

Plano Verde –instrumento de sustentabilidade

Manuela Raposo Magalhães

Instituto Superior de Agronomia . Universidade Técnica de Lisboa

Lisboa E-Nova, 26.Outubro.2010



CENTRO DE ESTUDOS DE ARQUITECTURA PAISAGISTA

“PROFESSOR CALDEIRA CABRAL”

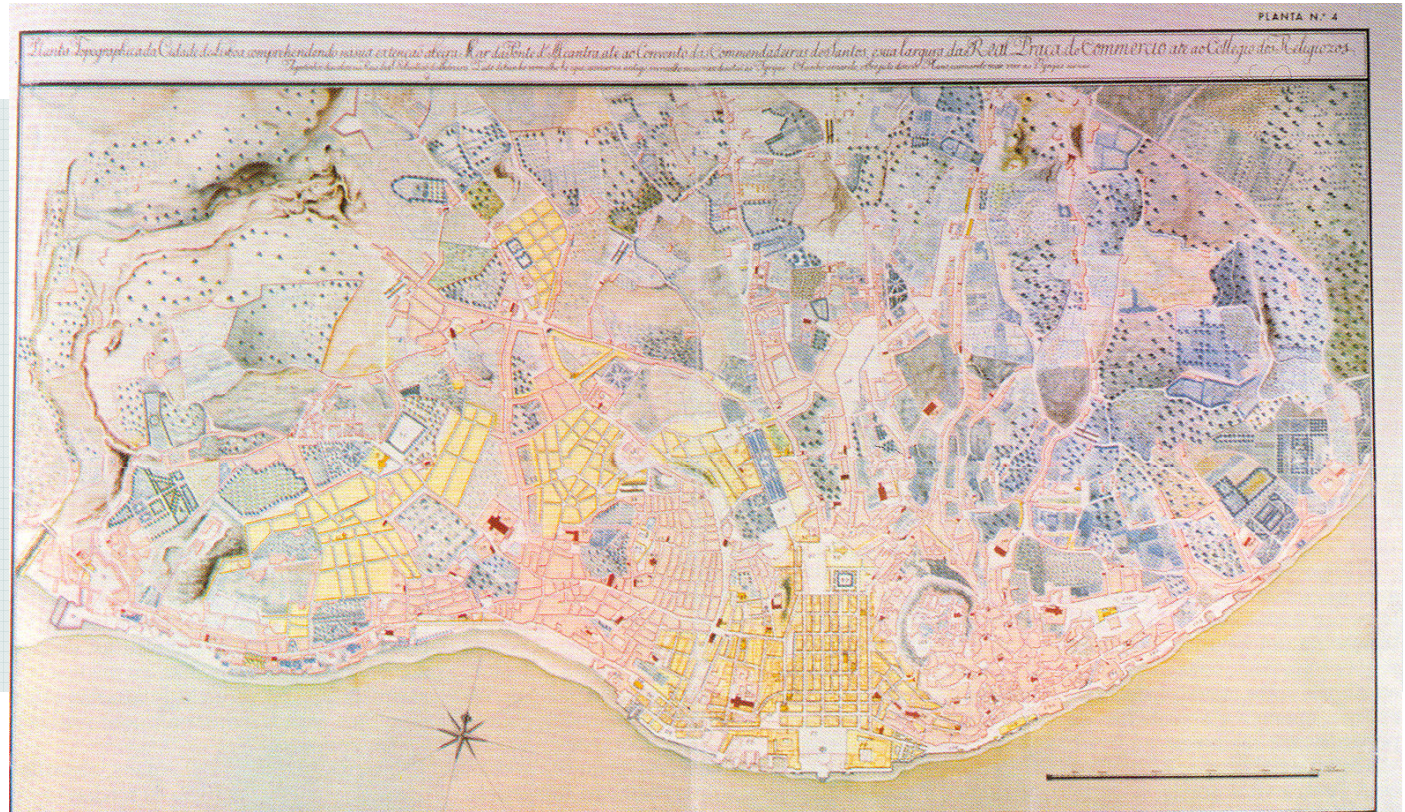
Lisbon - 1650



Figura 18 Lisboa em 1650, segundo J. N. Tinoco

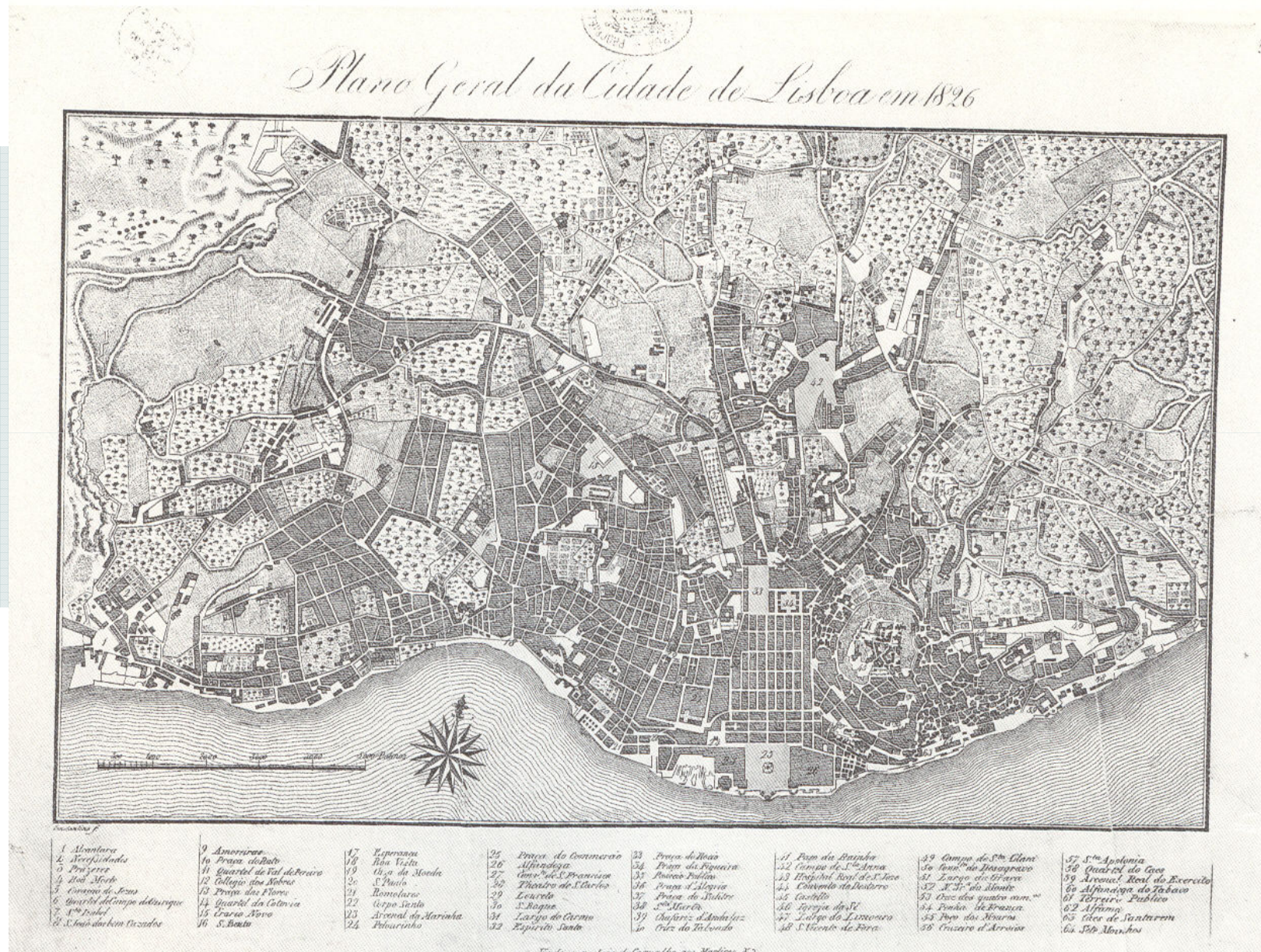
PLANS – Marquês de Pombal – XVIII century

General Plan of Lisbon - 1777



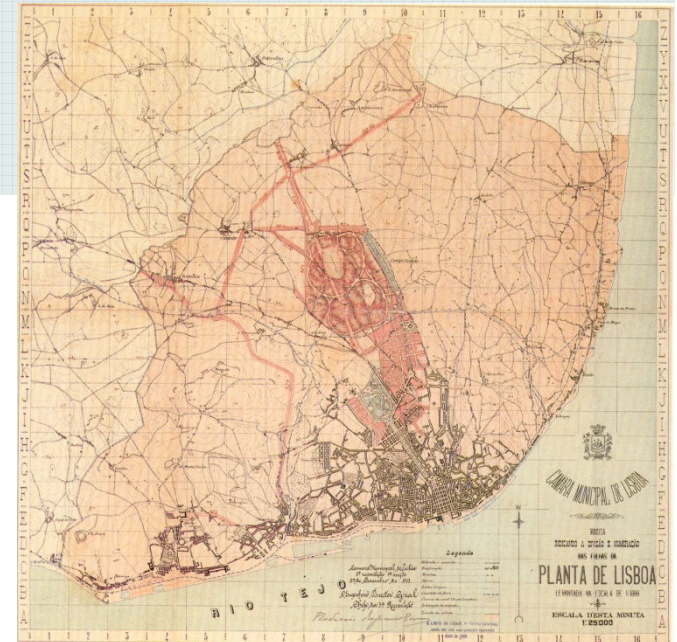
Earthquake of Lisbon
- 1755

General Plan of Lisbon, 1826



1st General plan of improvements of Lisbon - 1903

Ressano Garcia



ESTADO NOVO – anos 30s e 40s

1934 - General plan of Urbanization

Inspired in the Plans of embellishment of the French cities compulsory for all the settlements with more than 2,500 inhabitants.

It attributed to the municipalities the competency for the elaboration of these Plans

1935 –1st of the Fifteen Years Plans (1935 - 1950)

Objectives and budget

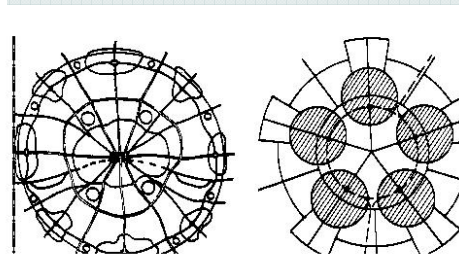
Improvements on infrastructures, agriculture,



