RE_VALUE and LINKAGE of REGENERATING URBAN VOIDS
Design and Planning strategies to counteract local socio-spatial fragmentation, in the Iquique urban system.
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STRATEGIC INTEGRATED PLAN FOR PUBLIC SPACE MANAGEMENT
IQUIQUE
HISTORICAL DEVELOPMENT

1861
- First neighborhoods
- Cosmopolitan City

1883
- First main streets
- City urban structure

1907
- Working class on the north / Wealthy population on the South
- Social segregation expressed in the public space

1930-1950
- Rapid urban / population growth
- Start process of urban implementation

1970-1980
- Urban expansion by sectors
- Complete city urbanization

2010-2011
- Different city periods are spatially appreciated
- Extreme internal migration processes. Alto Hospicio.
- Appearance of new urban centralities, definition of new neighborhoods and new mobility networks
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'
DELINEATING THE PROBLEM
IQUIQUE VOIDS MAP
Source: Created by author
Avalúo Fiscal
($/M2)

1 a 20.000
20.000 a 40.000
40.000 a 80.000
80.000 a 160.000
160.000 y más

Source: Created by author based in CCHC study on Iquique development
ABANDONED PROPERTIES IN BAQUEDANO STREET, IQUIQUE

Source: www.elnortino.cl
PARKING SPACE AND TEMPORAL MARKET PLACED IN THE CITY CENTRE COAST AREA

Source: GoogleMaps
AERIAL VIEW OF CITY VOIDS LOCATED AT THE SOUTH URBAN PATCHES

Source: www.lquiquesdesdeelaiire.com
We are in the presence of a highly porous urban fabric. Were the fragments of the different development periods have left their marks in the socio-spatial structure of the city.

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 re_linkage 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.

Lost of a relational link between urban regeneration, the treatment of the self-generated voids and the inclusion of participatory development schemes.
AIM

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. Responding to a large and constantly variation of uses.
reQUALIFICATION: DESIGN NEW TISSUES, ADD NEW FUNCTIONS

INTEGRATION: DEFINE LOCAL CATALYZERS, COMMUNITY PARTICIPATION

ACTIVATE NETWORK: ENHANCE [CONNECT] MIX USES
RESEARCH QUESTIONS AND METHODS
RESEARCH QUESTIONS

• How to define design planning strategies to develop a cohesive public space through the Morphological, Functional and Social-Cultural values of spatial voids in a highly porous developing city?

• 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?
RESEARCH STRUCTURE - METHODS

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

AIM

THEORETICAL FRAMEWORK

PROBLEM STATEMENT

ANALYTICAL FRAMEWORK

RESEARCH QUESTIONS

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

MOTIVATION

- 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. Viganò)
- Finding Lost Space (R. Tranck)

- Participatory Development
- Public Space and Network values
- Evolutionary Resilience
THEORETICAL FRAMEWORK
FRAMEWORK REFERENCES

STRATEGIC PLANNING REVISITED: A FUTURES PERSPECTIVE

Maree Conway
Association of University Administrators Conference
April 2007

The porous city: prototypes of idiorrhythmical conglomerates

Patola Vigna

The phenomena that gives rise to Roland Barthes' cycle of lenses. Comment upon multiple connotations, and manifestations itself in the many conglomerates idiorrhymically. It is the idiorrhythmical conglomerates that "evolve" the intelligent web and evolve the essence of mind and its transcendental levels. The system evolves its role of lenses, a manner landscape with which the external identity and written which its identity phase reader. Its shows a library, thus the user. The structures between idio and word forms the scenario into a field of knowledge that can be visualised by the reader from the word a social can be reconstructed. "Porous city" and "idiorrhythmical conglomerates" are learn by which a recurrent phenomenon, a widespread association, fragmented groups of hypotheses can be found and can define a field of knowledge. It is from these ideas that we wish to start off.

THE PAINTING OF ABSTRACT

The concept of abstract comes from the natural sciences, mainly from the science of the earth and its effects. In English movement and resilience are the terms. It has to do with classification phenomena, phenomena that do not cross a perfect line, but other bodies. As a metaphor, abstract was used in 1823 by William Wordsworth and is a title after the title "Elegy to a Lady". The Mediterranean city compares, at the same time, individual and fully visible. The words in the double meaning of sensed and clearly visible elements today are many as local useful for describing and designing contemporary cities and territories, useful for interesting
.. ‘Collective used urban spaces are understood as ‘the network of publicly and privately owned spaces and buildings used by the population for its recreation and circulation, either on a permanent or regular basis, which are explicitly linked one to another, at the scale of the pedestrian’.

- Leon S., 2001

- Privately Owned/Used Space
- Public Space by Use
- Public Space by Ownership

- Publicly Provided Space

- 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.

