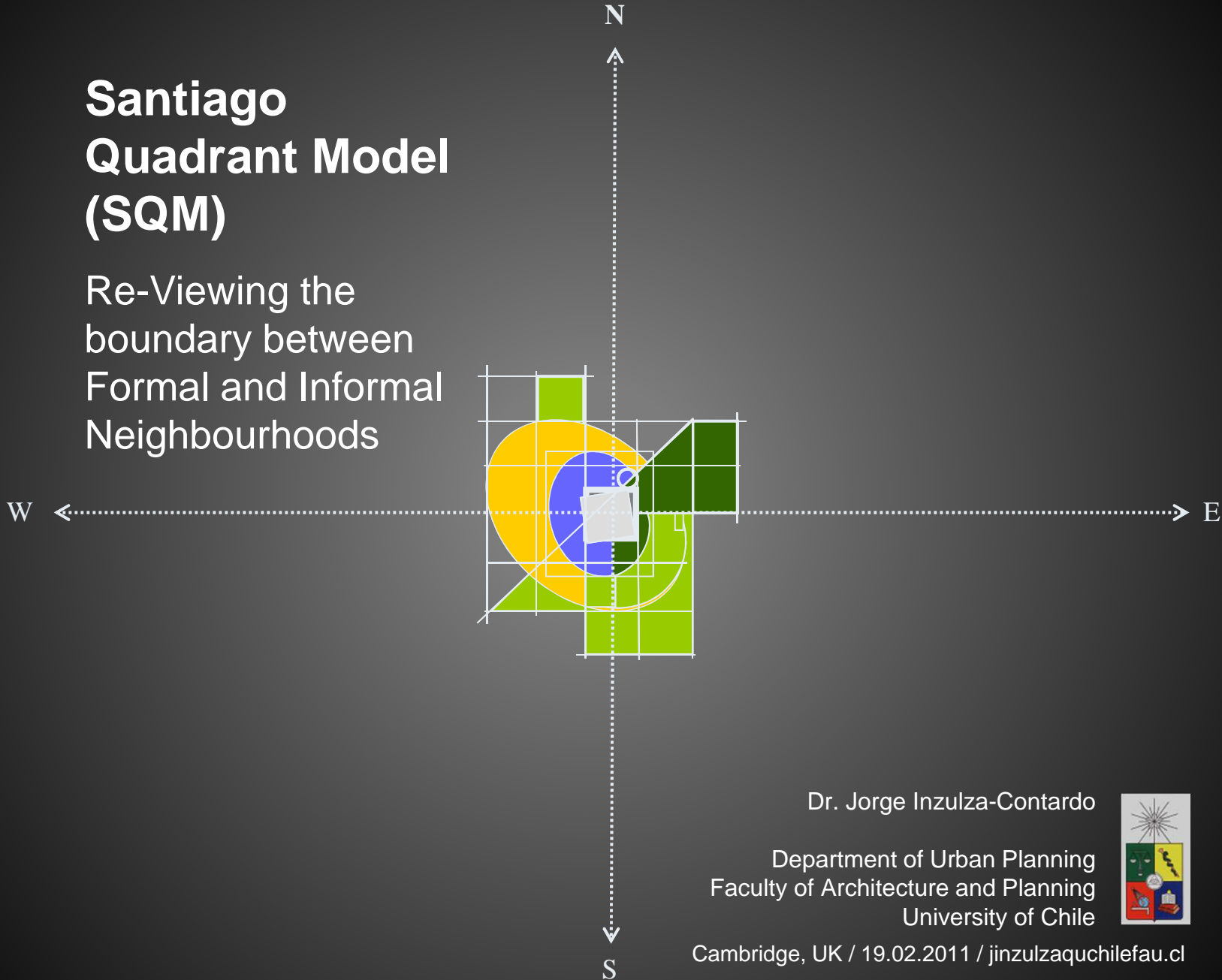


Santiago Quadrant Model (SQM)

Re-Viewing the
boundary between
Formal and Informal
Neighbourhoods



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Santiago Quadrant Model (SQM)

Re-Viewing the boundary between Formal and Informal Neighbourhoods



1. SQM: the main metamorphosis



Physical and social changes 2.

W ←

3. Formal & informal boundaries

→ E

Conclusions & reflexions 4





1. SQM: the main metamorphosis

The shape of Santiago's urban fabric, in common with many others Latin American cities, has undergone a major metamorphosis, particularly, at the beginning of 20th Century, when Santiago started to consolidate as a capital city with the problems and complexities associated with this process.



1. SQM: the main metamorphosis

Figure 5.13 Examples of 'condominios' in Gran Santiago. A: main entrance in an 'outskirt area'. B: high-rise building offered in SHC. C: sketch of a high-rise building panoramic (terrace) located in the SHC. In the centre: a logo with the Santiago Cathedral image promoting the sale of a housing project in the core of Santiago

- globalization
- social segregation
- Foreign consumption
- trendy housing
- high-rise buildings
- gated communities



Source: images from www.pabellon.cl

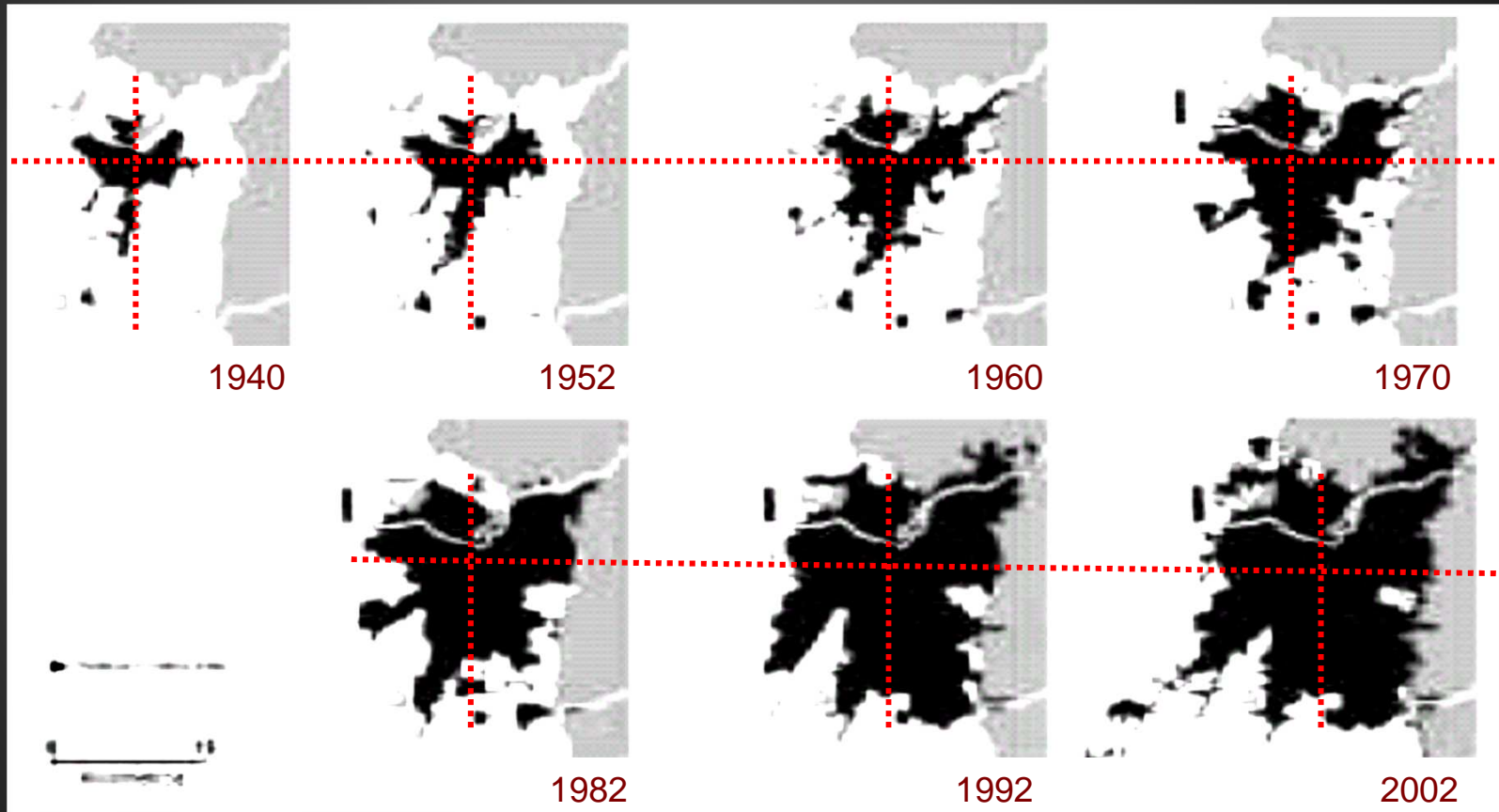


1. SQM: the main metamorphosis

For the period 1940-2002, actions of extension rather than densification, and state-sponsored social housing programmes, were extensively developed in the centre of Santiago and in all directions from its core.



