

Center for Geographic Analysis
Institute for Quantitative Social Sciences
Harvard University
Real Colegio Complutense
Geography Dept. Universitat Autònoma de Barcelona
Real Colegio Complutense. Harvard University

***Urbanism, Quality of Life
and Social Wellbeing.
Schools and Services in
CERDÀ'S Expansion Plan
for Barcelona***

MONTSERRAT PALLARES-BARBERA

(mpallares@cga.harvard.edu)

March 17, 2011 at 7,30 pm.

structure of the talk

- Introduction
- Problem and motivations of the problem
- Objectives
- Literature review
- Case study
- Concluding remarks

quality of life and social wellbeing

- quality of life and the relationship between people and their everyday urban environments
- the causes of urban environmental problems are multidimensional, stemming from the operation of a host of private and public agents, personal circumstances, and environmental conditions
- multifaceted approaches to address these problems
- variety of scales and dimensions of life quality
- quality should be addressed in terms of a hierarchy of approaches that explore different components of quality of life and identify strategies appropriate to specific problems and socio-spatial contexts (Pacione, 2003)
- Planning needs to take into account the preferences of civil society (Douglass Mike and John Friedmann (Eds)(1998)

the key role of human well being – quality of life

- developing notions and models concerning quality of life in the field of urban development, environmental quality and human well-being (Irene van Kamp, Kees Leidelmeijer, Gooitske Marsman and Augustinus de Hollander, 2003)

motivation of the problem: awareness and concerns

- from politicians:
 - “Because of our information gaps, national problems go nearly unnoticed until they suddenly are forced upon us by some significant development. Then, we learn of [various problems] (...) and of the absence of decent medical care for tens of millions of our citizens. We desperately need ways to monitor our social health and to identify such problems before they destroy our society.” Senator Walter Mondale, Congressional Record, January 25, 1971

awareness and concerns

- **from social organizations:**
 - "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control." (Universal Declaration of Human Rights, Paris 1948, art. 25)
 - "Urban settings have a direct impact on the health of the people who live there. (...) urban planning as a crucial link to building a healthy 21st century." (World Health Organization, 2010, 7 APRIL | GENEVA)
- **Need to advance – Looking for key masters**
 - analysis of Cerdà's Plan could have a contribution to this way of thinking

the key role of the city

- The differentiation of contemporary social systems has diminished the capacity of the nation state to organize groups and institutions. Under such fluid conditions, the cities and regions represent possible alternative scales of social organization (Le Gale's, 2002)
- Cities are adapting to new conditions and in turn are contributing to the construction of what is described as new forms of territorialization and institutionalization, and of compromise between social integration, culture, and economic development combined with the requirement to improve the environment (Le Gale's, 2002)

key variable: concentration of the population

- In the second decade of the twenty century, more people live in cities than in any other territory in the world (United Nations 2010)
- The population in cities will grow to about 70% of the total world population by 2050. Cities will not only have the highest population concentration, but also the highest population density
- Quality of life and urban sustainability will be crucial points that will characterize the overall degree of *liveability* in cities and a considerable degree of the population's well-being

On wellbeing and welfare: “On the concept of welfare” (Smith 1975)

definitions and uses

- different meanings in common use
- welfare, state of society and policy instruments
- confusing “social welfare” –in the sense of “wellbeing” of society; versus
- “social welfare” –in the sense of a set of social programmes
- “satisfactory state, health and prosperity, well-being” (Concise Oxford Dictionary)

wellbeing

- ‘who gets welfare and where do they get it?’ spatial social wellbeing
- Welfare-wellbeing has a geographical context, and it varies with location
- mapping wellbeing (Coates, Johnston and Knox 1977)
- welfare is not a simple concept
 - form in which people live
 - type of urbanism in a city

externalities and social wellbeing

- Individual location decisions
- Individual wellbeing

Welfare Geography and Economic Geography

- efficient distribution of service-to-people
- location theory (Conkling and Yeates, 1976)
- locational advantage and disadvantage

objectives

- **Top-down approach to urbanism:** good practices and good tools for producing urban plans: the Cerdà Plan for the Expansion of Barcelona (1859)
- **Linking top-down approach with new forms of governance (bottom-up):** community participation in the construction of a democratic decision-making process involving different groups of agents and goals to be satisfied: the Urban Plan of the municipality of Fonollosa (county of Bages) (2010)