- 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.
THE LOST SPACE

.. 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..

- Trancik, 1986

.. the lost spaces in the city of Iquique are unattended socio-spatial fragments of urban fabric, aiming for recovering intervention..

VOID

- Neglected spaces with a better future perspective.
- Platforms for strategic interventions, an opportunity for requalification of the socio-spatial values

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

INTEGRATED SPATIAL PLANNING

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.
OPERATIONAL TOOL

UNDERSTANDING

INTEGRATIVE APPROACH. Albrechts, Participatory Development.

SPATIAL READING. Vígano, Porosity

IMPLEMENTATION. United Nations, Social Pact

RE_QUALIFICATION. Trancik, Finding lost space.
ANALYSIS

lesson learned from Iquique
- **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.

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**LEGAL PLANNING CONTEXT**

- PARTICIPATORY URBAN DECISION MAKING PROCESS
  (Proposal)

- TRANSFORMING DECISION MAKING PROCESS
  (Government Aim)

- TRADITIONAL DECISION MAKING PROCESS

- LOCAL RESIDENTS
  Users

---

**COMPARISON of URBAN PLANNING AIMS**

Source: Created by author based in Chile’s Ministry of Housing focus aim document, 2007
VALUE OF VOIDS

Criteria for valuating urban voids, based on the impact the activated void space can perform in the creation of a general public space network, and its ability to raise local potentials.

- Accessibility.
- Morphology.
- Urban Function.
- Socio-Cultural.

How do we measure urban void values?
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.
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).

For this concern, the concept of POROSITY is applicable.
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).
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).
<table>
<thead>
<tr>
<th>Case</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Centre: Prat Square</td>
</tr>
<tr>
<td>2</td>
<td>Industrial: El Colorado-Zof-Rí</td>
</tr>
<tr>
<td>3</td>
<td>Coast: Playa Brava Beach Park</td>
</tr>
<tr>
<td>4</td>
<td>Extension Area: Mall-Ex Airport</td>
</tr>
<tr>
<td>5</td>
<td>South Sector: Pedro Prado-Alberto Hurtado Av.</td>
</tr>
</tbody>
</table>

**Porosity and Public Space / Voids:***

![Porosity and Public Space / Voids images]
RE_LINKING THE VOIDS

Proposal
OPPORTUNITY OF INTERVENTION

The intervention scope can be understood by the following graph:

LOCALITY (PARTICIPATORY) | MARKET (FORMATIVE) | LAW (REGULATORY)

Catalyst - priority intervention
Transformation Scope

Local 1  Neighbourhood 2  Urban 3  Region 4
This proposal is based in the recognition of the current and future users demands.

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.
IMPLEMENTATION OF THE PROPOSAL

Case [ 2 ]
OPERATIONAL PRINCIPLES

QUALIFICATION RULES

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:
OPERATIONAL PRINCIPLES

**PROTECTION/NON_INTERVENTION STRIPE**

*Art. 2.6.3 O.G.U.C.-Chile*

**APPLY OF A 60° ANGLE GUIDELINE FOR DEVELOPMENT**

*MAXIMUM RECOMMENDED HEIGHT [New Rule]*

**RIGHT TO VIEW (M.Errázuriz)**

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

**EXTENSION TOWARDS PUBLIC SPACE** [New Rule]

**MIX USE FOR 50% OF GROUND FLOOR** [New Rule]

**FREE FIRST FLOOR** [New Rule]

**MIX USE PRINCIPLES**

**TRANSFORMATION SETTING**

* 60°
TOOLBOX

In order to facilitate the implementation of an integrated plan a toolbox is drawn. to simplify communication bridges between stakeholders and finally seduce people to design.

How to build a public space capable of variations in time and intensity?
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.
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.
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

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

SQUARE CENTRE Type
Source: Created by author
## Void Intervention Matrix

### Ownership Classification

<table>
<thead>
<tr>
<th>Privately Owned</th>
<th>Publicly Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIDEWALK EXTENSION</td>
<td>SIDEWALK EXTENSION</td>
</tr>
<tr>
<td>BICYCLE LANE</td>
<td>BYCICLE LANE</td>
</tr>
<tr>
<td>STREET PARK</td>
<td>STREET PARK</td>
</tr>
<tr>
<td>TEMPORAL SQUARE CENTRE</td>
<td>TEMPORAL SQUARE CENTRE</td>
</tr>
<tr>
<td>URBAN GARDEN</td>
<td>URBAN GARDEN</td>
</tr>
<tr>
<td>HOUSING / MIX USE</td>
<td>HOUSING / MIX USE</td>
</tr>
</tbody>
</table>

