard of the void (the community’s assigned value to it), and how it can be incorporated to a daily life system and become a constant reference for citizens routine (in all living scales).
Name: Centre Prat Square

Mobility Network:
- Tarapacá St. Main Commercial street, Important mobility street
- Aníbal Pinto St. Main Mobility street, Services function

Public Space:
- Plaza Prat. Main city square
- Municipal Theatre.
- Baquedano Walk St. Historical meeting point
MORPHOLOGICAL VALUE

The grid in this area is highly porous, as heritage from the foundational times were the collective life was developed outside the house in the big open spaces. The densification of the urban tissue defined a very dense infill, with the presence of voids related to a very small scale, which makes this tissue specially reactive to the availability of space. This reaction is speedily registered in the almost automatic infill of the plot size voids, which in relation with the commercial and services activities make the use of the public space a dynamic approach.
The area has an immense value as an attractor, considered the heart of the city not because of its foundational location, but because of the amount of urban activities and services it provides and its able to provide.

It is an attractor and a catalizer at the same time, because of its historical significance it attracts all the possible urban interventions, temporal exhibitions, city festivities, commercial activities, urban services and most of the office activities in Iquique.

This concentration of urban functions in a specific patch has a complication, which is the disappearing of urban life during the not working hours. By reducing the amount of housing in the direct vicinity of the square, the public space becomes abandoned in the late afternoon and night time due to the lack of activities. Instead, the life in the city centre moves through Baquedano street looking for night life, pubs and restaurants, which also restrict the use time of this stripe in a complete day time frame to a week that starts on Thursday to Friday.

Housing is not introduced in this patch because of two main reasons: first, the high commercial quality of the patch which emphasizes the implementation of these land uses in the available voids and the historical condition of the constructions, which means an impossibility of intervention.
SOCIO CULTURAL VALUE

In the historical area, which already owns and added cultural value, the expression of the enclosed empty patches create discontinuity, lost of meaning and values within the tissue, being rapidly replaced by service spaces (in general parking places) that aim to respond to the urban market demand on the availability of labour opportunities in the area.
LAS CABRAS STREET

Source: Jorge Pantoja C.
Name: EL COLORADO-ZOFRI

Mobility Network:
- Av. Arturo Prat. Important mobility street

Public Space:
- School proximity
- Bridge crossing
MORPHOLOGICAL VALUE

The grid in this area is characterized by the existence of extended areas of available space in the shape of brownfields, thus the density is very low at the same time it describes a potential use of the voids based in an urban scale function. In complement with the geographical condition, the available public space gets highly fragmented and detached from the city's general network.

The direct relation of this patch with regional mobility networks and being placed in the vicinity of an enclosed industrial area qualifies the inhabitation as periphery, which result in a stronger enclosure on the neighbourhood, isolating from the city's public life and services.

[ 2 ] LIVEABILITY DEMAND LEVEL

<table>
<thead>
<tr>
<th>LOCAL</th>
<th>NEIGHBORHOOD</th>
<th>URBAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0 1 2 3
URBAN FUNCTION VALUE

The industrial patch represents a closed system, unable to allow the mix use of the spaces becoming a proper space for burglary and social unsafety, meaning segregation of the community related to those spaces. Because of this reason, the void has been provoked by the local government in order to break up the unsafe social situation, however the deep root feeling from the locals about the land is being ignored. At the same time, the public transport service is interrupted in the area, giving the road an almost unique function of being a transport, urban-regional network.

On the other hand, being located to one of the biggest free malls from Latin America (ZOFRI) retraces the significance of the routes going next to the patch. The high relevance as an urban attractor of this commercial centre located in no more than 500 meters distance from the patch represents an enormous opportunity to reconnect social and spatially the industrial periphery patch, through connectivity opportunities, job provision and complementary quality public spaces.
This neighbourhood represents one of the first being established in the city, which comes with a deep feeling of belonging and social cohesion between the historical neighbours and their families, there has been a strong struggle between municipality and inhabitants because of the fact this area is located in an industrial-urban periphery, and the high demand about the mobility networks going through this patch. When the government decided to provoke the creation of the void (the expropriation of the housing in the area for a better integration of urban functions), besides the low quality of the construction, and the apparent social issues that this might represent for the living in the area, the inhabitants, in part influenced by the tradition embedded in the neighbourhood, took strong action in order not to be removed from the place, and after the housing removal was performed an immediate takeover takes place.

In the historical area, which already owns and added cultural value, the expression of the enclosed empty patches create discontinuity, lost of meaning and values within the tissue, being rapidly replaced by service spaces [in general parking places] that aim to respond to the urban market demand on the availability of labour opportunities in the area.
EL COLORADO AND LAS CABRAS NEIGHBOURHOOD
Source: Jorge Pantoja C.
Name: COAST PLAYA BRAVA BEACH PARK

Mobility Network:
- Av. Arturo Prat. Important mobility street
  Night Life sector

Public Space:
- Playa Brava Beach
- Beach linear Park
- Skate Park
- University Arturo Prat
MORPHOLOGICAL VALUE

The most relevant value embedded in this patch is its position in direct physical and visual relation with the coast (the previously mentioned as public space by excellence). It is highly regarded by the real state market in the city, after its undeniable landscape features.

As expressed previously regarding the Prat square patch, the densification and infill of the available urban voids in these are have a speed transformation and intervention rate. However the difference in this patch is the ongoing speculation platform it represents, due to the pertenence of the beach front spaces by private owners that gather multiple patches through time in order to develop a profitable intervention which is widely visualized in the city as encaged empty plots, inaccessible waiting for a good financial opportunity. Thus is not necessarily porous, but it constitutes a linear empty space barrier towards the sea shore.