Cerdà and the unbearable urban density

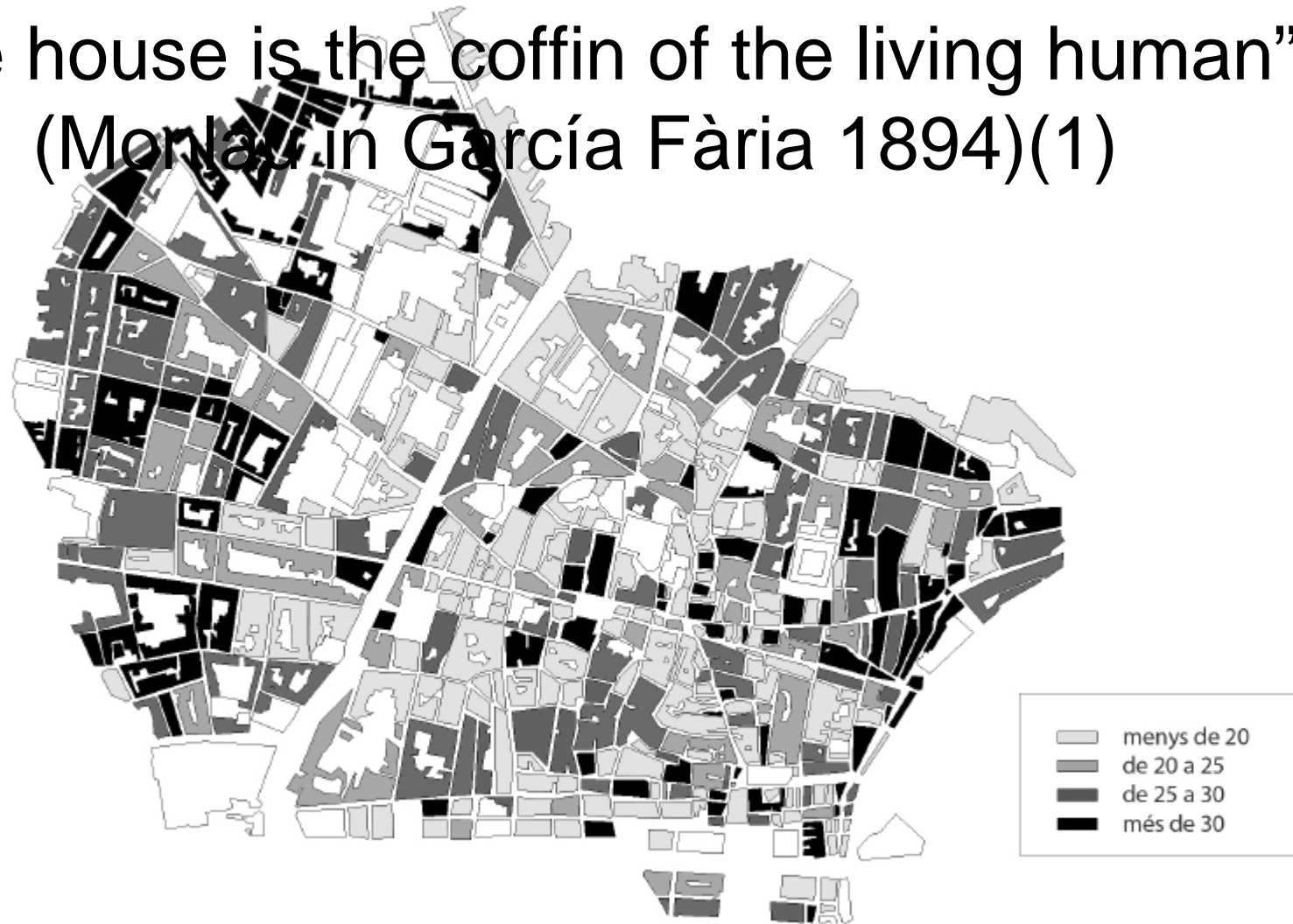
- “Monograph about statistics of the working class of Barcelona” (1856): living conditions
- social statistics as action tool
 - density
 - mortality
 - food intake
 - family budget
 - working conditions
 - house dimension-house density

The Inside-wall city: density in the first floor



Source. Canedo Arnedo, M. **Geohistòria ambiental de la Barcelona del segle XIX.**
 IQSS, Center for Master Research Project. Universitat Autònoma de Barcelona. Geography Department, 2010.
 Harvard University

“The house is the coffin of the living human”
(Monlau in García Fària 1894)(1)



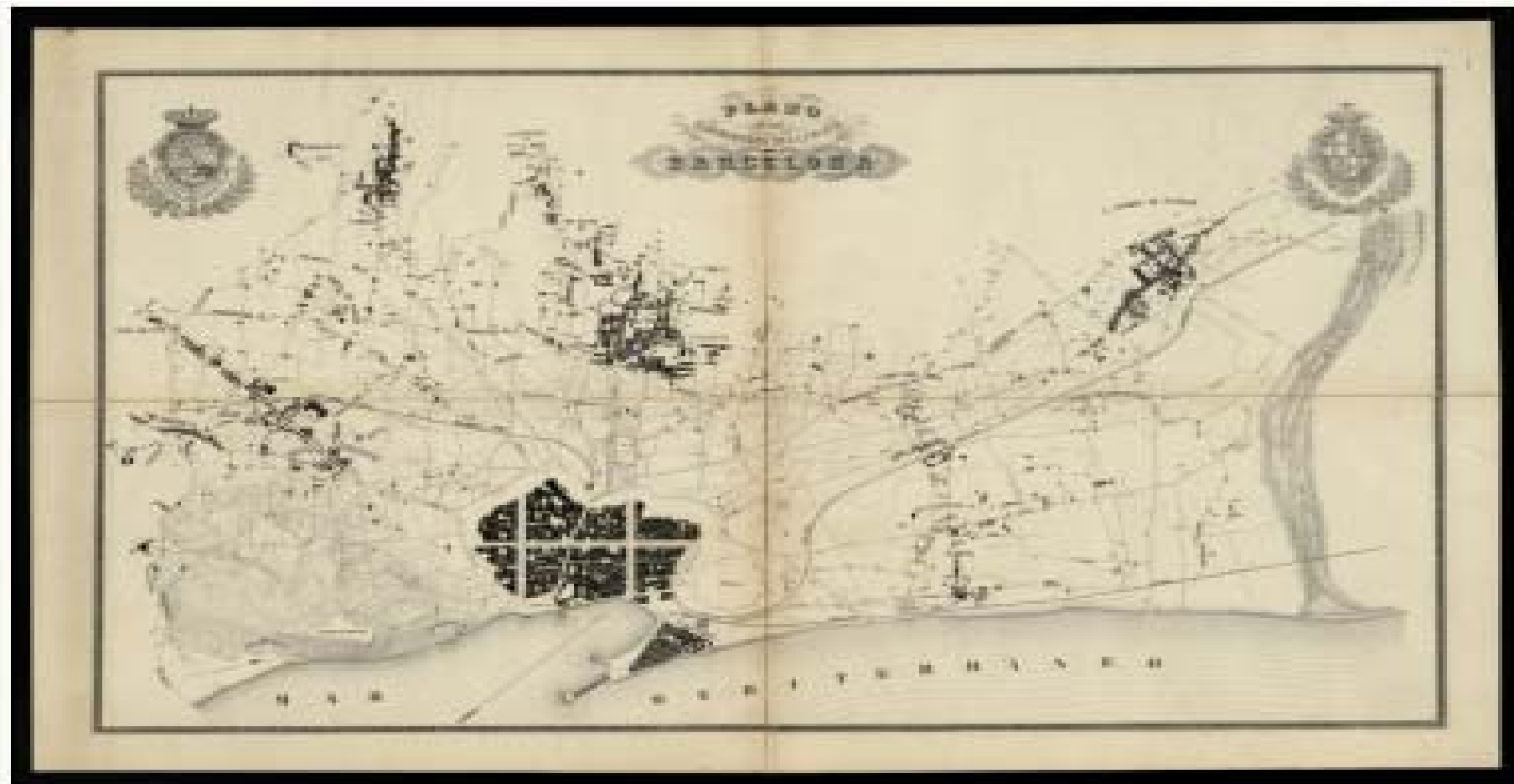
Source. Canedo Arnedo, M. **Geohistòria ambiental de la Barcelona del segle XIX**.
Master Research Project. Universitat Autònoma de Barcelona. Geography Department, 2010.