### Intervention Tool Set

- PARKLET (San Francisco, 2009)
- SIDEWALK EXTENSION
- BICYCLE LANE
- STREET PARK
- TEMPORAL SQUARE CENTRE
- IRREGULAR SQUARE
- URBAN GARDEN
- HOUSING / MIX USE (Under Conditions)

### Scale Classification

#### Urban Brownfield

- SIDEWALK EXTENSION
- BICYCLE LANE
- STREET PARK
- TEMPORAL SQUARE CENTRE
- URBAN GARDEN
- HOUSING / MIX USE

#### Neighbourhood Block

- SIDEWALK EXTENSION
- STREET PARK
- TEMPORAL SQUARE CENTRE
- URBAN GARDEN
- HOUSING / MIX USE

#### Local Plot

- POCKET / MINI PARK
- URBAN GARDEN
- HOUSING / MIX USE

[UBERN SERVICES / EQUIPMENT]
Case [2] ‘El Colorado’

<table>
<thead>
<tr>
<th>Urban Brownfield</th>
<th>Neighbourhood Block</th>
<th>Local Run</th>
<th>Application Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Situation</td>
<td>Structural Attractor</td>
<td>Stakeholders</td>
<td>Intervention Conditions</td>
</tr>
<tr>
<td>Open air storage</td>
<td>Regional mobility: Arica Port Av. Regional Economic Centre (ZOFRI)</td>
<td>Municipality, Tax free zone (ZOFRI), Private Investors, Housing, Cultural activities, Regional mobility</td>
<td>Protection/non-intervention strips</td>
</tr>
<tr>
<td>Spontaneous Parking</td>
<td>Historical Meaning: Coast View</td>
<td>Municipality, Owners, Housing, Private Investors, Public Space, Cultural expression</td>
<td>Apply of a 45° angle guideline for development</td>
</tr>
<tr>
<td>Enclosed Storage</td>
<td>SEE and Access of the first floor: Direct relation with the immediate public space</td>
<td>Owners, Housing, Private Investors, Public Space</td>
<td>Right to view</td>
</tr>
<tr>
<td>Regional Crime Platform</td>
<td></td>
<td></td>
<td>Maximum recommended height</td>
</tr>
<tr>
<td>Abandonment / Underuse</td>
<td></td>
<td></td>
<td>Extension towards public space</td>
</tr>
<tr>
<td>Truck Parking</td>
<td></td>
<td></td>
<td>Free flat floor</td>
</tr>
<tr>
<td>Criminality Platforms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Air Storage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garbage storage space</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Activités voids

Diagnose

Accessibility

Actived voids

Mix & Activate

Current situation

Intervention

Current mobility

Proposed mobility

Potential P.S. responsibilities for developers

Recover / Recognizable internal passage area

Recognizable interactive public space

Development of area

(participation and recognition)

Regional Mobility: Arturo Prat Av.

Regional Economic Centre: ZOFRI

Use and Access of the first floor: Direct relation with the immediate public space

Municipality, Owners, Housing, Private Investors, Public Space, Cultural expression

Owners, Housing, Private Investors, Public Space

Municipality

Tax Free zone (ZOFRI)

Private Investors, Housing

Cultural activities, Regional mobility

Protection/non-intervention strip

Apply of a 45° angle guideline in back of the plot

Right to view

Extension towards public space

Free flat floor

Recognizable internal passage area

Recognizable interactive public space

Development of area

(participation and recognition)
NON INTERVENTION SCENARIO: CURRENT SITUATION
Case ‘El Colorado’
Source: Created by author
EXTREME SCENARIO: FUTURE INTERVENTION
Case 'El Colorado'
Source: Created by author
MIXED PROGRAMME SHOWCASE
Source: Created by author
REFLECTIONS AND LIMITATIONS
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).
Currently the cities and their public space has been taken for granted, avoiding to acknowledge the unique features of its social element in the city making

**AIM**

The project addresses a reasonable (reachable) alternative for activating the re_linkage and meaningfulness of the underused urban voids. It addresses the possibility of building communicational (and decision making) bridges between Top_down and Bottom_up policies for city shaping. And represents a starting point to recover urban significance and time_space adaptation, based in the quality social commitment can add to the evaluation of public space.

**LIMITATIONS**

In Chile there is still not a regard of benefit (profit) related to the quality of public spaces. The municipality is the only responsible to activate the use/implementation of these voids spaces dealing strategies. Thus we should pursue the inclusion of these strategies within the municipal agenda, giving space to the multiple actors to perform.
The non existence of an open source of information for planning matters, makes the process tedious and progressively diminishes the interest.
When people lose everything, this proposal gives tools to the community to help.
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