Praça de Londres



General Plan of Lisbon,
Etienne De Gröer, 1948 - Green spaces

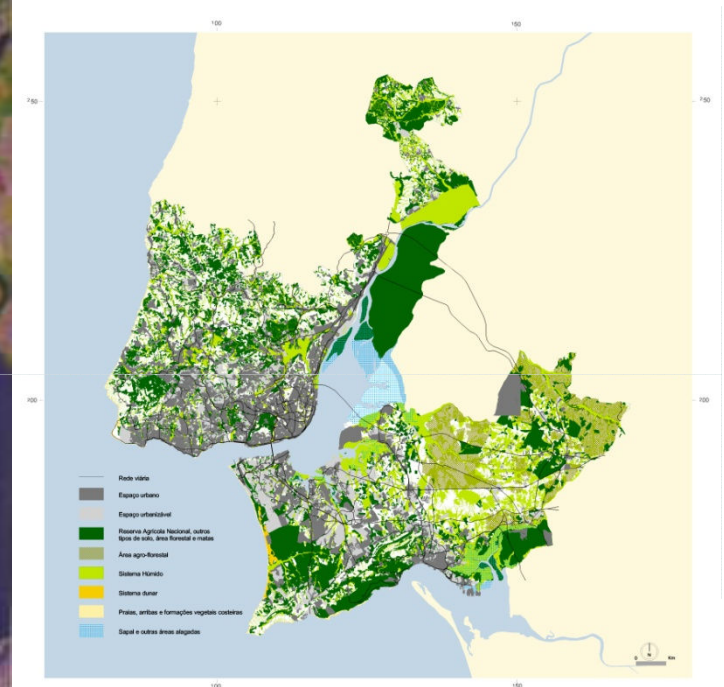


concept



General Plan of Urbanization, Alvalade

Area Metropolitana de Lisboa



conceito - Planejamento Ambiental

Conceito Físico + Biológico

Teoria Geral dos Sistemas – Ludwig Bertalanffy, 1968

Teoria de Gaia – James Lovelock, 1979

Estrutura Ecológica /

Local, Regional, Nacional

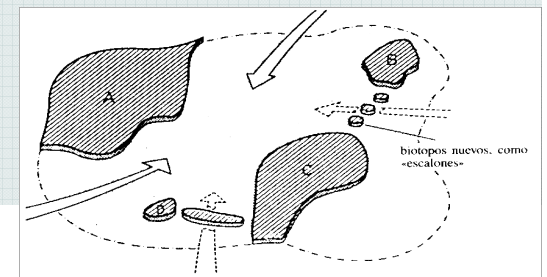
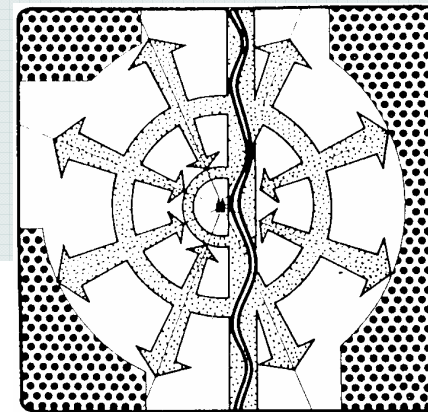
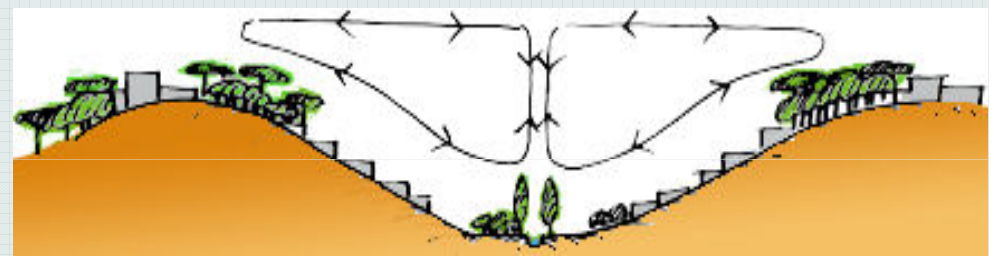
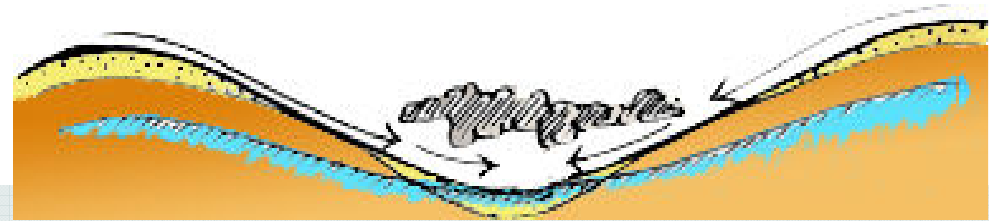