1. SQM: the main metamorphosis

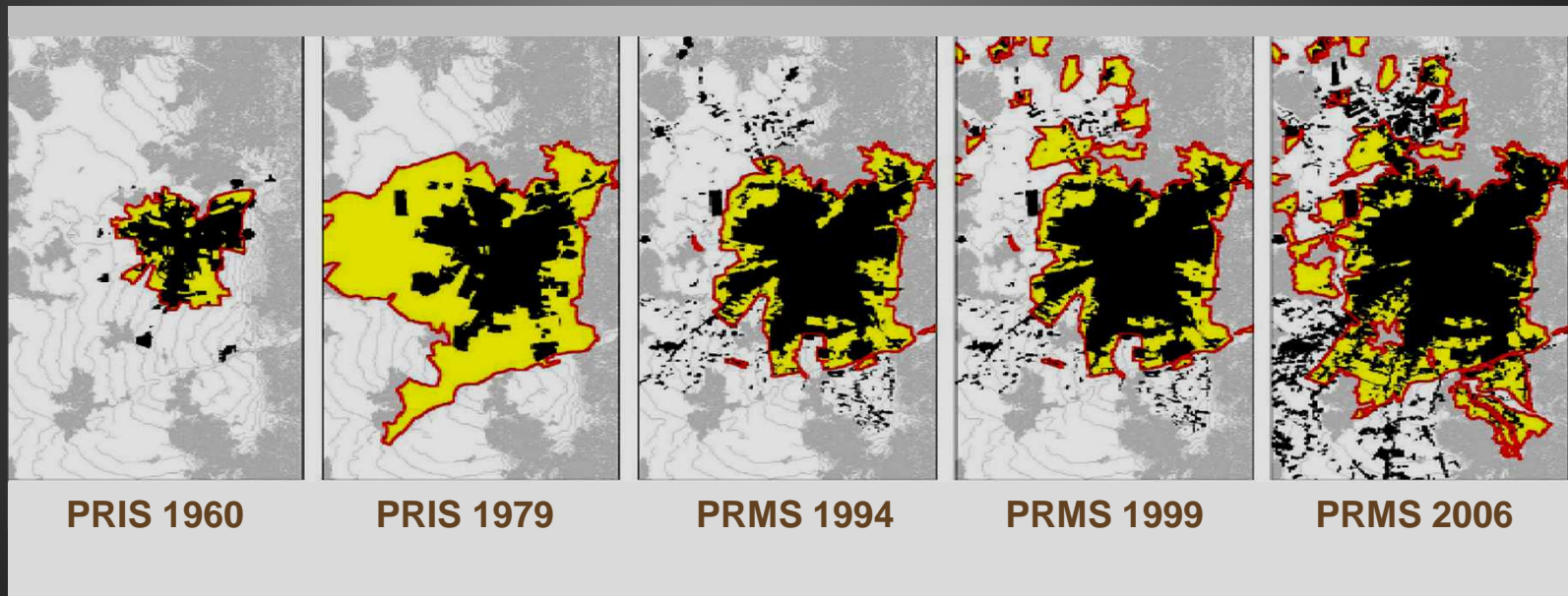




1. SQM: the main metamorphosis

from a *gran aldea* to a capital city...

Period 1940 - 2002, Santiago inner city population decreased by more than 50%: from 444.196 to 206.044 inhabitants, whereas, the rest of Santiago territory grew more than four times; from 952.000 to 5.392.840 inhabitants (Ortíz & Morales, 2002).

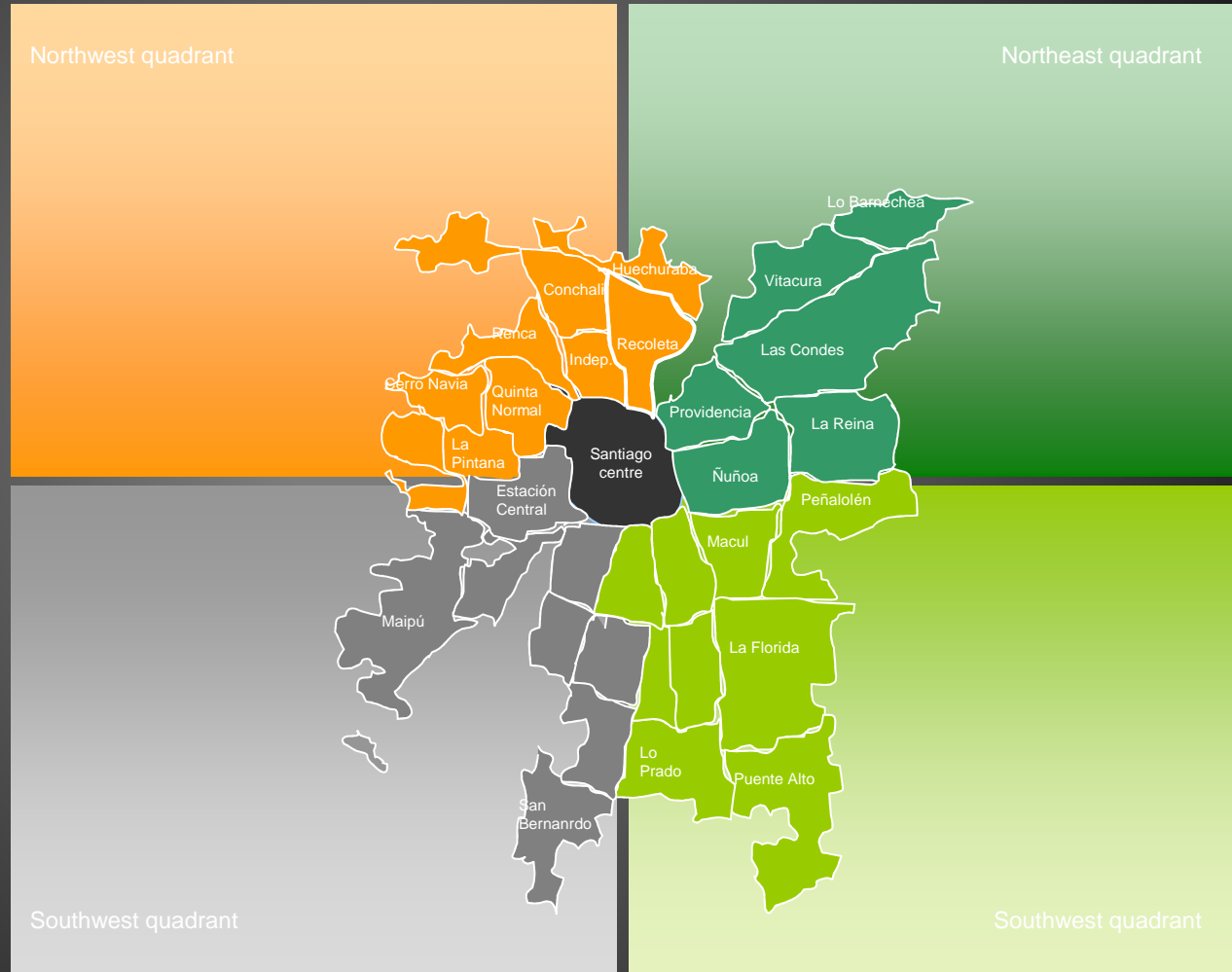


■ Built-up area
■ Urban boundary
(proposed by metropolitan masterplans)