SOCIO CULTURAL VALUE

Having a location next to the sea shore, and the main pedestrian and vehicular flows in its domain, this patch becomes the most regarded as a trigger for social interaction and public space equipment, being platform for all kinds of temporal and permanent interventions on service of the community, with seasonal functions, urban entertainment and service facilities (skate park, dirt park, cafés, clinics, university, schools and open air festival location, among others).
The coast analysis case also represents the placement of the most important (and used) mobility networks, and the gathering of multiple urban life circuits. The presence of Av. Arturo Prat in all the extension of the coastal area represents for the future voids that might appear in the area and immediate accessibility value.

On the other hand, the landscape value of the area relates immediately with any urban activity that might need scenery or urban impact (mostly relevant according to the size of the plot).

The amount of users this patch has means the patches in this location are under constant demand for urban equipment and maintenance, thus the best preserved and beloved by the citizens.
PHOTO COMPARISON IQUIQUE 1970 v/s 2007
Source: www.memoriachilena.cl
Name: EXTENSION AREA MALL-EX AIRPORT

Mobility Network:
- Av. Airport. Main Commercial street,
  Important mobility street
- Av. Diego Portales. Main Mobility street,

Public Space:
- Mall Las Americas
- Diego Portales playground Park
- Tennis Club

[Diagram of EXTENSION AREA MALL-EX AIRPORT]
MORPHOLOGICAL VALUE

This patch represents a specific case of re-validation of a functioning urban fabric, where the shapes remain however the connection of the available structural space is reinterpreted to create a new centrality. In simple terms, an area with a peripherical urban functions, due to metropolization transforms into a new centrality for the today city of Iquique.

This patch was used 30 years ago as the landing piste for the planes arriving to the city (Airport), meaning that its value as a national scale access point was not necessarily related to the accessibility within the city, mainly because of the technical safety reason that made this area forbidden for public space activities.

[4] LIVEABILITY DEMAND LEVEL

- LOCAL
- NEIGHBORHOOD
- URBAN
   0 1 2 3
URBAN FUNCTION VALUE

Besides the enclosed condition of the spaces surrounding this area, this was indeed a meeting point for the town community, specially guided by the arrival/departure experience available in the area. When the airport moved to the south part of the region, the remaining infrastructure made possible and efficiently connected (and equipped) new development. Due to the direct connection to the coast and the big amount of available space, the patch rapidly became regarded as a new central point in the new extension of the city, which in complement with the rapid densification of the surroundings determined the land-use of the patch as a commercial exchange anchor.

SOCIO CULTURAL VALUE

As explained before, the main significance of this patch is related to transport and mobility. There is a difference in meaning in the current days depending on the knowledge of the historical development of the area, however the main use these days of this linear patch is related to a family scale life, regarding as a meeting point for the community of all the city and at the same time a home supply centre.
Name: SOUTH SECTOR PEDRO PRADO-ALBERTO HURTADO

Mobility Network:
- Av. Pedro Prado, Important mobility street
- Av. Padre Hurtado, Main Mobility street,

Public Space:
- municipal courtyard
MORPHOLOGICAL VALUE

Detached from the extension of the road network in the city, the need for a supply of new urban scale avenues generated big irregular patches as a consequence of the encounter between the topography and the trace of a line that could move the city from one specialized centre to the next one in the shortest amount of time.

The shape of this patch is better understood from the perspective of a highly perforated platform, with multiple sized void spaces that are almost completely independent from each other, thus constitutes the most difficult case to address.

URBAN FUNCTION VALUE

As irregular spaces with no significance in relation with the general networks, they are usually addressed by the municipality for local family uses (when the size is medium to small), hosting small kiosk facilities, playgrounds and green areas. In a bigger scale voids, this situation is translated to abandoned brownfields, garbage accumulation spots and eventually pet cemetery.

These neighbourhoods are usually underused on working hours, due to its mono function as inhabitance space.

SOCIO CULTURAL VALUE

Since these voids do not have an historical significance, besides being part of an specific neighbourhood where families relate to each other since decades, the social values are essentially related to the public use of passages and small streets as meeting points for neighbourhood kids to meet, which eventually upgrades into family visits to the small green areas in the vicinity of the big avenues as a family activity on weekends.
To address this issue of available, empty or lost spaces before, we have mentioned the theories of Paola Vigano where the intervention comes out of the hand-of the-user by producing an intervention encourage by the reinterpretation and use of the available spaces so then proposing a public space programme (Park Spoor Noord - Antwerpen, 2003); the vision of Roger Trancik’s about how the lost spaces becoming undesirable for the user and thus the lack of relevance of them for the public space network, but further than diagnosing and classifying the situation both agree in filling the available space with significant infrastructure for public living as mention by Sepulveda within a recognized framework (Sepulveda, D. 2002).

For developing countries, its important to provide solutions that relate to the social values of the community in transition, in order to be able to maintain and transform the interventions in time. We would like to mention that the traditional top down planning approach in this societies is very difficult to change, however it is possible to provide a common field for decision making (which in this proposal is define by the diverse values on accessibility, morphology, spatial programming and socio cultural demands). Is this how we propose an option were the user (or those with direct interest ) of the void space are active actors and give value to the intervention, using the social formative power embedded in the locality as a validation boost in the persistence and adaptability of the intervention. Finally this proposed process will be able to seduce people to design by themselves (Interview with Dr. M. Harteveld 2015).
6.1 PROPOSAL STRATEGY

The presence of the void alters the relations and values of the public space, in a multi-scalar and dynamic way. The appearance of bigger sized voids (on late development periods in town) mean a higher impact on the public space network but at the same time they represent a high value in terms of creating micro relations that have to do with the neighbourhood, generating temporary uses that can have a more representative importance, improving the transition and communication between the different layer of values, the morphological significance and the social demand.

Reflecting on the permanence of these public space structures is how we would like to recover the meaningfulness of the now present voids in a sustainable transformative process, reconnecting the social element (the people) to them, in order to maintain the values and integrate the voids towards the public space network to rescue the underused fragments. The voids can be part of the urban public space.