Planeamento/Design Ambiental



Paisagem Contemporânea ≈

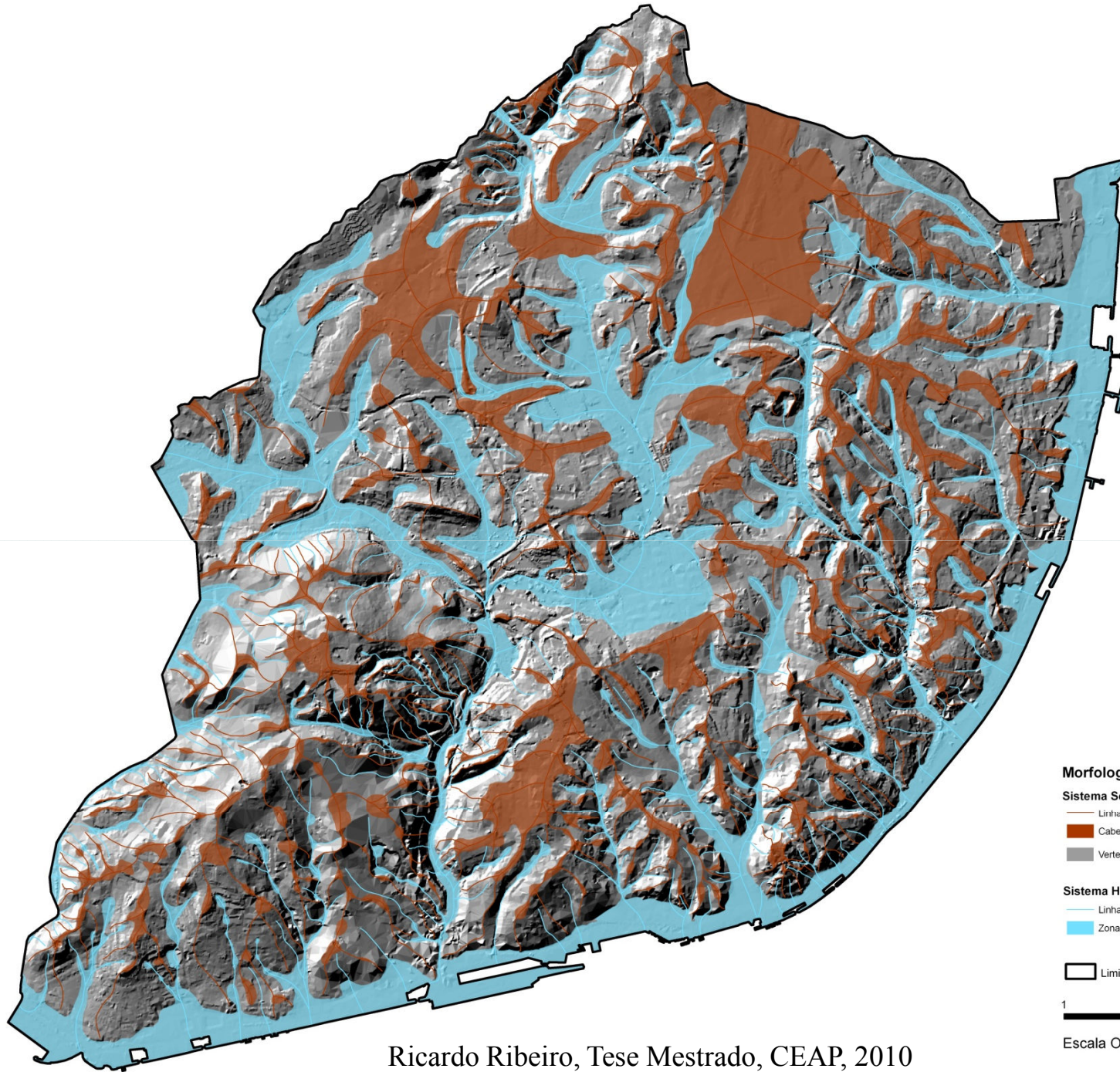
Paisagem Global



Blab, 1985

LISBOA

Morfologia do Terreno 



Morfologia do Terreno

Sistema Seco

- Linhas de fecho
- Cabeços
- Vertentes

Sistema Húmido

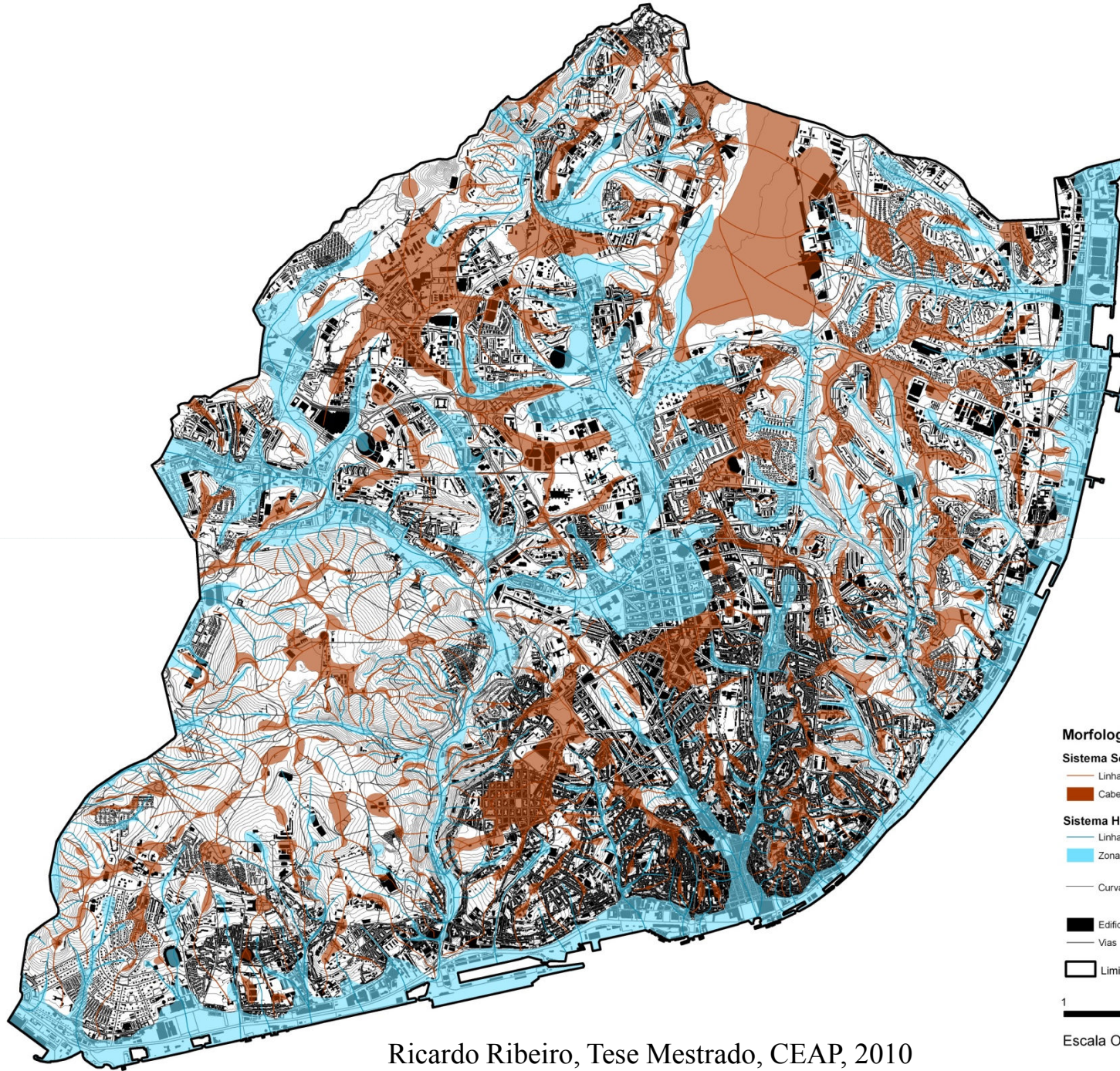
- Linhas de água
- Zonas contíguas às linhas de água