Source: adapted from SEREMI-MINVU (2008)



1. SQM: the main metamorphosis



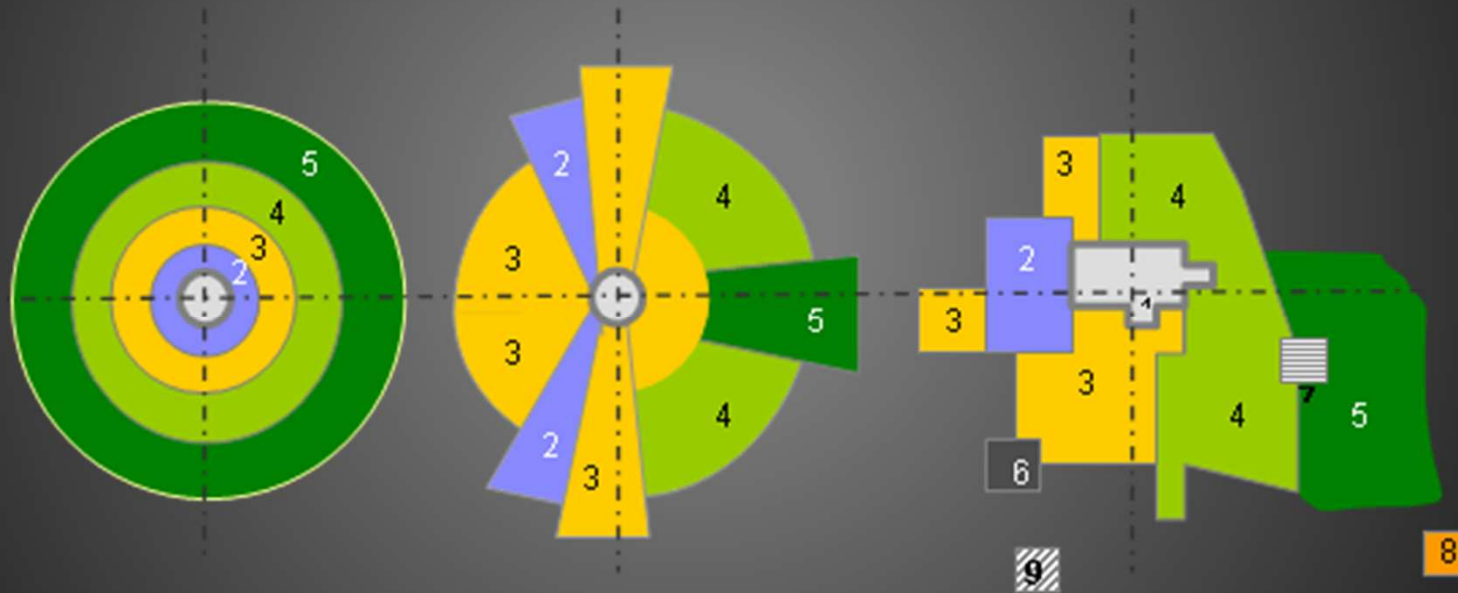
Source: author's interpretation

Dr. Jorge Inzulza-Contardo / feb 2011 ©



1. SQM: the main metamorphosis

Classical urban-structure models



Burgess' model (zones)

Hoyt's model (sectors)

Harris & Ullman's model (nucleuses)

Source: own elaboration from Balchin et al (1988). Shafer (1977)

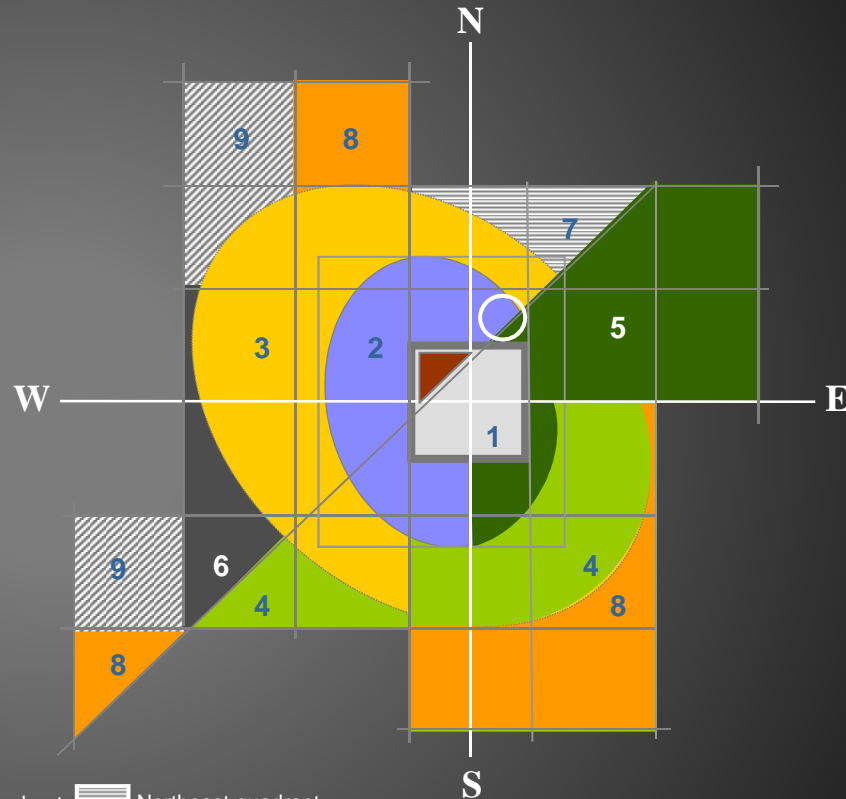


1. SQM: the main metamorphosis

Santiago quadrant model

Key:

- | | | |
|--|--|--|
| | | |
| | | |
| | | |
| | | |



2. Physical and social changes



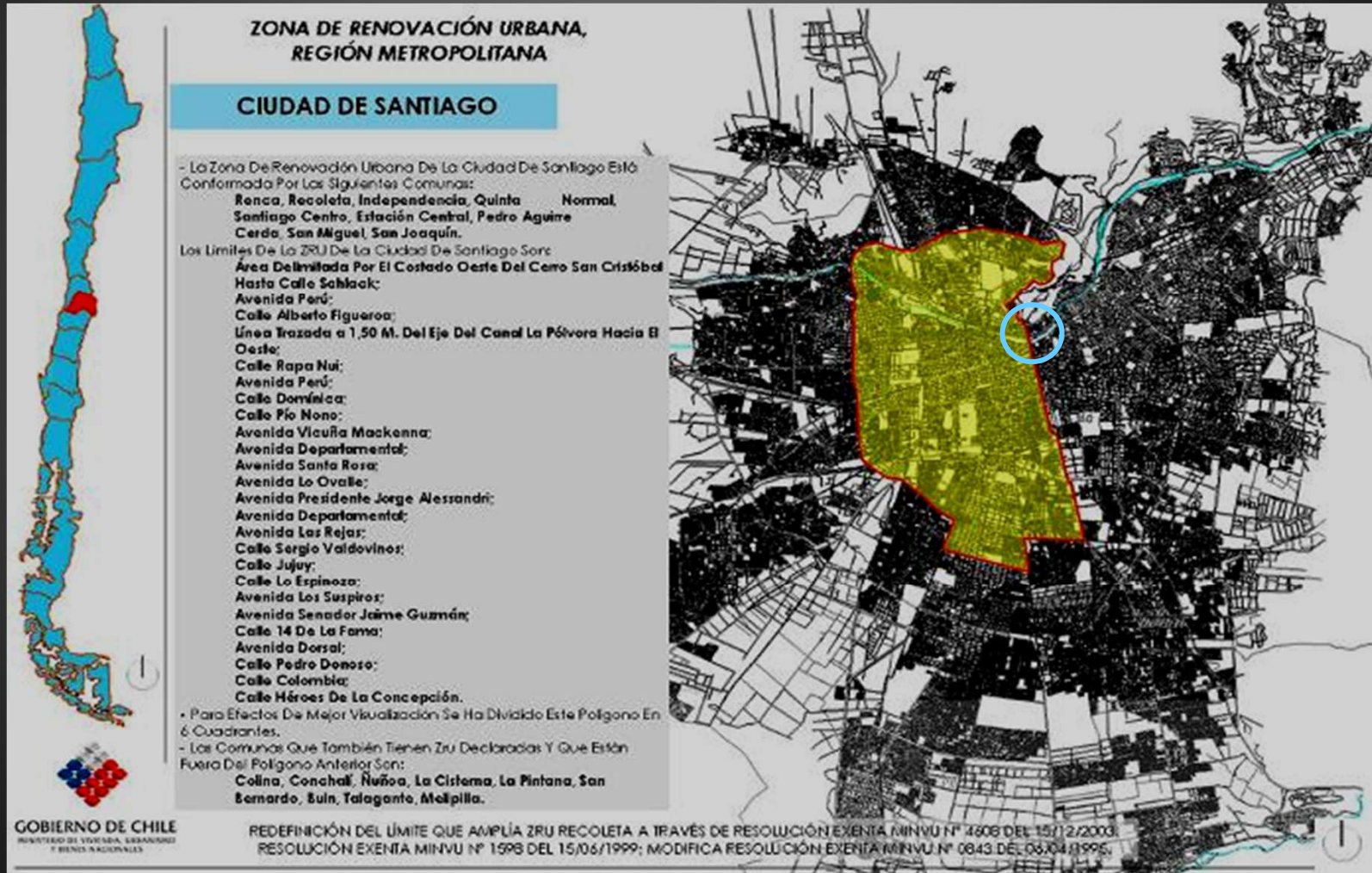
As a result, both physical and socio-economic patterns were altered mainly due to the impact of large-scale extension of housing provision since the 1960s through metropolitan masterplans, and later, in the 1980s when the market forces took a main role in the urban planning of the city.

2. Physical and social changes



Even though the two National Urban Development Policies (PNDUs) of 1979 and 1985 put considerable emphasis on the social development of the city, under the name of 'Market Social Economy' (1979), and established that 'the urban land is a scarce resource' (1985), Santiago in the last thirty years has shown a clear liberalisation of the urban land density regulation, leading to a noticeable predominance of residential property.

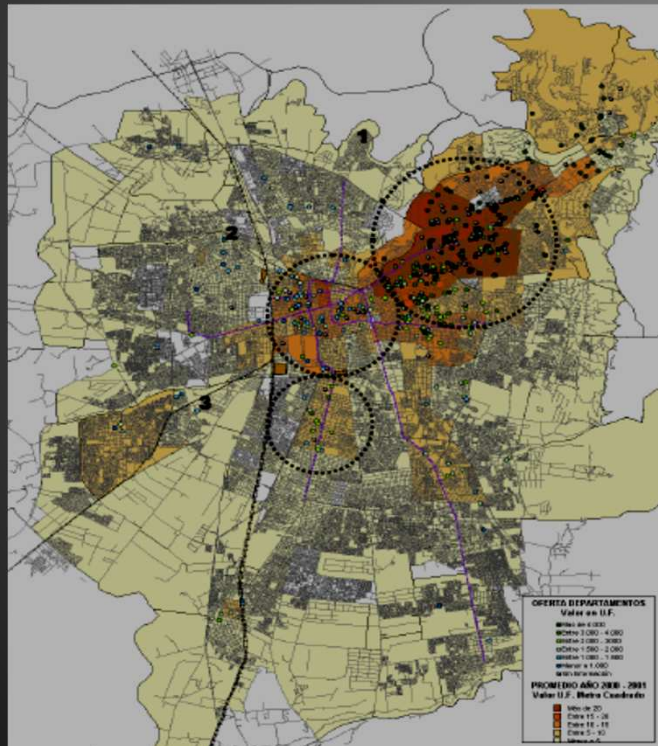
2. Physical and social changes



2. Physical and social changes



Urban land value and flats available for sale in Santiago, 2001. Into available floor-area for new flats in Santiago, it is possible to observe three main dynamic areas that has been the focus of property development (SEREX, 2002). Between 1992-2002 and increase of 53,591 flats (75%) was found northeast quadrant (from 71,407 to 124,998 units)



Source: SEREX, 2002; www.bellavistaforestal.cl; www.mundoinmobiliario.com

2. Physical and social changes



Kind of housing in Gran Santiago, 1992-2002

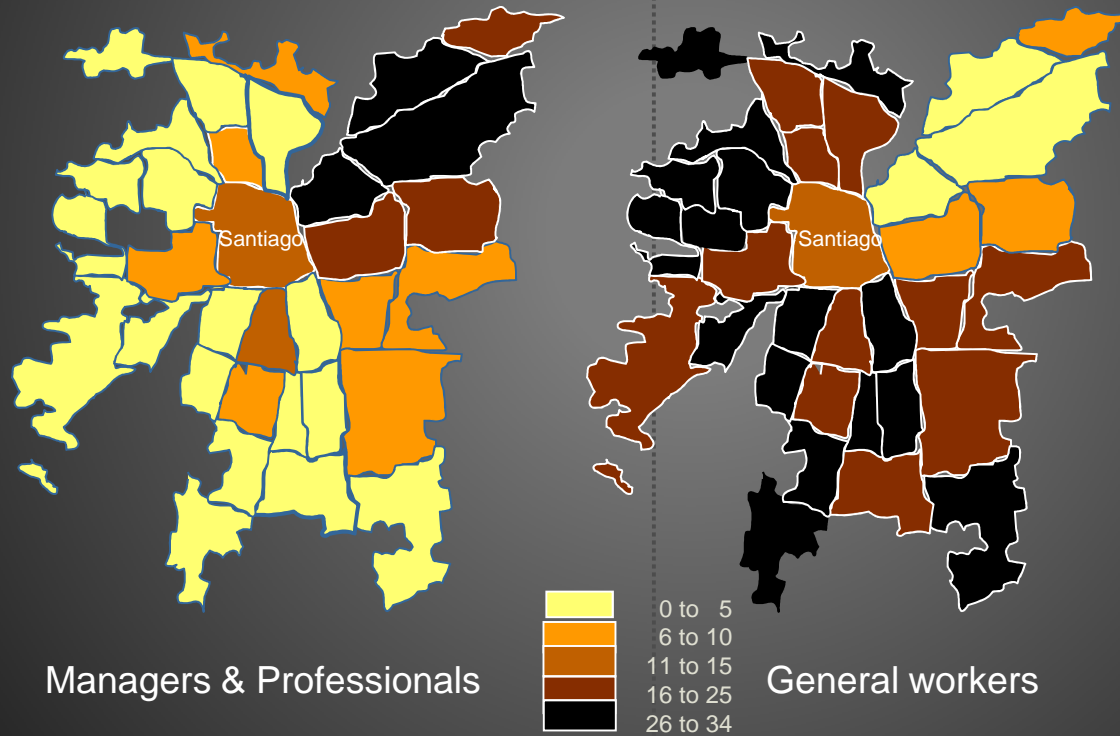
Boroughs	Total of housing in urban area			Houses (number)			Flats (number)			
	Name	1992	2002	% change	1992	2002	% change	1992	2002	% change
Northwest Quadrant		193,576	236,287	22.0	106,117	108,949	2.6	71,407	124,998	75.0
Recoleta		38,613	35,225	-8.7	28,130	27,336	-2.8	4,377	5,215	19.1
Northwest		279,516	314,096	12.3	209,230	253,923	21.3	22,533	39,466	75.1
Southeast		346,199	423,791	22.4	259,934	340,347	30.9	36,671	64,937	77.0
Southwest		273,767	344,931	25.9	214,501	283,077	31.9	22,344	46,953	10.1
Stgo. Centre		63,204	67,331	6.5	28,510	24,146	-15.3	22,690	38,661	70.3
Total Gran Santiago		1,156,262	1,385,436	18.8	818,292	1,010,442	23.4	175,645	315,015	79.2

Source: Census of Housing, 1992 and 2002

2. Physical and social changes



'Tertiarization' of the employment. An increase of 6 percentage points (311,113 people) working as managers, seniors in business, academic and education observed in the period 1992-2002.