(1) García Fària, 1894, p. 26-27.

Cerdà and the Barcelona of 1859

- Cerdà's urbanization model proposal in the Barcelona of 1859. In the array of streets projected by Ildefons Cerdà
- location of amenities, such as schools and hospitals in Cerdà's urban expansion of Barcelona;
- spatial-optimization models implemented in GIS
- sustainable objectives in land-use location-allocation using urban patterns
- test and analyze the optimal and suboptimal and generate a number of compromised spatial solutions that can be both feasible and different from one other

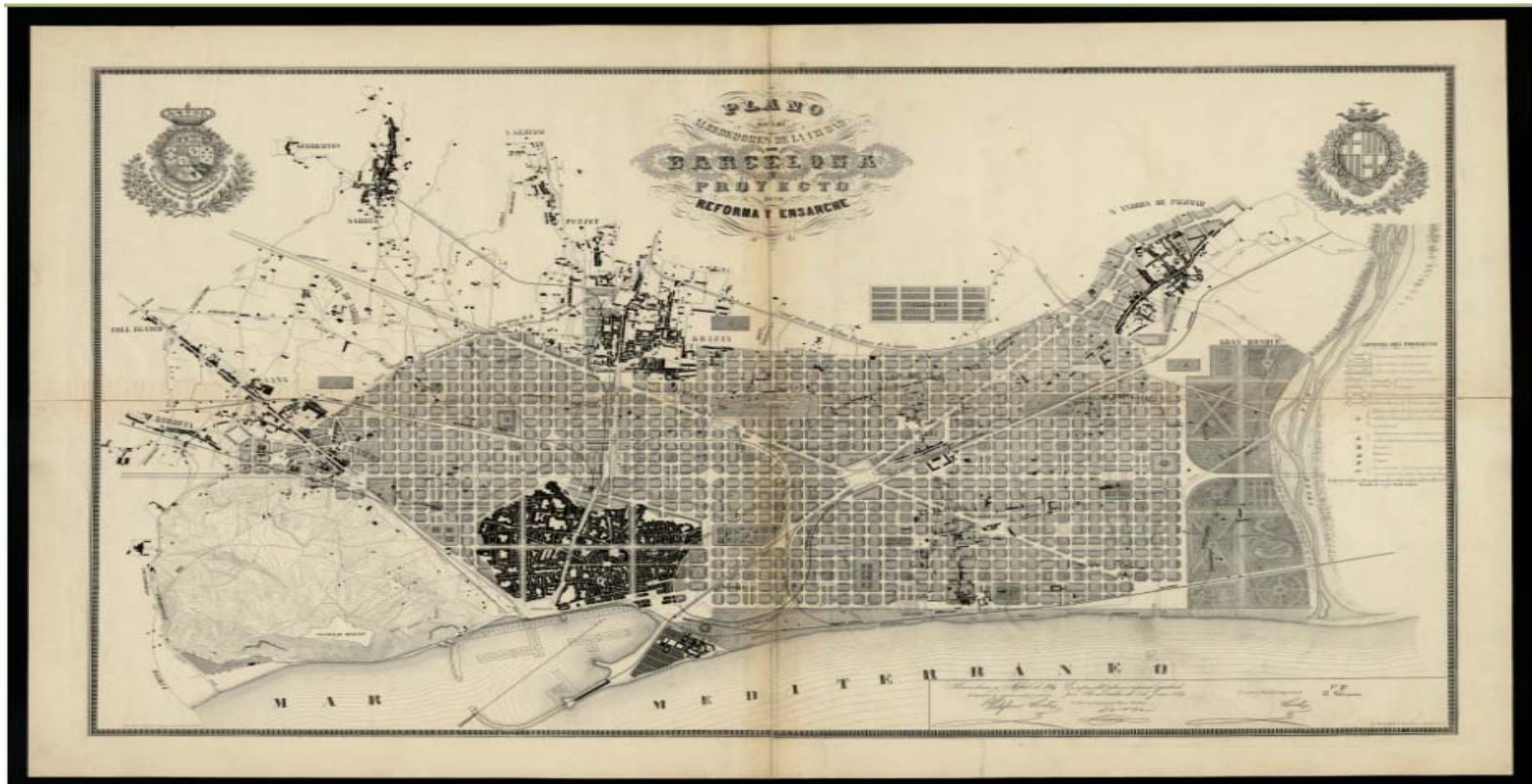
topographic map of Barcelona 1958



Source: Expansion Plan of Barcelona made by Gerdà.
Geographic Analysis
Harvard University

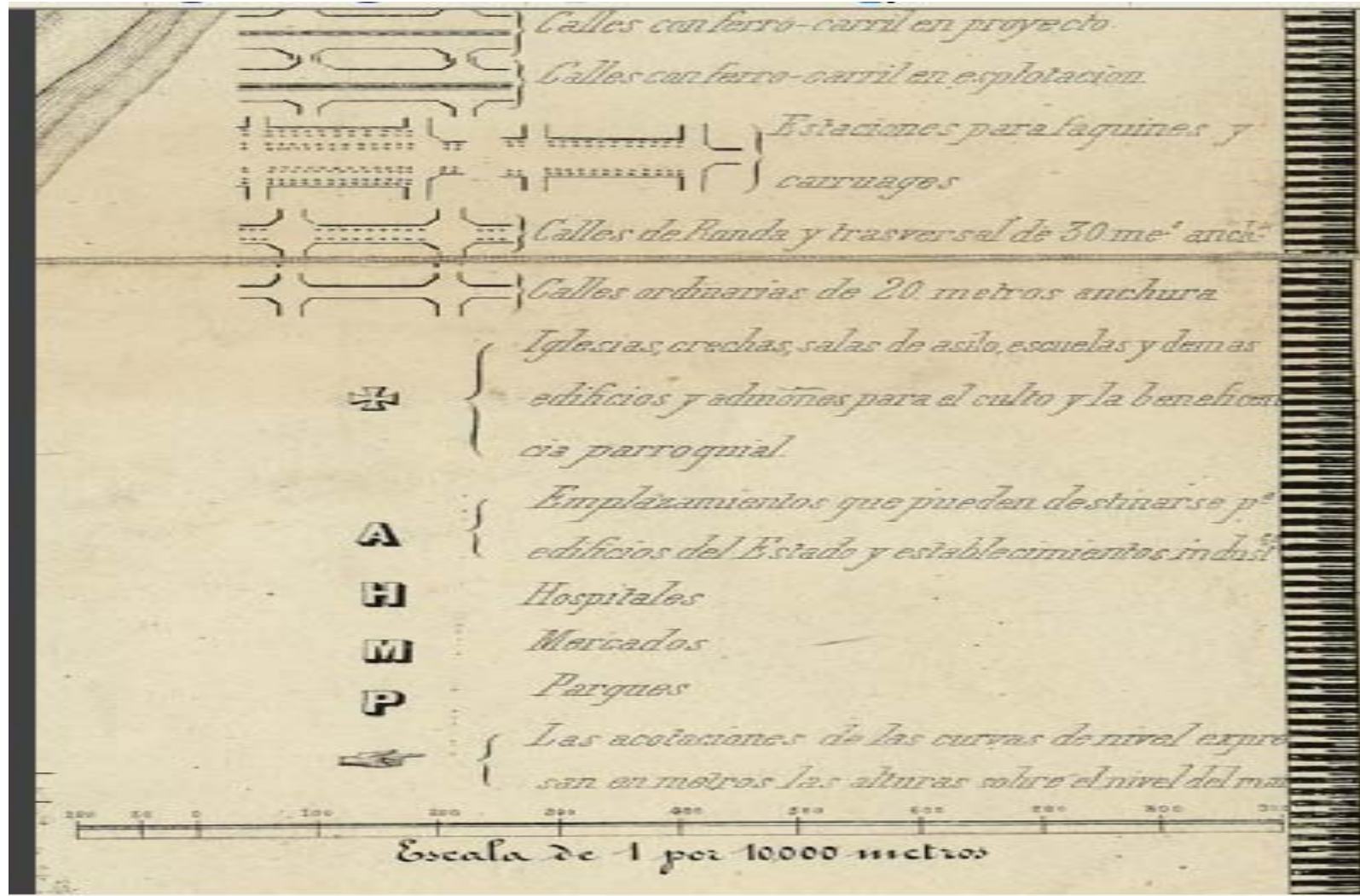
Geography Dept. Universitat

Cerdà's map of Urban Expansion of Barcelona 1859



Source: Expansion Plan of Barcelona made by Cerdà.
Geographic Analysis.
Harvard University