- Limite do concelho

1 0 1 Km

Escala Original 1/25 000

Ricardo Ribeiro, Tese Mestrado, CEAP, 2010



Morfologia do Terreno

Sistema Seco

- Linhas de fecho
- Cabeços

Sistema Húmido

- Linhas de água
- Zonas contíguas às linhas de água
- Curvas de nível

- Edificado
- Vias

- Limite do concelho

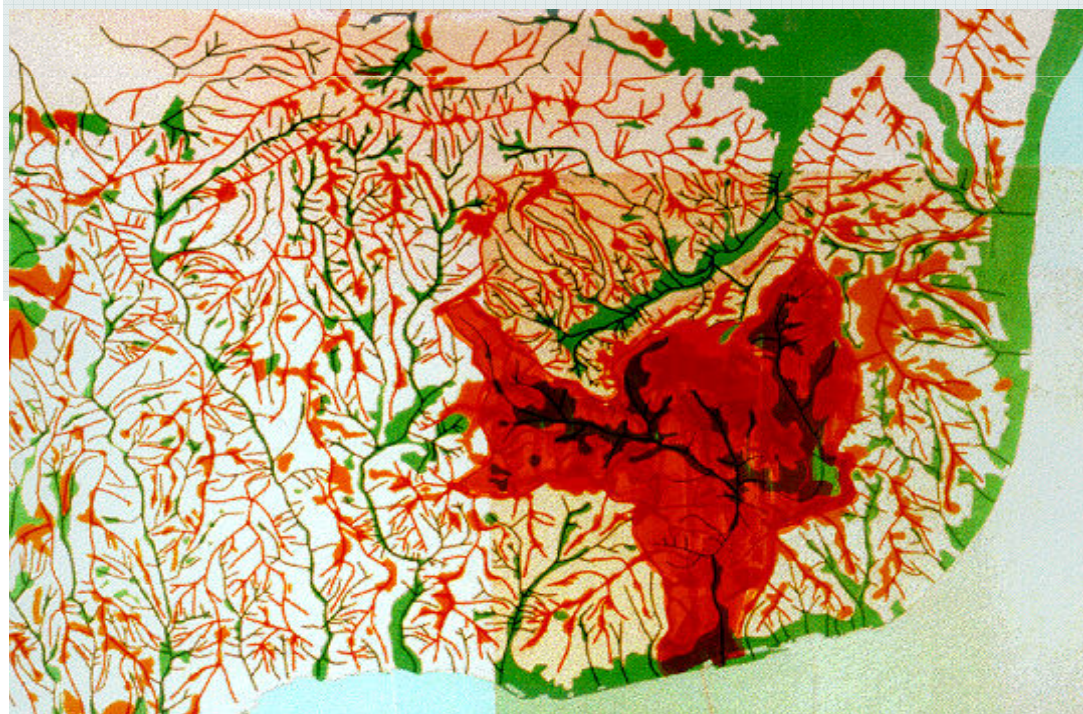


Escala Original 1/25 000

Riscos associados às Zonas Adjacentes



Liquefacção dos terrenos

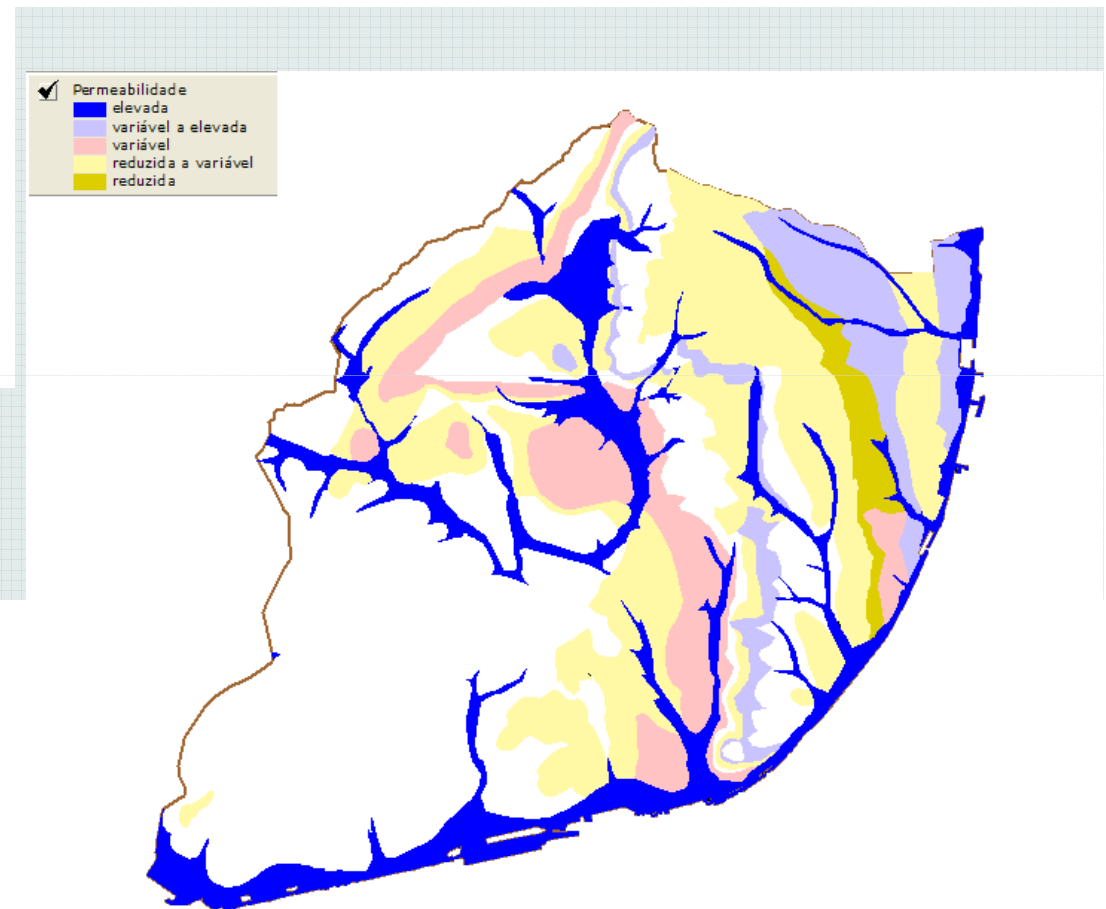
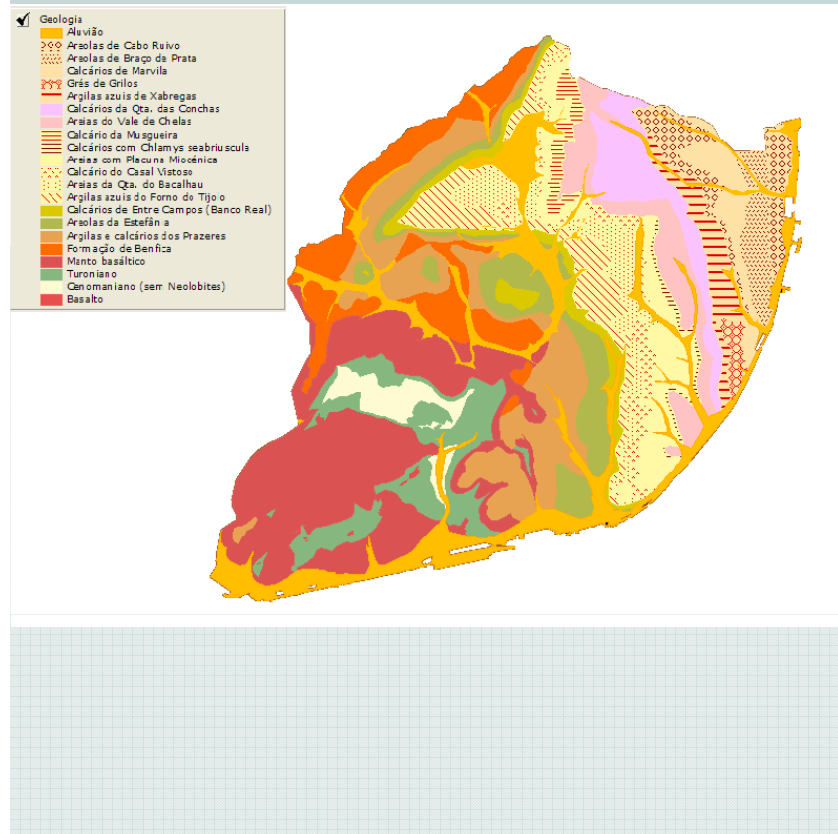