Key: percentage of amount of employees by district
 Source: % (approx.) from Census of Population 2002; De Mattos at. al. (2005)



Bellavista

Un territorio estratégico ubicado en el noreste de la ciudad y con una data remontada desde la fundación de Santiago.



3. Formal & informal boundaries

Urban Regulation
& context

Análisis de
base oficial
de datos
+
Políticas
urbanas
nacional y
local

Physical
morphology

open
interviews
+
semi-
structured
interviews
+
ethnography



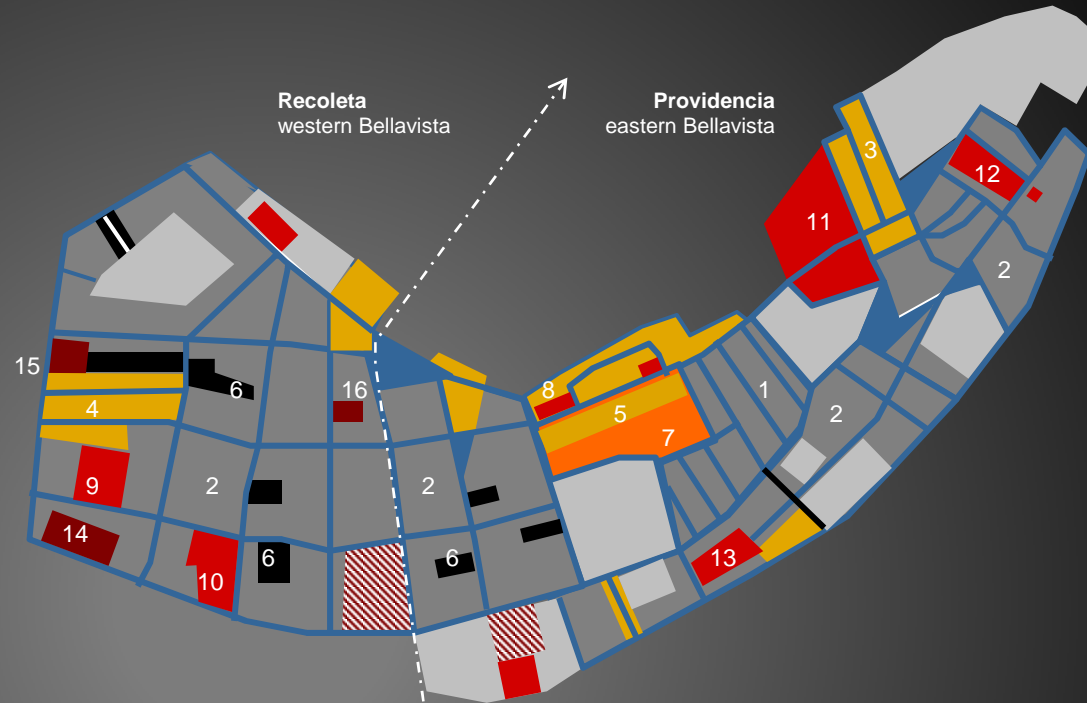
Social
environment



3. Formal & informal boundaries

Main examples:

- Type A**
- León XIII quarter 1
- Mixed area (commercial) 2
- Type B**
- Los Gráficos quarter 3
- General Ekdhal street 4
- A. López De Bello street 5
- Type C**
- Cité building style 6
- Nueva Dardignac street 7
- A. López De Bello street 8
- Dardignac street 9
- Bellavista street 10
- San Cristóbal condominium 11
- Loft Bellavista-Providencia 12
- Santa María street 13
- Bellavista street 14
- Loreto street 15
- Loft Bellavista-Recoleta 16



- Type A:** 1-3-storey terraced building
- Type B:** 1-3-storey detached/ semi-detached building
- Type C:** 1-storey terraced building (cité)
- 1-3-storey detached building
- 3-7-storey middle-rise building (condominium)
- 15-22-storey high-rise building (condominium)
- 21-storey building (approved to be built)
- Type D:** 1-5-storey detached-semi-detached building (institutional)

Distribution of building-typologies



3. Formal & informal boundaries

Percentage of main land uses for Bellavista 2002

area	residential	commercial	office	industry	education	(*) urban services
Eastern Bellavista (Providencia district)	31.5 %	12.8 %	15.6 %	11.9 %	9.7 %	18.8 %
Western Bellavista (Recoleta district)	26.6 %	28.7 %	9.2 %	17.9 %	8.3 %	9.3 %
Bellavista Neighbourhood	29.1 %	20.7 %	12.3 %	14.9 %	9.0 %	14.0%

(*) including land uses for religious institutions or buildings, public area and services, sport & leisure activities

Source: Census of Population and Housing 2002



3. Formal & informal boundaries

Cantidad de departamentos vendidos con SRU en el Área Central de Santiago (inner-city), periodo 1995 - 2005

Área	1995 - 1999	2000	2001	2002	2003	2004	2005	Total
Área central Santiago	13,815	1,673	1,813	2,799	4,780	7,314	10,768	42,962
Comuna Recoleta	173	178	95	165	215	600	702	2,128
Bellavista Poniente	n/l	n/i	72	---	115	678		865

Fuente: elaboración propia, basado en Arriagada et. al.(2007:33); Municipio de Recoleta (2005)