Cerdà's map legend



decision and space

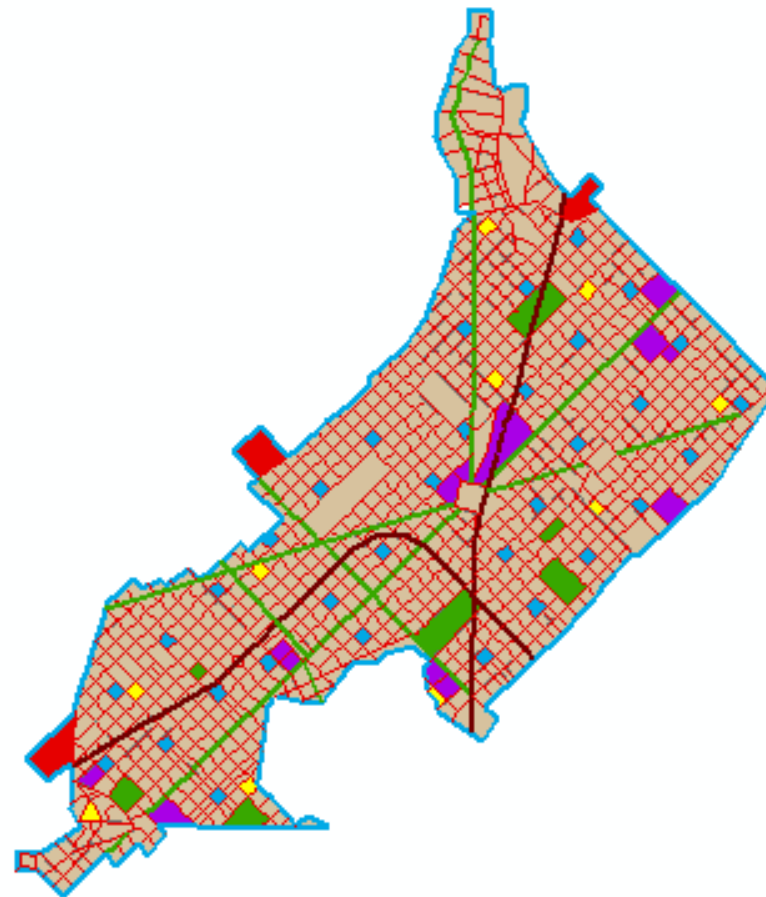
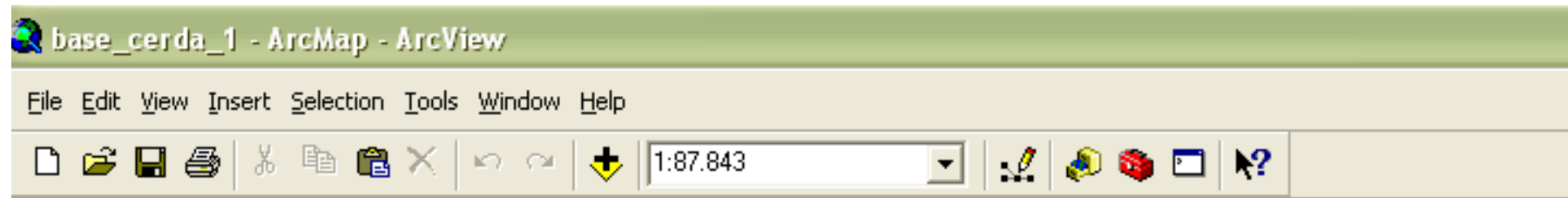
- judging the desirability of alternative states of society
- spatial variations
- general wellbeing and even territorial distribution of wellbeing
- the better – the worst: alternative situations influencing individual wellbeing
- choosing the ‘best’ of the alternatives would be that which maximizes wellbeing
- people making choices and people constraints (economic, social, ideological)

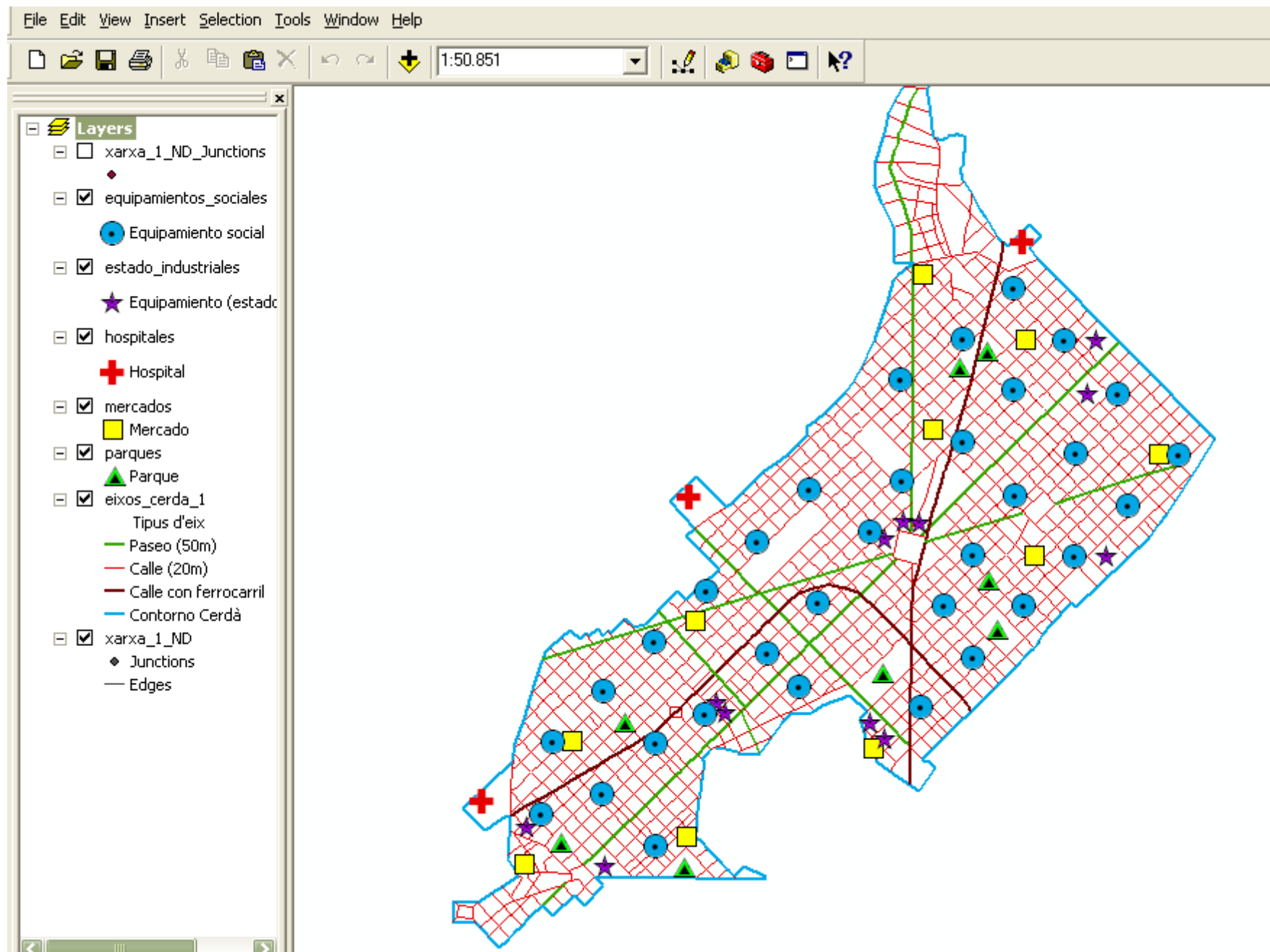
on the concept of spatial wellbeing and spatial justice