Ribeira de Alcântara



LUSA/ANTONIO COTRIM

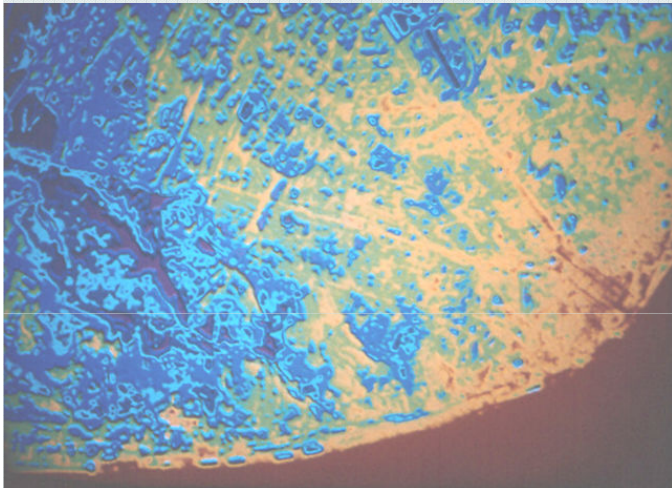
Lisboa - permeabilidade



Carta de Permeabilidade, Sara Levy, TF, IST

PLANEAMENTO E ORDENAMENTO DA PAISAGEM

Pressupostos de Base Ecológica - CONFORTO BIOCLIMÁTICO



Fotografia térmica de Lisboa

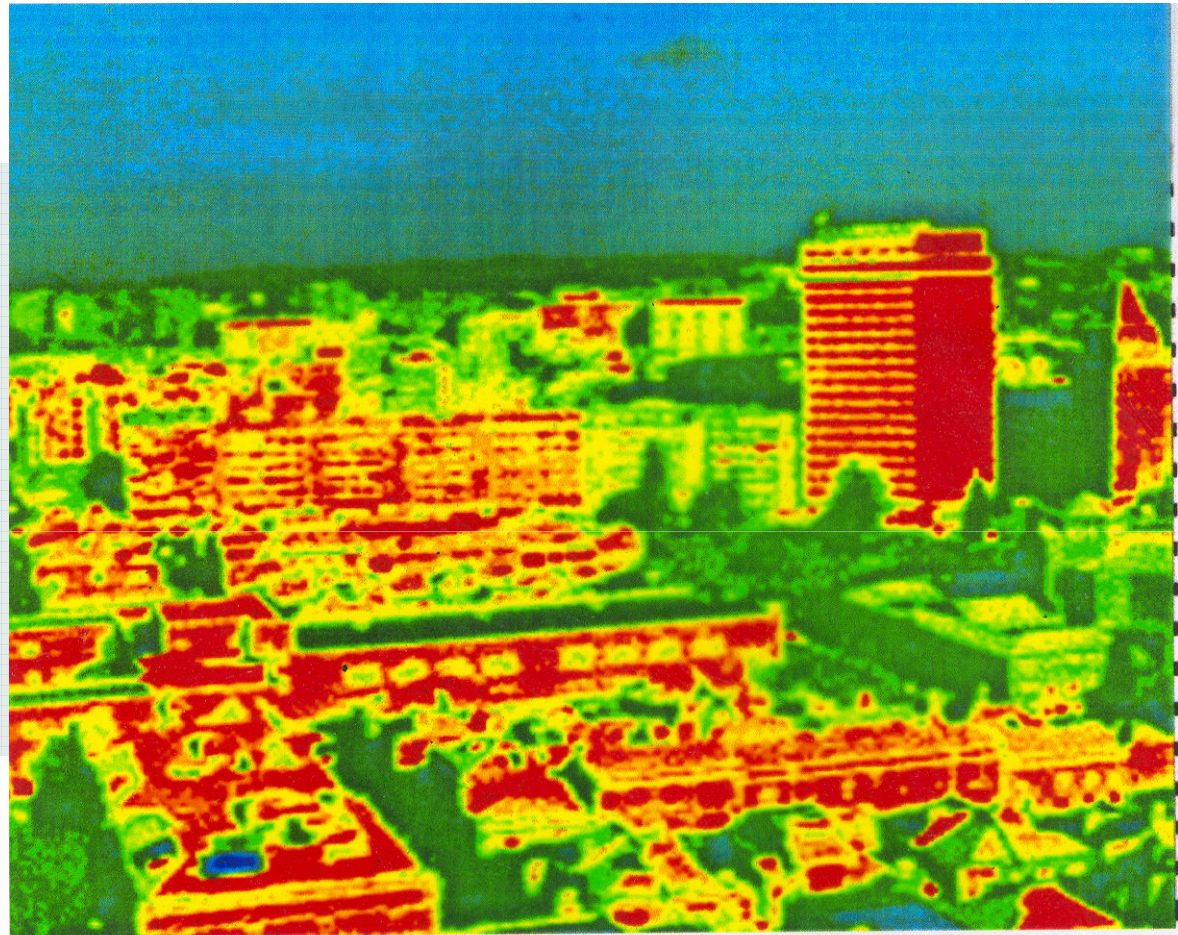


Imagem de fluxo radiativo colhida sobre o Bairro de Alvalade, sobressaindo o edifício de 20 andares do Ministério do Emprego e Qualificação Profissional. -

Imagem colhida pelo Engº Miguel Águas (IST)

Agricultura urbana espontânea / CHELAS



CHELAS – Agricultura urbana espontânea /

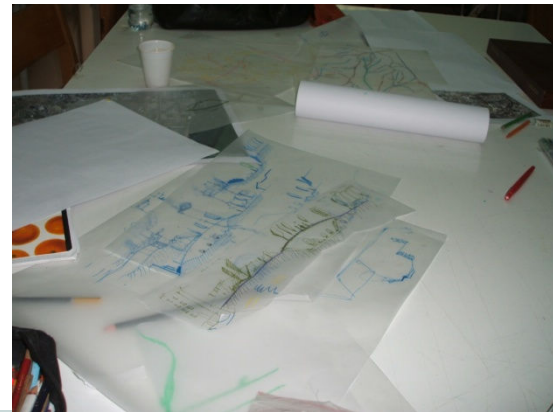
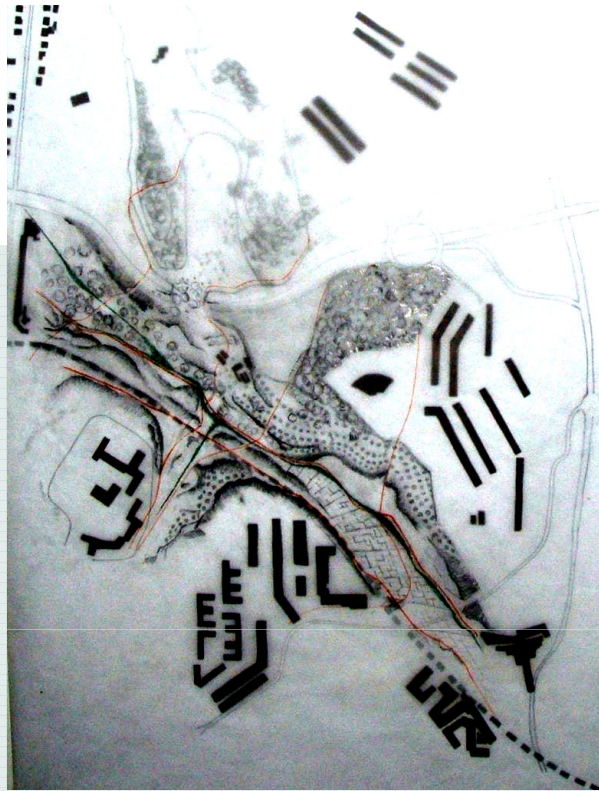
Valores Produção