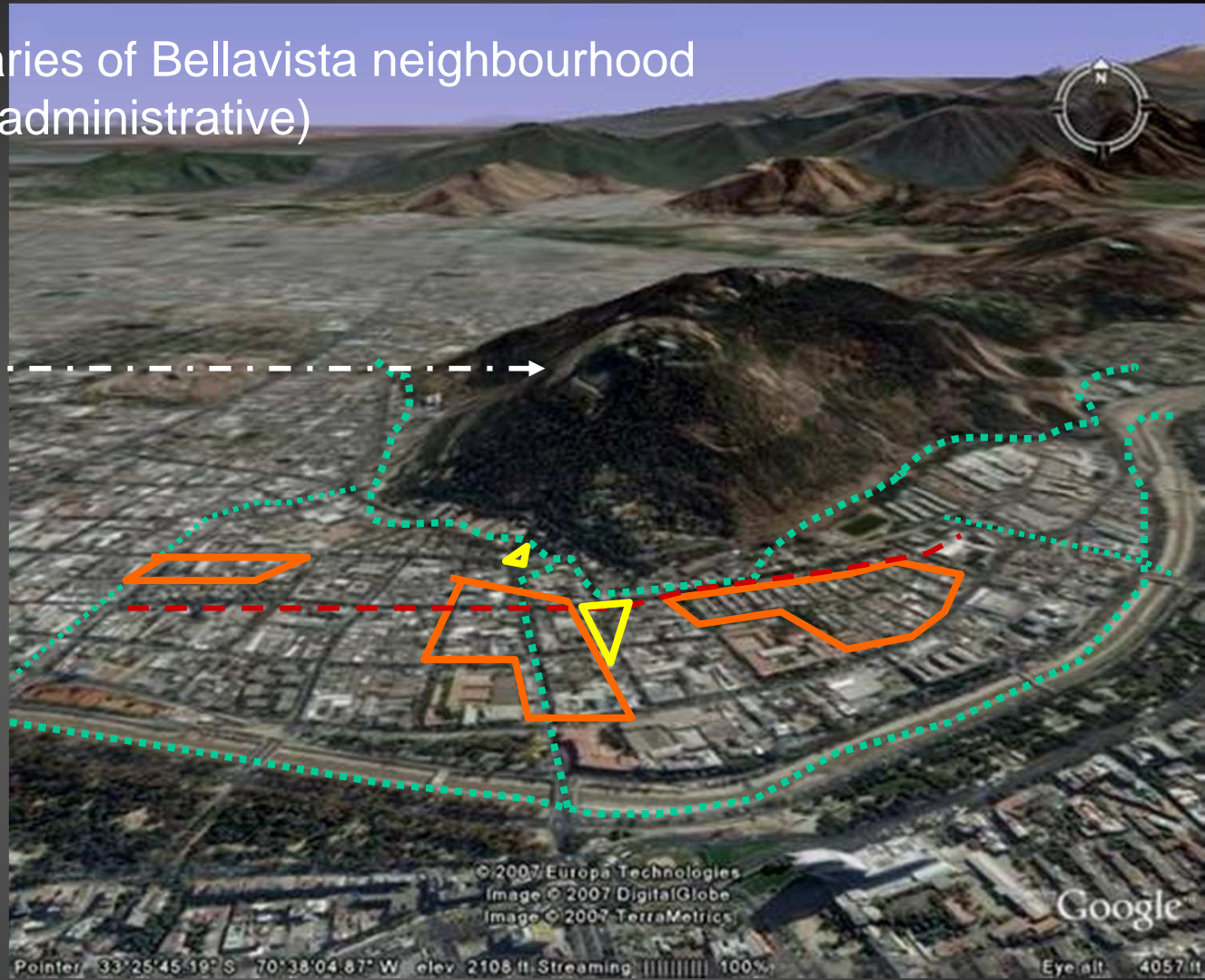


3. Formal & informal boundaries

Main boundaries of Bellavista neighbourhood
(natural and administrative)

Urban
elements

- hito - - - - -
- borde -
- area - - - - -
- nodo - - - - -
- via - - - - -



3. Formal & informal boundaries

Do you think that the poor people are being displaced from Bellavista to outskirts areas?

Recoleta / west-side

“20 years ago only houses and a few restaurants were here...nowadays at least twenty-five discotheques can be identified...”

“A high-rise building was located next to a “Cite” then people were displaced...”

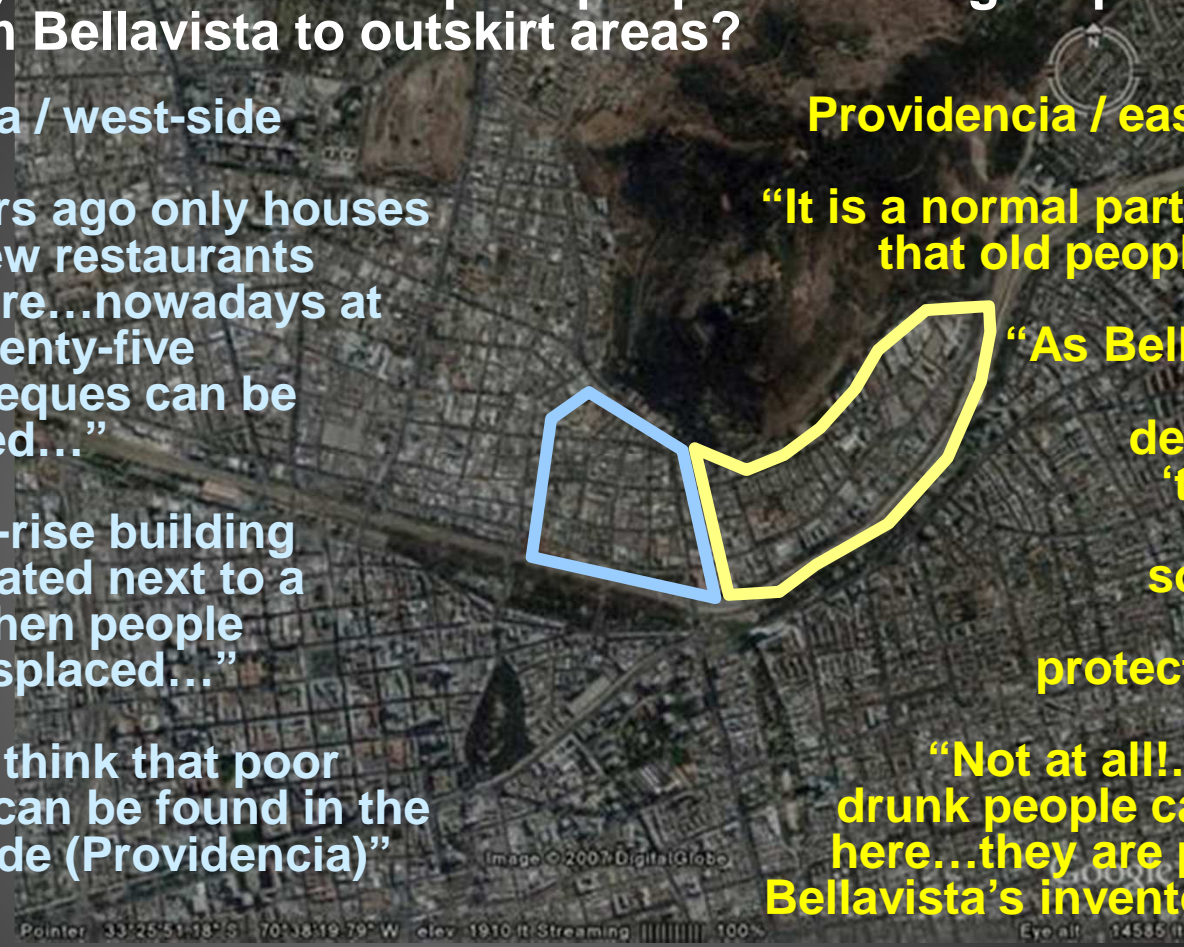
“I don’t think that poor people can be found in the other side (Providencia)”

Providencia / east-side

“It is a normal part of life that old people die”

“As Bellavista was declared ‘typical Zone’ so I feel totally protected...”

“Not at all!...even drunk people can live here...they are part of Bellavista’s inventory...”