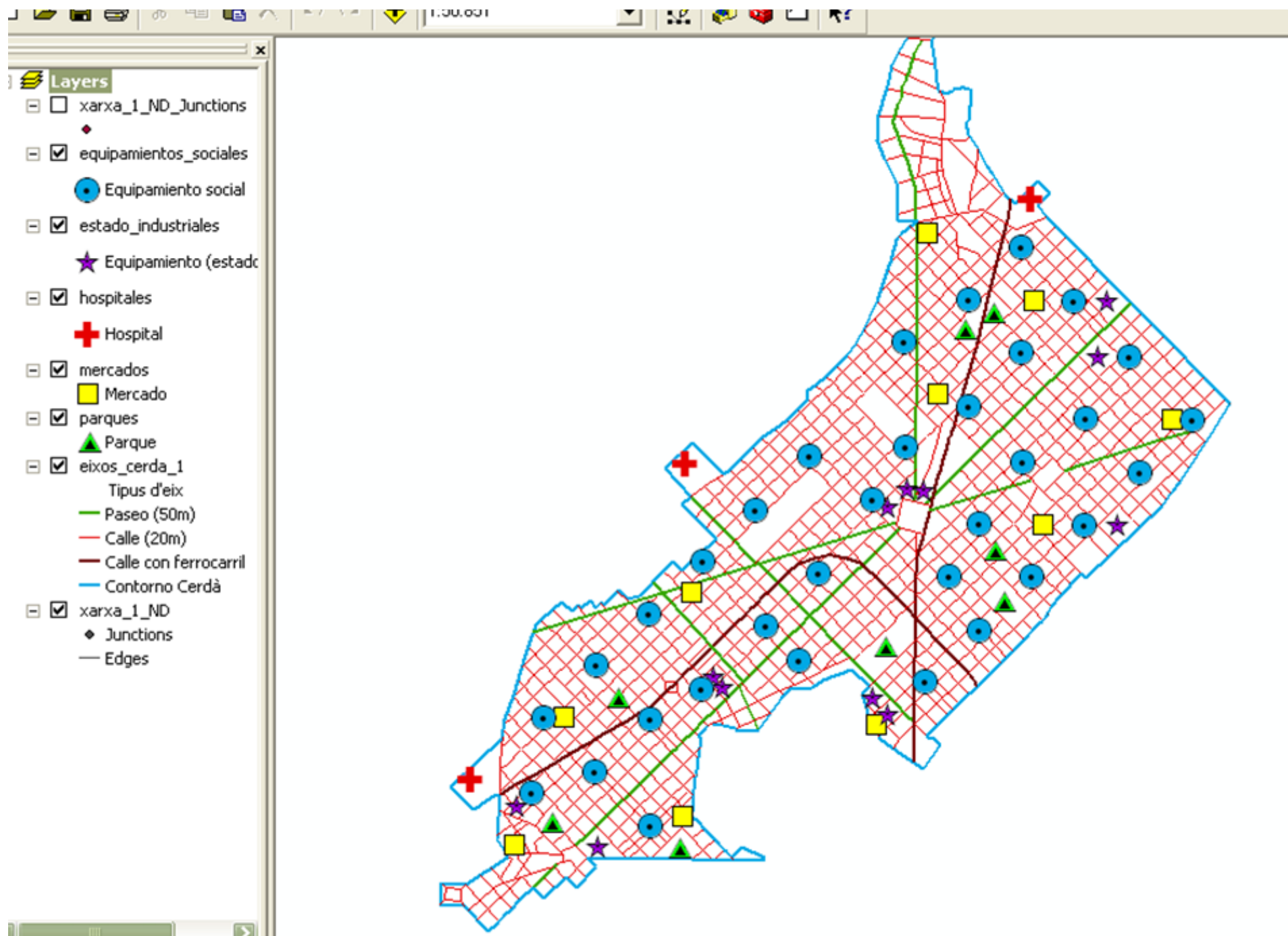
- urbanism
- population's well-being
- “Better city, better life” Shanghai 2010
- fulfill population needs
- “appropriate” urban fabric
- structural questions
- well-being of society and social and territorial diagnosis
- needs and provision of public services-to-population
- Spatial justice emphasizes the use of better mechanisms to achieve a more even distribution of resources and opportunities (Soja, 2010)

methodological approaches and tools


- spatial-optimization models
- qualitative methodology
 - workshop discussions
 - in-depth interviews
 - focus group