At the Chilean city of Iquique, the decline of the significance of public space is attributed to the reduced availability and functions attached to it, at the same time to the ongoing desire to control the own space (market oriented development). This project aims to deal with the fragmented city, as a result of the influence performed by the presence of urban lost spaces (‘Voids’) over the morphological structure of the city, through an Strategic integrated plan for public space management, which can

PREVIOUS Situation
Constant transformation and reinvention of the available public spaces

CURRENT Situation
Fragmentation of the general public space network and lost of void spaces

IDEAL Situation
Re_linkage of the lost fragments into the public space structure as quality sub_centers.
Activate spatial voids by social cohesion
recognize the dynamic and multi scale values embedded in these urban voids as platform to re_link and activate a meaningful cohesive public space network.

thinking about how to implement an strategic planning, inside a Chilean context where the planning system has a complex particularity where it allowed some kind of diversification and flexibility in the development aims, and these days is widely used as the main planning tool, is that we propose an strategical framework for public space management.

It has been mentioned before that the legal framework flexibilized in the 80s towards a market oriented development, thus this constitutes an opportunity of the apparently structured legal scope to transform or adapt on behalf of the future void space interventions. It is important to emphasize this point due to fact that what we look to reach with this proposal, in terms of goals, its impossible to achieve if the ruling formative powers are not addressed.

The feasibility of the implementation, and the convalidation of the interventions within a local reality depends on the ability of the strategy to join time-space aims from the current stakeholders, users and owners in a communicational aggreement, backed-up by a legal framework from where to define the scope of the future intervention.

Under the premise that voids can be integrated to the general public space network as platforms from were to reactivete the use of these lost spaces, we aim to propose interventions that can create quality spaces within a scope that considers the concept of ownership, market and socio-cultural values, in order to create a sustainable proposal, allowing temporal and agreed landuses where the local demands are answered through public space.

In order to define the Design and Planning guidelines for this document, we simplify the strategy design goals as : “To join stakeholders interests and suitable planning instruments about void spaces in order to define the scope of intervention”.

The outcome expected to be achieved by the intervention of void spaces are:

- reQUALIFICATION : DESIGN NEW TISSUES, ADD NEW FUNCTIONS
- INTEGRATION: DEFINE LOCAL CATALYZERS, COMMUNITY PARTICIPATION
- ACTIVATE NETWORK: ENHANCE (CONNECT) MIX USES
PLANNING IMPLEMENTATION

In terms of planning, is it possible to draw a legal framework, supporting the strategy, able to work as an efficient guideline for integrative development and activate the local creativity and innovation? Is thinking about the mediator condition the law can perform and the existence of local added values (social, cultural, and morphological), that we worry about the progressive lost of the urban potentials, and we find an answer in the structure and impartiality of the planning tools (with the corresponding legal framework) to create a common platform from where to build up.

The legal framework should consider adding a ‘social pact’ as a developing tool, making communication an obliged moment in development negotiation; the legality, in its invariable condition, should be able to judge, diagnose and underpin the relevant needs and main shaping forces, make them interact and set start points for the reinvention of cities, preserving, improving or activating their unique values.

As it was mentioned before, there is an special situation related to the ownership of these spaces. Thus, considering we are dealing with private spaces (voids), the project aims to deal with these voids by performing temporal uses, as a result of a common agreement between the citizens and the stakeholders social pact, where the municipality, the users and the neighbours agree in a temporal use for these spaces, which is meant to result in the recuperation of the public space grid, achieving an spatial cohesion through a social cohesion.

Is this why a the United Nation’s ‘social pact’ sys-
The presence of multiple spaces were the affection of the void exists, is where the most value the empty plot takes, and where higher relevance has the idea of regulating and allow temporal uses to take over by adding new functions, considering that the current meanings and functions are already altered (and so the general structure of the public space).

The social pact consists in rejoining forces between the so considered formative elements of a sustainable intervention in this context; ownership, governance and development, and at the same time set a communication agenda were the particular interests of the stakeholders are recognized, thus an agreement of priorities, responsibilities and cooperation can be achieved under a feasible implementation framework where the recognized potentials of the void are enhanced and integrated to a global socio-spatial system.

In the case of Iquique, and all Chilean cities, the main actor regarding development issues is not the municipality, it is the owner. That’s why reaching an agreement is imperative to reach a time sustainable strategy with no inconsistencies on its implementation.

The general idea behind this approach is to activate a method to define temporal land uses, recognizing the typology and the values embedded in the analysed patch, defining rules and possible function programming that are feasible and context related. For example if we have a central space in an area not focused on housing but on services, these spaces should have a more active use in order to avoid the creation of disconnecting places that might become a decay platform. In residential areas, the pact includes the neighbours (opinions about the intensity of the function, activities, noise, etc). When we talk about transformation areas (like in the industrial tissue surroundings) it’s possible to consider bigger urban functions and decide what impact they should have (local, urban or neighbourhood), being even able to host activities with a metropolitan scale, as a joint point of the public space demands from the neighbour municipalities (for example for the visits of the circus, cultural art showcase, seasonal markets, carnivals or religious festivities) and also responding to an historic-cultural use performed in these high value voids.

In order to diagram a kind of manual on how to implement this method we could ask the stakeholders about topics on common ground like: How to use these spaces? What are the solutions for the problematics you see here? What are the constrains to develop these spaces? In terms of permeability and accessibility. What is the liveability we want to improve? Pedestrian oriented?

The answer on common concern issues, from different perspectives, will reveal a demand on the use of those spaces (will specify what is the real demand on those spaces), the demand will define which infrastructure/intervention is required in order to answer the multiple and common aims, and eventually a network will be generated due to the interaction between all the partial interventions.
IMPLEMENTATION TIMELINE

According to the United Nations proposal on how to implement this social pact method in time, we can describe a timeline that diagrams stages, processes, accomplishments and results expected in each of them in order to diagram an overview of the implementation and functionality of the final stakeholder agreement.