3. Formal & informal boundaries

Bellavista poniente (Recoleta)	Bellavista oriente (Providencia)
<p>Dos PRCs ha tenido Bellavista oriente</p> <ul style="list-style-type: none"> ▪ XVII C - 2005 PRC de Santiago ▪ 2005 - presente PRC de Recoleta 	<p>Cuatro PRCs y un Seccional en Bellavista oriente</p> <ul style="list-style-type: none"> ▪ 1897 - 1903 PRC de Ñuñoa ▪ 1903 - 1981 PRC de Santiago ▪ 1981 - 1990 PRC de Providencia ▪ 1990 - 1997 Seccional de Bellavista ▪ 1997 - presente PRC de Providencia
<p>La normativa local permite actividades residenciales, comerciales y de talleres</p> <p>Bellavista pertenece a la Zona 'U-E'</p> <ul style="list-style-type: none"> ▪ Zona de servicios urbanos (toda el área) ▪ restaurantes ▪ discotecas 	<p>Normativa local más específica los usos residenciales y actividades complementarias</p> <ul style="list-style-type: none"> ▪ Principalmente zona residencial (León XIII, Los Gráficos, Nueva Dardignac, y A. L. Bello) ▪ Zona mixta franja sur (Bellavista - Sta. María) ▪ sólo restaurantes (se prohíben discotecas)
<ul style="list-style-type: none"> ▪ Edificios de altura media y alta permitidos ▪ Condiciones especiales para aumentar de altura con coeficientes de constructibilidad a proyectos de vivienda con deptos. de hasta 35m2 de superficie. 	<ul style="list-style-type: none"> ▪ Edificios en altura son permitidos sólo en sector 'El Manhattan de Bellavista' ▪ 5 pisos como máxima altura de edificación ▪ Las alturas existentes en áreas residenciales (1-3 pisos) se mantienen
<p>Calles afectas a ensanche en casi todas la vialidad estructurante lado poniente de Bellavista, excepto en calles B. Nuñez y E. P. Lagarrigue</p>	<p>Calles afectas a ensanche sólo en las vías principales del lado oriente de Bellavista, como calles Santa María y Bellavista (no así la vialidad local)</p>
<p>Cuatro niveles de conservación, tres de nivel nacional:</p> <ul style="list-style-type: none"> ▪ Monumento Nacional (MN) ▪ Inmueble de Conservación Histórica (ICH) ▪ Zona de Conservación Histórica (ZCH) <p>Uno de nivel local (PRC)</p> <ul style="list-style-type: none"> ▪ Sector Especial (SE) 	<p>Cuatro niveles de conservación, todas ellas de nivel nacional:</p> <ul style="list-style-type: none"> ▪ Monumento Nacional (MN) ▪ Inmueble de Conservación Histórica (ICH) ▪ Zona de Conservación Histórica (ZCH) ▪ Zona Típica (ZT)
<p>Zona de Renovación Urbana (ZRU) con subsidio para todo el territorio</p>	<p>Sin ZRU</p>

Fuente: elaboración propia, basada en Municipalidad de Santiago (2003); Municipalidad de Recoleta (2005); Municipalidad de Providencia (2005, 2005a); MINEDUC / CMN (2005)

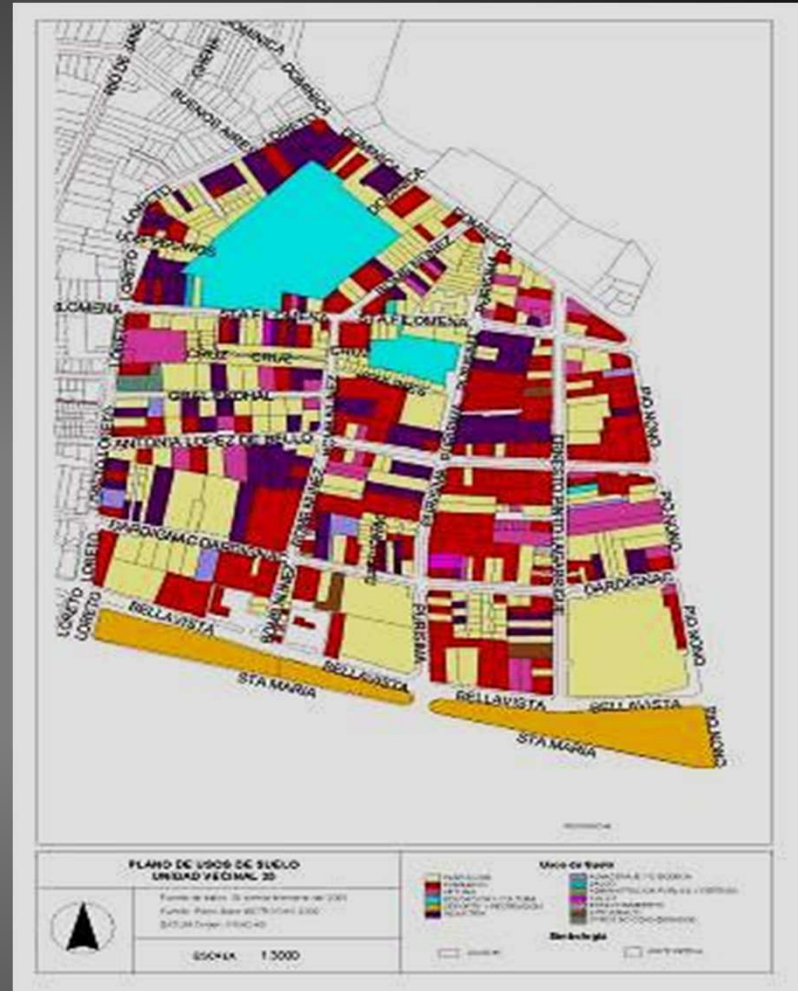
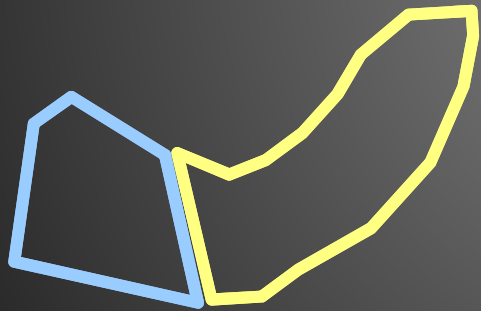
Urban regulations effects

Bellavista current trend

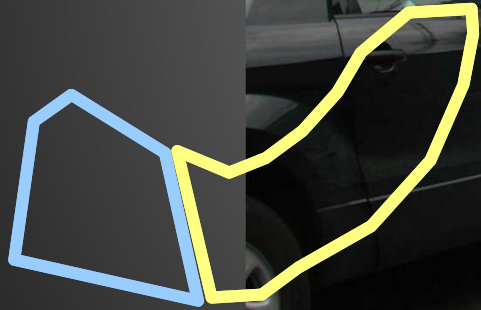
- Residential
- Commercial
- Financial
- Tourist-cultural
- TV Channel area
- Educational equip.
- Leisure centre
- Green areas



Urban land uses patterns by sites in Bellavista-Recoleta, 2005



3. Formal & informal boundaries



3. Formal & informal boundaries



3. Formal & informal boundaries



3. Formal & informal boundaries



3. Formal & informal boundaries

As re-viewed the boundary between formal and informal neighbourhoods, “...different ways to approach and to study urban informality in architectural, urban and anthropological terms” can be found

←-----→
4. Conclusions & reflexions



Different housing landscapes can be observed when comparing diverse areas of the cities, and also, boundaries between formal and informal neighbourhoods are blurred



4. Conclusions & reflexions



Key contemporary issues such as gentrification (recent waves) and globalisation are changing rapidly the Latin American urban fabric, which are associated with social segregation and community conflicts