Registres: |< << < > >> >| Camps: |< << < > >> >|

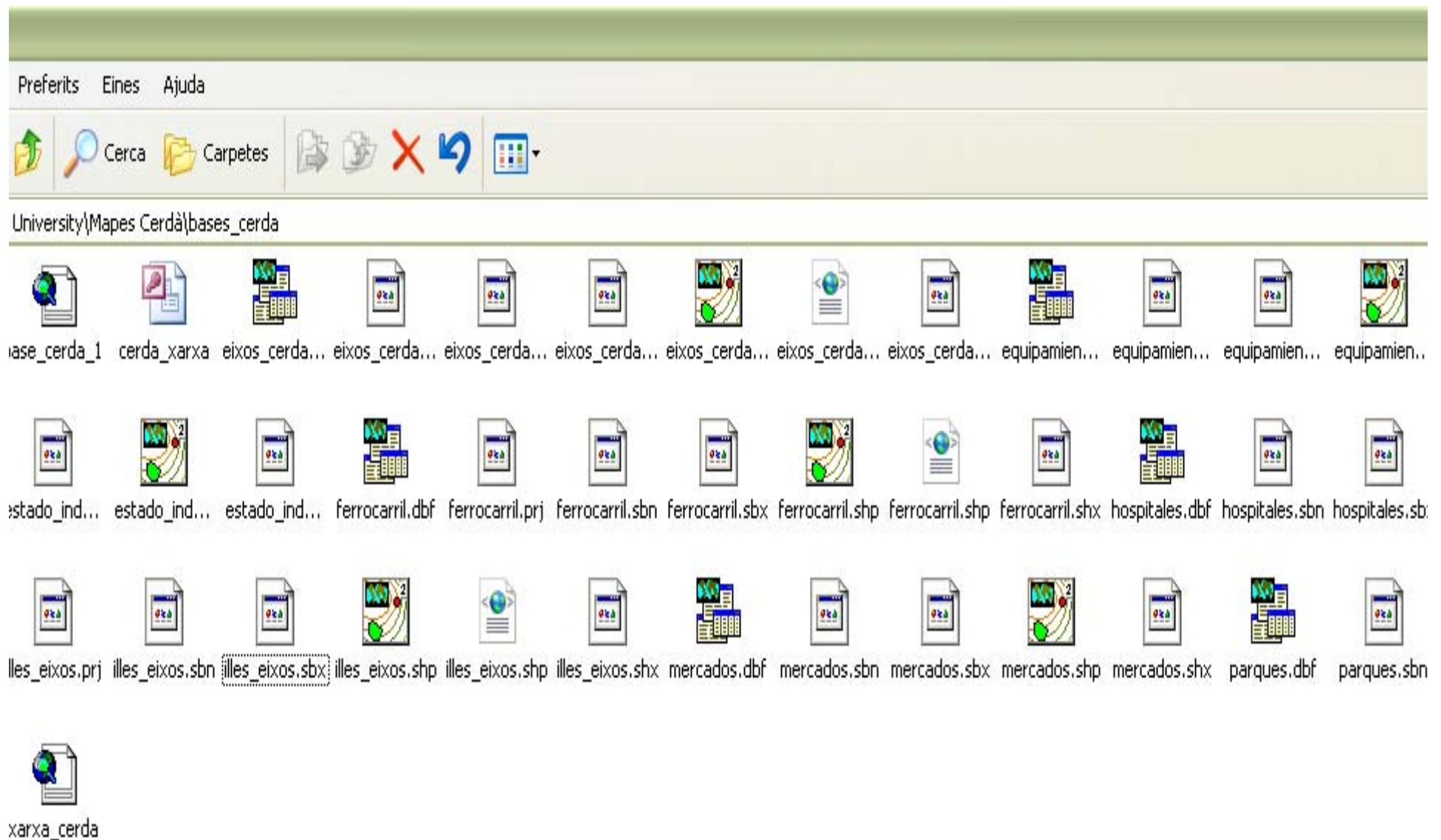
	OBJECTID	CAS	IDFULL50M	REVISIO	tipus_carr	contorn	long	METERS	KM_H	MINUTES
1	451636	VIA58	421	4	2	0	133.91	133.9	4	2.0
2	451725	VIA58	421	4	2	0	133.80	133.8	4	2.0
3	449615	VIA58	421	4	3	0	121.85	121.8	1	7.3
4	449685	VIA58	421	4	2	0	133.97	134.0	4	2.0
5	451906	VIA58	421	4	1	0	136.00	136.0	5	1.6
6	451976	VIA58	421	4	2	0	271.15	271.2	4	4.1
7	449852	VIA58	421	4	2	0	74.89	74.9	4	1.1
8	452049	VIA58	421	4	4	1	94.01	94.0	3	1.9
9	449905	VIA58	421	4	2	0	134.28	134.3	4	2.0
10	452241	VIA58	421	4	2	0	31.76	31.8	4	0.5
11	450078	VIA58	421	4	2	0	68.72	68.7	4	1.0
12	447944	VIA58	421	4	2	0	166.80	166.8	4	2.5
13	450281	VIA58	421	4	2	0	134.71	134.7	4	2.0
14	452549	VIA58	421	4	2	0	135.89	135.9	4	2.0
15	450396	VIA58	421	4	2	0	144.73	144.7	4	2.2
16	450397	VIA58	421	4	2	0	135.60	135.6	4	2.0
17	452704	VIA58	421	4	2	0	137.61	137.6	4	2.1
18	448218	VIA58	421	4	2	0	133.26	133.3	4	2.0
19	452857	VIA58	421	4	2	0	123.57	123.6	4	1.9
20	450683	VIA58	421	4	2	0	133.23	133.2	4	2.0
21	450739	VIA58	421	4	2	0	69.00	69.0	4	1.0