UNITED NATIONS SOCIAL PACT TIMELINE. As drawn by H. van den Berg (2011)
Source: altered by Author
From the previous studied typological cases, we select for deeper evaluation two different contextual areas. And with this evaluation we look to systematize the variables influencing the development values of the patches. The case studies are categorized in terms of their potentials to counteract the local fragmentation process and the affection to the permeability, and in the general outcome to enhance the integration to the urban public space.

This implementation exercise is performed in the two patches: the historical city centre (due to its regional scale significance) and the patch located in ZOFRI vicinity (an example of a multi-scale value void, with mainly an industrial-periphery housing development, where the voids are provoked); the reason for choosing this two cases as representative is that, considering that the main strategy talks about rejoining the voids through their role in respect to the urban public space networks, both cases have an opposite relation in respect to their interaction and demands within the public space. Experimenting in this contrast situation can give representative solutions to the strategy system.

To clarify this point, in simple words, we say that the voids in the city centre are usually informed and regenerated by the public space, the filling of the void space is reinforced, thus the public space works as the activator of the values/potentials, meanwhile the voids present in the industrial periphery represent an important case of available spaces, where the implemented public space is inexistent and there’s a need of generating activators, thus the value as a catalyst this time falls into the void. In these contrast examples, the transformation power is embedded in two opposite poles, in the first one the voids acts as ‘regenerator’ of public space, meanwhile in the second the void performs as a ‘creator’ (generator) of public space platforms.

After the values of the public space surrounding the voids we are going to understand deeply now, we can proceed to collect the demands that the multiple users of these spaces have and propose possibilities of use. In order to propose a strategical programme for these voids we delineate which are the agreements (social pact) that should be addressed in the interventions of these spaces and like this, finally drawing the final step of this research. This final proposition of uses that gather the particular interests of all the participants will be the document to take back to the decision making entities and the community for a final con-validation and hopefully sustainable implementation.
6.3 POTENTIAL SPATIAL PROGRAMMING

According to this study’s approach, public space is lost and underused at the study case area. In order to revitalize and activate these fragments we propose a strategy (process of reading) under the following parameters:

VISION

The call is to develop an agreement on a development vision. So to reach an urban structure that allows and facilitates the implementation of locally demanded uses towards the public space structure, recognizing as well the dynamic condition of the new ongoing economic development drivers demands, regarding new actors, development and logistics across the diverse scales that define the whole public space network within the urban structure.

STRATEGIC GOALS

- Re_Link (Connect). Strength the multi_scale interactions to define a cohesive public space network.
- Mix (Complement). Encourage mobility and safety by adding complementary urban tissue (urban functions).
- Activate (Involve). Activate voids use, meaning and place making (community involvement).

The general idea is to enable the permeability of urban multi purpose spaces through the public space network of the city.

DIAGNOSE MATRIX

To redevelop the void area is needed to perform a first step of general diagnose and classification of the typology of the path which we are going to analyze. Within this step, and by the hand of a diagnose matrix, we emphasize the observation of the following points:

- Scale identification. To identify what is the impact scope from the analyzed patch, within the public space network where they belong, and how the void spaces appear within its extension classified by their size (scale), Urban, neighbourhood and Local.
- Structural Spatial Attractor. Once the urban, neighbourhood and plot elements participating in the patch are located, we proceed to underpin which is the ‘Structural Spatial Relation’ that will organize the space in the mentioned scale. This part of the analysis is highly important due to the need of an integral analysis of the morphological, socio-economic and cultural values in the location, by the planner (or the decision maker), and will empower the concept of Identity embedded in situ. This point will make possible to underpin socio-cultural values that will validate the intervention at the same time it represents the transferability values of the intervention.

As an application example we will analyse one patch from the 5 study cases.
## DIAGNOSE MATRIX

<table>
<thead>
<tr>
<th>APPLICATION SCALE</th>
<th>URBAN</th>
<th>NEIGHBOURHOOD</th>
<th>LOCAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BROWNFIELD</td>
<td>BLOCK</td>
<td>PLOT</td>
</tr>
<tr>
<td>CURRENT SITUATION (Appropriation expression)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRUCTURAL ATTRACTOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAKEHOLDERS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTERVENTION CONDITIONS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEGAL TOOLS (Locally recognized)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### DIAGNOSE MATRIX: Case [2]

<table>
<thead>
<tr>
<th>APPLICATION SCALE</th>
<th>URBAN BROWNFIELD</th>
<th>NEIGHBOURHOOD BLOCK</th>
<th>LOCAL PLOT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT SITUATION</strong> (Appropiation expression)</td>
<td>Open air storage</td>
<td>Spontaneous Parking</td>
<td>Enclosed Storage</td>
</tr>
<tr>
<td></td>
<td>Criminality Platform</td>
<td>Open Air Storage</td>
<td>Garbage storage space</td>
</tr>
<tr>
<td></td>
<td>Abandonment / Underuse</td>
<td></td>
<td>Burglars meeting place</td>
</tr>
<tr>
<td></td>
<td>Truck Parking</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STRUCTURAL ATTRACTOR</strong></td>
<td>Regional Mobility: Arturo Prat Av.</td>
<td>Historical Meaning: Coast View</td>
<td>Use and Access of the first floor: Direct relation with the immediate public space</td>
</tr>
<tr>
<td></td>
<td>Regional Economic centre: ZOFRI</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STAKEHOLDERS</strong> (Demand on the space)</td>
<td>Municipality, Tax Free zone [ZOFRI], Private investors, Housing, Cultural activities, Regional Mobility</td>
<td>Municipality, Owners, Housing, Private Investors, Public Space, Cultural expression</td>
<td>Owners, Housing, Private Investors, Public Space</td>
</tr>
<tr>
<td><strong>INTERVENTION CONDITIONS</strong></td>
<td>Protection/non_intervention stripe</td>
<td>Protection/non_intervention stripe</td>
<td>Apply of a 60° angle guideline in back of the plot</td>
</tr>
<tr>
<td></td>
<td>Apply of a 60° angle guideline for development</td>
<td>Apply of a 60° angle guideline for development</td>
<td>Right to view</td>
</tr>
<tr>
<td></td>
<td>Right to view</td>
<td>Right to view</td>
<td>Extension towards public space</td>
</tr>
<tr>
<td></td>
<td>Maximum recommended height</td>
<td>Maximum recommended height</td>
<td>Free first floor</td>
</tr>
<tr>
<td></td>
<td>Extension towards public space</td>
<td>Extension towards public space</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Free first floor</td>
<td>Free first floor</td>
<td></td>
</tr>
<tr>
<td><strong>LEGALTOOLS</strong> (Locally recognized)</td>
<td>Restrict Land Use</td>
<td>Recognize the role of the directly related mobility, and protect it</td>
<td>Densification towards the back (inverted application of 60° angle)</td>
</tr>
<tr>
<td></td>
<td>Developing Transfer rights</td>
<td>Shared visual domain of the coastal area</td>
<td>Maximum height: 3 floor / Settlement of medium height</td>
</tr>
<tr>
<td></td>
<td>Implement legal P.S. responsibility for developers</td>
<td>Recover / Recognize internal passage use</td>
<td>Recognize interactive plints</td>
</tr>
<tr>
<td></td>
<td>Implementation of intervention conditions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OPERATIONAL PRINCIPLES