4. Conclusions & reflexions





4. Conclusions & reflexions

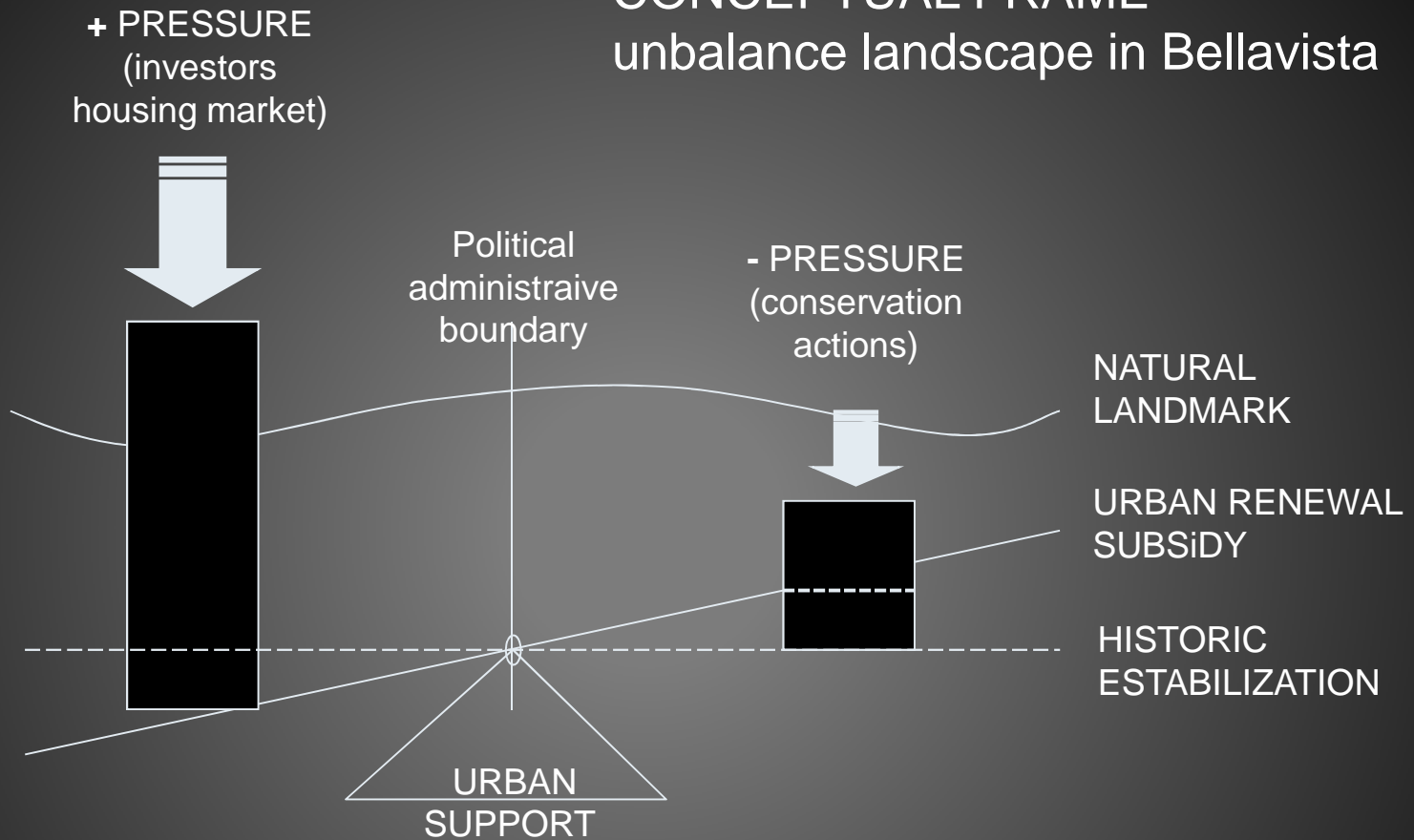


Informality deals “...not only with the physical expansion of metropolitan areas and the provision of urban infrastructure... but also with issues relating to governance and social inclusion. Interventions are often small in scale but ambitious in scope”

4. Conclusions & reflexions



CONCEPTUAL FRAME unbalance landscape in Bellavista



4. Conclusions & reflexions



It is not the low-income class who has been benefited in most of conservation processes, being part of the arguments against conservation in the ground of social injustice (Eversley, 1975). It is inevitable that the rehabilitation of the historic districts provokes the attraction of the new residents and economical activities, increasing the land and buildings prices (Rojas and De Moura, 1999)

4. Conclusions & reflexions



Whole street-section to recover neighbourhood concept



4. Conclusions & reflexions





←-----→

4. Conclusions & reflexions





4. Conclusions & reflexions



How are we approaching the new boundaries of neighbourhoods in Chile after the 27/F earthquake?



4. Conclusions & reflexions



...especially when we need to recover boundaries



4. Conclusions & reflexions





Housing **provision**



Urban **planning**



4. Conclusions & reflexions



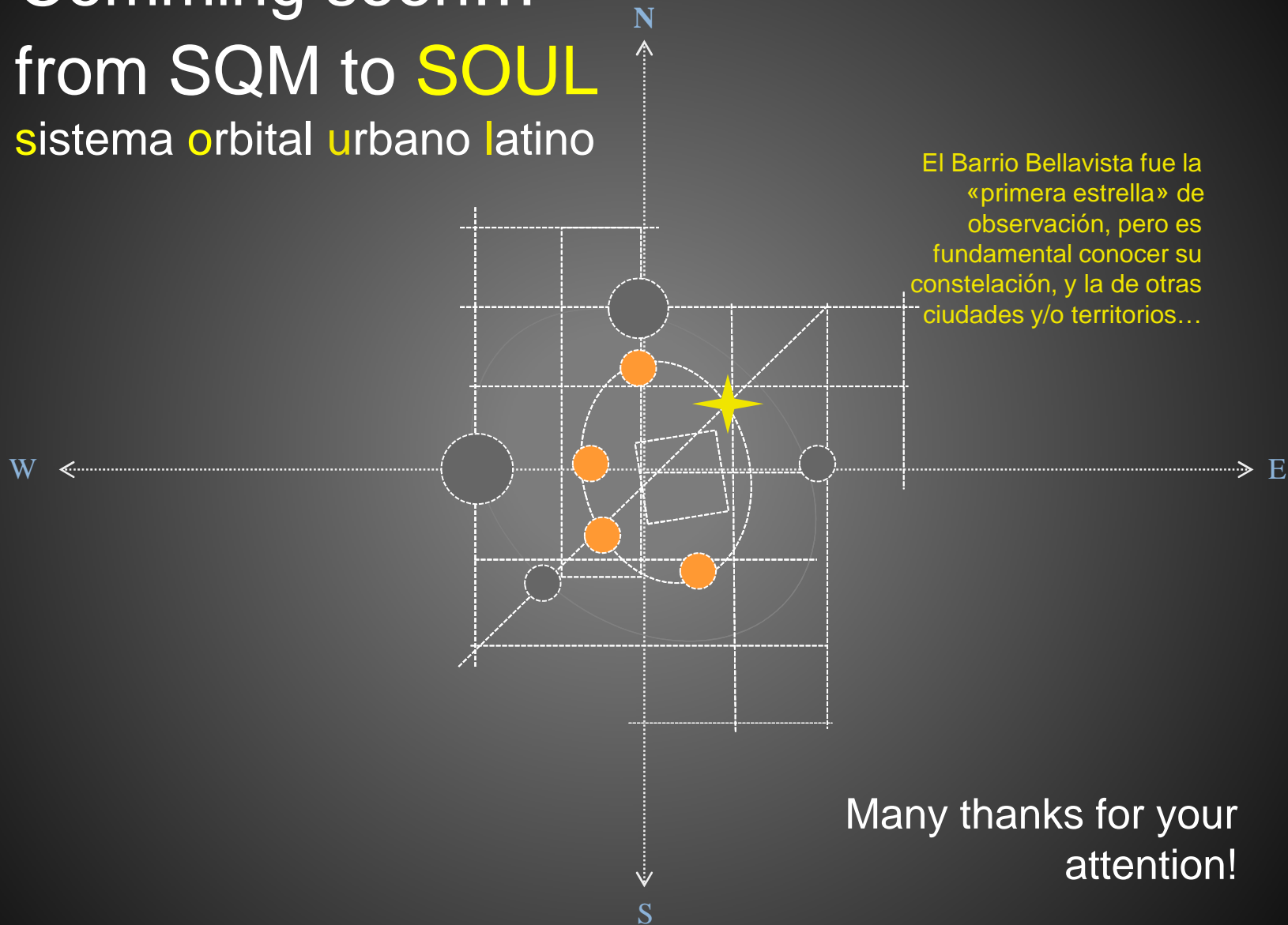
Let's re-discover the urban boundaries!



4. Conclusions & reflexions



Comming soon...
from SQM to **SOUL**
sistema orbital urbano latino



El Barrio Bellavista fue la «primera estrella» de observación, pero es fundamental conocer su constelación, y la de otras ciudades y/o territorios...

Many thanks for your attention!