MiraDades [1]: D:\Montse\Harvard University\Mapes Cerdà\bases_cerdà\hospitales.dbf							
Fitxer Edició Visualització Registres Camps Informació Eines Ajuda							
Registres: < << < > >> > Camps: < << < > >> >							
	Id	tip_illa	OID_	Field1	tip_illa_1	simbol	descr_illa
1	0	3	2	0	3	H	hospitales
2	0	3	2	0	3	H	hospitales
3	0	3	2	0	3	H	hospitales

MiraDades [1]: D:\Montse\Harvard University\Mapes Cerdà\bases_cerdà\estado_industriales.dbf							
Fitxer Edició Visualització Registres Camps Informació Eines Ajuda							
Registres:		<<	<	>	>>	Camps:	
		<<	<	>	>>		
	Id	tip_illa	OID_	Field1	tip_illa_1	simbol	descr_illa
1	0	2	1	0	2 A	edificios estado, establecimientos industriales	
2	0	2	1	0	2 A	edificios estado, establecimientos industriales	
3	0	2	1	0	2 A	edificios estado, establecimientos industriales	
4	0	2	1	0	2 A	edificios estado, establecimientos industriales	
5	0	2	1	0	2 A	edificios estado, establecimientos industriales	
6	0	2	1	0	2 A	edificios estado, establecimientos industriales	
7	0	2	1	0	2 A	edificios estado, establecimientos industriales	
8	0	2	1	0	2 A	edificios estado, establecimientos industriales	
9	0	2	1	0	2 A	edificios estado, establecimientos industriales	
10	0	2	1	0	2 A	edificios estado, establecimientos industriales	
11	0	2	1	0	2 A	edificios estado, establecimientos industriales	
12	0	2	1	0	2 A	edificios estado, establecimientos industriales	

<div> <div>Registros: < << < > >> > </div> <div>Camps: < << < > >> > </div> </div>							
	Id	tip_illa	OID_	Field1	tip_illa_1	simbol	descr_illa
1	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
2	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
3	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
4	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
5	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
6	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
7	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
8	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
9	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
10	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
11	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
12	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
13	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
14	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
15	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
16	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
17	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
18	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
19	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
20	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
21	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
22	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
23	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
24	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
25	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
26	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia
27	0	1	0	0	1	+	iglesias,crechas,asilos,escuelas,beneficiencia

		Registres: < << < > >> >						Camps: < << < > >> >					
	OBJECTID	CAS	IDFULL50M	REVISIO	tipus_carr								
1	449615	VIA58	421	4	2								
2	449386	VIA58	421	4	2								
3	451040	VIA58	421	4	2								
4	451189	VIA58	421	4	2								
5	451247	VIA58	421	4	2								
6	450852	VIA58	421	4	2								
7	451070	VIA58	421	4	2								
8	451223	VIA58	421	4	2								
9	451059	VIA58	421	4	2								
10	451365	VIA58	421	4	2								
11	449252	VIA58	421	4	2								
12	450801	VIA58	421	4	2								
13	451123	VIA58	421	4	2								
14	451350	VIA58	421	4	2								
15	451370	VIA58	421	4	2								
16	451444	VIA58	421	4	2								
17	449485	VIA58	421	4	2								
18	450979	VIA58	421	4	2								
19	451569	VIA58	421	4	2								
20	450890	VIA58	421	4	2								
21	451254	VIA58	421	4	2								
22	451296	VIA58	421	4	2								
23	451424	VIA58	421	4	2								
24	450813	VIA58	421	4	2								
25	450937	VIA58	421	4	2								
26	451649	VIA58	421	4	2								
27	450822	VIA58	421	4	2								



MiraDades [4]: D:\Montse\Harvard University\Mapes Cerdà\bases_cerdà\parques.dbf							
Fitxer Edició Visualització Registres Camps Informació Eines Ajuda							
Registres:		<	<<	<	>	>>	>
Camps:		<	<<	<	>	>>	>
	Id	tip_illa	OID_	Field1	tip_illa_1	simbol	descr_illa
1	0	5	4	0	5	P	parques
2	0	5	4	0	5	P	parques
3	0	5	4	0	5	P	parques
4	0	5	4	0	5	P	parques
5	0	5	4	0	5	P	parques
6	0	5	4	0	5	P	parques
7	0	5	4	0	5	P	parques
8	0	5	4	0	5	P	parques

results expected

- best practice guidance
- to ascertain factors in leveling social welfare
- quality of life
- to construct the future policy initiators now found in contemporary cities
- To help asking the right questions concerning urban wellbeing and provision of needs

- **thanks for your attention**

mpallares@cga.harvard.edu