The application method is composed by two main parts: A first one referred to the analytical approach that corresponds with 'common knowledge' rules that should be addressed in every case of implementation in order to set the ground for a quality intervention or eventually protect the existing qualities in case of no intervention (Qualification Rules), and a second one subdivided in two, which in order to implement this strategy addresses two kinds of operational principles that are complementary: The definition of which local legal tools are meant to be reinterpreted to perform the re-linkage process, as an invariable element that will be applied in every intervention (Basic principles); and the definition of the so called operational principles that will allow the inhabitants to decide and shape their immediate public space as a platform for time adaptive interventions (Mix Use principles).

The main difference between basic and mix use principles is the fact that the first ones are strict and support the current law about building, the fulfilling of these requirements is an obligation. Meanwhile the mix principles represent a new proposal that creates space from the basic legal platform set by the first principles, meaning the mix use principles will set the parameters for transformation and change in case the owner decides to negotiate with the government.

The definition of the invariable part of the intervention parameters, responds to look for a medium point in the ongoing discussion between ‘Densify’ and/or ‘Qualify’ the urban voids. The topic of this thesis does not look to decide about a fixed final outcome of this decision, but to offer a framework that will allow the locality to ‘Use’ the public space in the way that fulfills the best the current socio-spatial aims.

QUALIFICATION RULES

This proposed rules respond to the space management towards the interventions and consider the aspects that should be considered in the implementation of any of the voids so to improve its quality.

a. Time use programme:
   - Include daily uses.
   - Consider seasonal functions.

b. Safety:
   - Preserve visual control and permeability.
   - Maintain public lightning.

c. Weather / Landscape:
   - Use to provide comfort in pedestrian areas.
   - Use of local flora for green interventions.

d. Densification / Land_Use:
   - Maintain the density of the vicinity of 400 meters range.
   - Encourage first floor public/mix usage.
   - Land_use should complement with the surrounding 500 meters radius area.
   - Land_uses must be demanded by the community.
   - Non densification of recognized social interaction spaces.

e. Accessibility:
   - Provide at least two circulation methods.
   - Define visible accesses, emphasize intersection spaces.
   - Determine the parking areas parallel to the main mobility routes, not in leftover spaces.

f. Maintenance:
   - Municipal control and maintenance of open spaces.
   - Legal responsibility on maintenance to the owner.
   - Community involvement in shared spaces care.

g. Housing / Mix Use:
   This point is addressed as a precondition for void revitalization. Due to the always present developing interest over any piece of available land, it is unreal to think that the owner will not evaluate the opportunity of making profit of its own land. Is this how the inclusion of housing and mixed use infrastructure is considered as a relevant parameter to consider in a very early stage of intervention, as a tool for establishing a sufficient platform.
The buildings placed in direct relation with a recognized mobility network and/or structural element space, will be able to extend 3.00 meters (medium height of the first floor in the neighbourhood) of their intervention volume towards the public space only in the circumstance it is adding a mixed use (complementary to the place) function.

**MIX USE FOR 50% OF GROUND FLOOR** [New Rule]
Related to the previous point. If 50% or more of the surface on the first floor (or direct relation with the pedestrian route) is designated to a mixed use (non housing) function, the intervention space can be extended 3.00 meters.

**FREE FIRST FLOOR** [New Rule]
This concept refers to the liberation of the first (pedestrian) floor in order to add a semi_public space to the general public space network. This intervention can improve the permeability (and porosity) of the analyzed patch. At the same time, if this option is taken, the housing volume can grow an extra floor.

**MIX USE PRINCIPLES PLATFORM SETTING**

**PROTECTION/NON_INTERVENTION STRIPE**
Space contiguous to the main structural space protected from densification. The width of this stripe corresponds to 6.00 meters (the rule is: Two times the medium height of a first floor in the area).

**APPLY OF A 60° ANGLE GUIDELINE FOR DEVELOPMENT**
Use of the established shadow regulation angle (*) to regulate growth and distance of the future development of the void space. The official plot limits will perform as application line, thus if there’s a terrain gradient, the intervention volume will be placed under the guide of this imaginary line.

**RIGHT TO VIEW (M.Errázuriz)**
Every intervention, or change in the volume of the built plot should respect the visual continuity of the building with the structural space, in order to create a neighbourhood visual control and unification of sights.

* *Servitude of View*, as seen in the Civil Code-Chile

**MAXIMUM RECOMMENDED HEIGHT** [New Rule]
The maximum height that will be recommended for future developments in the voids is going to be defined by the media in the proximity of 400 meters in the neighbourhood and the mixed application of the previous mentioned rules.

Example: For the patch of ‘El Colorado-ZOFRI’, the recommended height is three floors, due to the general low density quality of the neighbourhood.
How to build a public space capable of variations in time and intensity?

In order to diagram a practical way of intervention and answer the question, a set of tools meant to apply in every analysed void is drawn. The public space elements that we will use for the following interventions are defined in 9 options, which can be implemented together, single used and in some cases re-shaped to multiple scales.

The idea behind setting a toolbox on service of the decision makers is to give the individuals (professionals and non-professionals in the field) the power to observe, analyse and participate of the formative process that will stimulate the re-use of the urban voids. To seduce the people to design by themselves and being responsible of their environment.

The definition of the intervention prototypes are the result of the comparative analysis of multiple strategies that address the qualification and improvement of public space (J. Gehl public space practice, Pocket Park NY movement) and a critical observation of the local needs.

The tools are considered to be implemented in a short time that will variate from tool to tool without exceeding the maximum of four years for the initial implementation (this time frame corresponds to the extend of a legal government period), when after monitoring can be improved, removed or maintained for a next period of upgrade, which will vary in every specific case. The following showcase will exemplify the state of the prototype tools in three scenarios: No intervention (current situation), implementation of priority interventions in a start period, and improvement of the intervention.
This tool is inspired in the alternative use of parking spaces during working hours as complementary meeting spaces. In the situation this intervention becomes permanent, can work as a support extension for mixed activities happening in the vicinity.

PARKLET Type
Source: Created by author
As the previous case, this is a short-term implementation tool, where in an improvement stage, the wide circulation space can be complemented with some quiet stops with diverse contemplative activities.
Currently there is a growing interest about healthy living and mobility through bicycle (specially in small towns), by including bicycle paths next to the vehicle mobility, we provide an option for those who want to experience their daily city life (e.g. going to work) in a different way, or just include healthy habits to their routine. This test lane can eventually be exported to other parts of the city that enjoy the initiative.
This tool is the most used in terms of making public space attractive, gathers demands about urban mobility and at the same time recreative aims. It is related to the beautification of the public space, however has an important function reuniting multiple urban demands in one multifunction public space.
In some cases, the monofunction of a street in a street without dense traffic represents a borderline for public living. By addressing a critic review of the need of time usage from these platforms, its possible to propose a single extended public space platform, where a sidewalk can improve its functions towards a square meeting space platform.
When the road network is traced and the plot divisions are made, usually leave pieces of open space with irregular forms that become hard to reintegrate to the general network. By applying qualification rules and adding attractive elements, these spaces can begin to be used. Improving the accessibility is highly relevant in terms of reducing the disconnection and the easy use of the space (e.g., placement of pedestrian paths to cross the streets).
This tool patch is different from the others in terms it is based in the principle of a big available field that can host temporal, big sized functions. In this case, the evolution of the intervention varies from activity to activity, but the ones suggested here represent an starting point for quality improvement.
CURRENT SITUATION

FUTURE/TEMPORAL SITUATION

SQUARE CENTRE Type
Source: Created by author

TEMPORAL INTERVENTION for REVIEW
Local Market, Street Fair
Weekly

TEMPORAL INTERVENTION for REVIEW
Open Air Cinema, Cultural Festivities, Sports
Season or Unique event

TEMPORAL INTERVENTION for REVIEW
Public Exhibitions, Circus, Art Performances
Season or Unique event
This tool represents a way of recovering plot size voids into a meaningful community space with some neighbourhood privacy. The concept of this patch is inspired in the reinvention of these small spaces as complement for some semi-public internal activities in the contiguous spaces, such as cafés, small parks, etc., and finally a possible boost up for commercial activities.
The placement of urban gardens or planters in strategical places for citizens to cultivate the land is expected to become a meeting place for a part of the neighbourhood community, at the same time it will support the daily living needs for some inhabitants and recreation aims for some others. In a very much improved version of this intervention, the local gardens can communicate with the weekly market for a complete mix use system.
How do we use this tools? By joining the so considered most important concepts in terms of formative powers towards the voids: Stakeholders, in terms of ownership; and Scale in terms of priority and influence; we diagram an Adaptation/Implementation matrix, that can be applied in every analysed void patch to activate.

The process of evaluation and placement of the previous tools within the void public space network refers to the following scheme, where the void space is first evaluated in terms of scale (potential to activate within the urban network), which will represent the priority of the intervention meaning the wider scope of void re_linkage opportunities with different networks and the main urban public spaces will be developed in first place (Urban interventions have the first priority, followed by the neighbourhood scale ones and finally the interventions in scale of a plot). After this classification has been made, we proceed to a second stage of classification in terms of ownership (this advises on who will perform and maintain the intervention):

a. Privately Owned Void Space: Private sites and Residual (development leftover) sites.

b. Publicly Owned Void Space: Street space and Residual space.
* This matrix represents the summary of what this project has achieved, thus the most important tool provided by this thesis project. In an ideal scenario, the print of this page performs as a ‘pocket guide’ to be used in situ when a void space is candidate for intervention.

<table>
<thead>
<tr>
<th>OWNERSHIP CLASSIFICATION</th>
<th>OPPORTUNITIES OF INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIV. SITE</td>
<td>PRIV. RESIDUAL SPACE</td>
</tr>
<tr>
<td>PRIV. SITE</td>
<td>PRIV. RESIDUAL SPACE</td>
</tr>
<tr>
<td>SIDEWALK EXTENSION</td>
<td>SIDEWALK EXTENSION</td>
</tr>
<tr>
<td>BICYCLE LANE</td>
<td>BICYCLE LANE</td>
</tr>
<tr>
<td>STREET PARK</td>
<td>STREET PARK</td>
</tr>
<tr>
<td>TEMPORAL SQUARE CENTRE</td>
<td>IRREGULAR SQUARE</td>
</tr>
<tr>
<td>URBAN GARDEN</td>
<td>TEMPORAL SQUARE CENTRE</td>
</tr>
<tr>
<td>HOUSING / MIX USE</td>
<td>URBAN GARDEN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCALE CLASSIFICATION</th>
<th>INTERVENTION PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN NEIGHBOURHOOD</td>
<td>PLOT</td>
</tr>
<tr>
<td>LANE</td>
<td>POCKET / MINI PARK</td>
</tr>
<tr>
<td>STREET</td>
<td>POCKET / MINI PARK</td>
</tr>
<tr>
<td>PARKLET</td>
<td>POCKET / MINI PARK</td>
</tr>
<tr>
<td>URBAN GARDEN</td>
<td>POCKET / MINI PARK</td>
</tr>
<tr>
<td>HOUSING / MIX USE</td>
<td>HOUSING / MIX USE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERVENTION TOOL SET</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARKLET (San Francisco, 2009)</td>
</tr>
<tr>
<td>SIDEWALK EXTENSION</td>
</tr>
<tr>
<td>BICYCLE LANE</td>
</tr>
<tr>
<td>STREET PARK</td>
</tr>
<tr>
<td>SHARED SPACE (BOULEVARD)</td>
</tr>
<tr>
<td>IRREGULAR SQUARE</td>
</tr>
<tr>
<td>TEMPORAL SQUARE CENTRE</td>
</tr>
<tr>
<td>POCKET / MINI PARK (New York)</td>
</tr>
<tr>
<td>URBAN GARDEN</td>
</tr>
<tr>
<td>HOUSING / MIX USE (Under Conditions)</td>
</tr>
</tbody>
</table>
6.5 ANALYSIS CASE TEST

ANALYSIS CASE TEST [2]

By underpinning the values embedded in the patch, it is possible to identify the intervention points with higher potential to trigger the re_connection of the void space: Catalyzer Voids; and place where it corresponds the most accurate tools in order to respond to the local demands.

As an example of the application of this method, we will use one of the patches selected previously as case study to fill in the matrix: El Colorado-ZOFRI patch.

In this graph it is roughly described the process of diagnose, linkage, mixicity and activation of the patch: The influence scale of every available space is shown, the recognition of the main mobility and accessibility networks with the proposed improvements in the pedestrian circuits within the patch and finally the re_diagram of the patch including the possible intervention platforms.

The diagram in the next page amplifies the intensity of the public space potentials embedded in the study patch. This classification is based in the urban functions these spaces perform, relating the maximum intensity to the spaces that represent an urban relevance, a medium intensity to those spaces regarded with neighbourhood (inside and for exchange) value for the community, and a lower intensity for the places that represent a local interior identity value for the community. This lower intensity places at the same time represent the strongest intervention points in order to achieve social re_qualification of the void. It is about this platform where we define possible locations for the previously defined toolbox.
EXTREME SCENARIO: FUTURE INTERVENTION
Case ‘El Colorado’
Source: Created by author
The confirmation of the effectiveness of the intervention will be expressed in the use of the spaces. Use will fill the void with significance.

The graph of the visual control achieved by making the fragment spaces accessible reveals a general platform for intervention that shows different intensities (time and space) in the function and meaning of the accomplished public space network, and with it (as mentioned before) the starting point for a social recognition and revalidation of the spaces, drawing circuits and improvement priorities in the places where multiple networks meet.
In order to test the strategy in a different patch, we apply the method in the coastal patch, specifically the area facing Playa Brava (beach), because it represents a relevant anomaly in terms of densification, where the first coast line appears as a wall between the neighbourhood behind it and the coastal public space.

Refering to the previous stated rules for development, it's important to mention that the medium height for this area is 5 floors, where the average height of a single level is four meters; and to remind that the interventions proposed by this project are focused on the creation of quality public spaces, thus the priority on intervention goes to the not densification of the available urban voids, however due to the high demand on the development of this area for specially turistic activities, the intervention should prioritize the liberation of the ground floor for public use activities.
NON INTERVENTION SCENARIO : CURRENT SITUATION
Case "Coast Playa Brava"
Source: Created by author
EXTREME SCENARIO: FUTURE INTERVENTION
Case "Coast Playa Brava"
Source: Created by author
In this case, the graph of the visual control reveals the high intensities on public space use around the mobility networks, which is expected due to the spatial structure the public space presents in this area of the city, with a medium density however the almost complete use of the available groundfloor.

Specially in the Zoom 2, is possible to appreciate the mix of functions related to the significance of the place, considering that the most relevant use concentration appears in the intersection between the neighbourhood pedestrian network and the door or the school.
Considering the aim of this research is to create a platform able to generate new mixed use tissues, we proceed to showcase (previous image) a set of possible uses that can be hosted by the mixed application of the tools in the ‘El Colorado’ patch.

In the following images, we refer to ‘Valparaíso Cultural Park’ project by HLPS Architects in which a space, previously used as a prison is understood as a new space of confluence and integration for the designers. An underlying contradiction due to its original purpose as a prison: the hermetic reclusion of space, but surely an example of how people re-invents the space by adding new urban functions.

The images of this project, due to the condition of port city (Valparaíso is the main port of Chile), appear consistent with the design aims to address in Iquique, where the coast space and the visual cohesion between the fragments of public space describe a bigger system of city recognition. And arises the need to address the social element demands into the decision making.
Public spaces are the great equalizer in cities: Improvements in the public realm benefit everyone. The city should view the challenge not as a reason for retreat, but as a call to create a diverse, dense, intense experience of public life that we can all enjoy.

- Jan Gehl, Jeff Risom and Julia Day
7.1 REFLECTIONS AND LIMITATIONS

The concluding chapter will discuss on the feasibility of physical implementations of the proposed strategy, and will provide a brief review about the outcomes, achievements and limitations of the proposed strategy.

This thesis began with the aim to examine the challenges and opportunities that arise from the ongoing void generation in the city of Iquique. The project aimed to develop an alternative to support the current planning system dealing with the fragmented city, generated by these urban voids, by looking for a socio-spatial strategy that would strengthen the meaning and quality of these fragments through the recognition of a multidimensional public space system. The achievement of this aim, if succeeded, will activate social involvement and recover of abandoned urban spaces.

The location where this project is applied represents a type, in terms of case study, where an urban area embedded in a developing country is progressively pushed towards development essentially trying to respond market aims. This planning method based in investment interests is currently becoming a trend, especially in Latin America where the successful development is usually mistaken by quantity of interventions instead of quality ones (Boisier, 2001).

This project is presented as a complement between an extensive research and the proposal of a planning strategy for the city of Iquique. The first part relies in the understanding of the type, with its universal characteristics (as a global study case) and its particularities in order to frame a general strategy that can be complemented by a locally rooted alternative, thus it is considered important to avoid addressing planning strategies where a model is replicated in multiple scenarios without integrating local potentials to the intervention, limiting the chances of community impact and effectiveness of the strategy. The second part, the proposal, represents the practical application stage of the vision resulting from a research critical analysis, where the basic principles supporting the current legality are presented, a functional toolbox is provided and an application system is diagrammed in order to serve the urban space actors needs.

AIM

With the purpose of activating the re_linkage and meaningfulness of the underused urban voids, this project addresses a reasonable alternative in the reach of the community. It is certainly not the only alternative but it addresses the possibility of a communicational (and decision making) bridge between Top_down and Bottom_up policies for city shaping. By addressing the open spaces of Iquique, this project represents a starting point to recover urban significance and time_space adaptation, mainly based in the quality social commitment can add to the evaluation of public space.

The variation of the intervention outcome, in different patches of the city, will arise by the hand of the reading of existing values in the vicinity of the studied void. If we are in presence of a void that is significant in size, however the accessibility is deficient, the intervention should supply that aim first, answering to what the method pursues, which is to balance the spatial quality of these fragments of public space with the city’s public space network. Finally, the mixture between these 'supplement' interventions and the elements proposed from the toolbox will deliver an unique outcome in every case, allowing to address different activators and potential spatial programming as needed.

LESSONS LEARNED

By addressing theories from different world locations, so considered influential in the understanding of Chilean development, we target for the creation of a new development of the theory, where those principles that were studied particularly in order to create a theoretical framework are interacting in a common 'live' case study. It’s important to emphasize the liveability condition of the city of Iquique because what makes the case relevant and especial for the development of this project is not necessarily the ‘fragmented’ condition and the ability of all of the previously mentioned theories to tackle their challenges from their unique perspective. What we learn from Iquique’s
(and maybe Chile’s) case, is to open the scope of the theme, towards the comprehension of a new dimension in urban planning: The formative power embedded in the social commitment.

Social resilience, social power and place making are topics that have been studied through times, however they are frequently forgotten at the moment of defining a city. By adding this element as a formative tool, within a void space management strategy, to recover and reconnect lost public space, we include the most valuable feature found in developing countries: The People and their aim to ‘use’ their cities.

On the other hand, this project addresses the need of developing urban strategies as an integral approach, where the selection of efficient tools for space intervention (in this case urban void management) is the result of an inverse analysis process, where the totality of the urban scope its analyzed in order to underpin how it relates internally, describe the functional urban systems and reveal potentialities, in order to achieve a common ground tool/system that will be able to trigger any current or future generated void space and reconnect them in a multi_scalar approach that recognizes its impact. Thus the final void management plan relies in a common criteria, where the same structural rules are followe and the concepts referring on how to valuate and re_evaluate the voids are equally accurate to implement in any urban patch. At this stage we emphasize the need of local professionals on the implementation of this strategy, under the premise that the inclusion of local professional knowledge will add deepness to the diagramation of the diagnose and focus of the impact provided by an effective project framework.

This proposal opens a door, to see the urban space as an integrated opportunity, and to create ‘Cities for people’ (Gehl, 2013) on the reach of people's hands.

LIMITATIONS

This project represents mainly a theoretical testing model for ‘developing voided cities’, that could be replicated and paraphrased in multiple world scenarios, by the hand of a professional planner, a passionate citizen and/or a flexible legal framework that allows to inject quality spaces within the public space networks. However, the extensive research and proposal process, and the special emphasis in including local identity as a shaping tool, could represent only a 10% of the real impact of this thesis proposal.

The truth is that in Chile the involvement and interest in urban issues is partial, respond to a monthly time_frame trend on what is meant to be protected or preserved and quickly moves towards a new trend. The traditional top_down planning (and legal) approach is hard to break, and there is still not a vision of benefit (profit) related to the quality of public spaces, at least not further than merely appreciating the beautification processes related to main mobility roads.

The starting point for a strategy implementation relies on the will of the planning powers/instruments. In this case, the municipality, determined as the organism capable to activate the use of these voids spaces and authorize the implementation of the proposed strategies. Thus before we think about exposing the information to the future users of these public spaces, we should pursue the inclusion of these strategies within the municipal agenda, together with a commitment from the ruling body to build communicational bridges and give space to the multiple actors demanding over this available space to perform, activate and regulate the transformation processes of the urban spaces within the framework of this thesis project, that has proven to be legally feasible, adding shared rights and duties to the city planning.

What currently runs against the implementation of this project is the non existence of an open source of information for planning matters, the process of acquiring information becomes tedious and ends up in removing the interest, and further participation, of the citizens in urban themes. If information is not set on a citizen reach, the inhabitants will have an active, efficient and well informed participation in decision making and finally to be encouraged to design by themselves.
7.2 REFERENCES

- Albrechts, L., 2010 How to embrace creativity, diversity and sustainability in spatial planning: Strategic Planning Revisited
- Errázuriz, M., Concept of ‘Servitude of View’, included in the civil code of Chile and Spain. Available at: http://www.derecho-chile.cl/las-servidumbres-ii-parte/
- Viganó P., On Porosity. IUAV Venecia

INTERVIEWS

7.3 BIBLIOGRAPHY

- Dimitrokou, I., 2013. Redefining abandonment through inhabitation: Strategic instruments for socio-spatial transformation in Athens
- Glaser M., 2012. The City At Eye Level: Lessons for street plinths
- Viganò P., On Porosity. IUAV Venecia