Preços grossistas: 1-4 €/m² = 40.000 € / ha

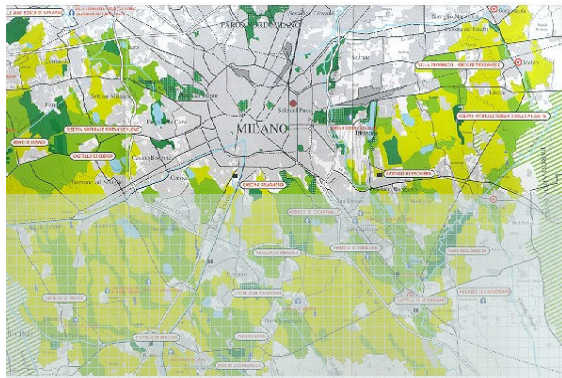
	Kg/ m ²	Preço/ Kg €	Preço/ m ²	
Batata x1	4	0,50	2	
Cebola x1	3	0,95	2,85	
Alface x2	8	1,95	15,6	
Couve x1	6	1,50	9	
			29,45€ / m ² / ano	294.500 € / ha/ ano *

* Valor bruto, pressupõe fornecimento de água, ocupação total do terreno, boa estrumação orgânica, ausência de contingências como pragas, granizo, inundações, vandalismo, etc.

CHELAS – Agricultura urbana espontânea / Workshop ISA/ U. Nürtingen, 2008



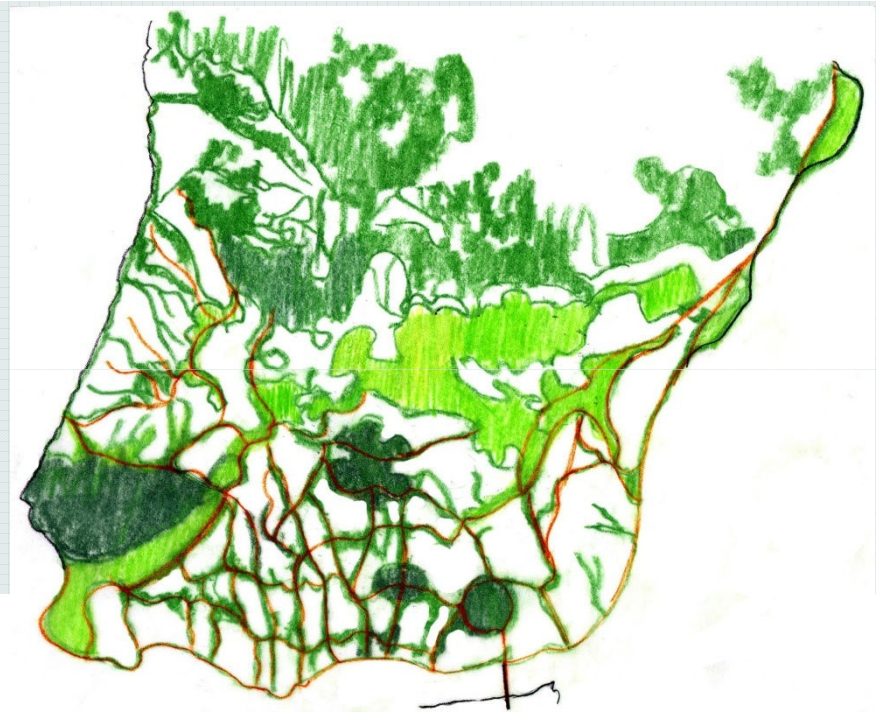
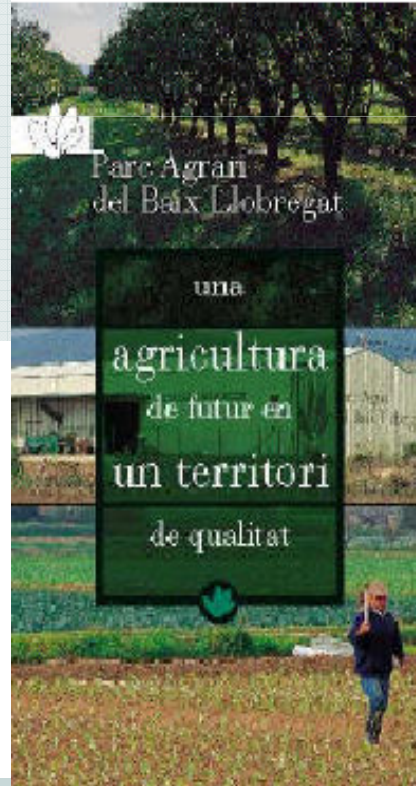
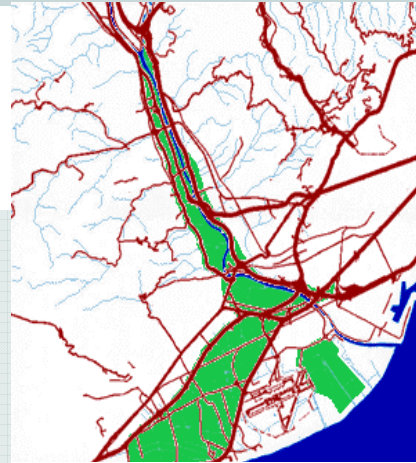
Parques Agrícolas



*illustrazione del
rapporto di gestione 2000*

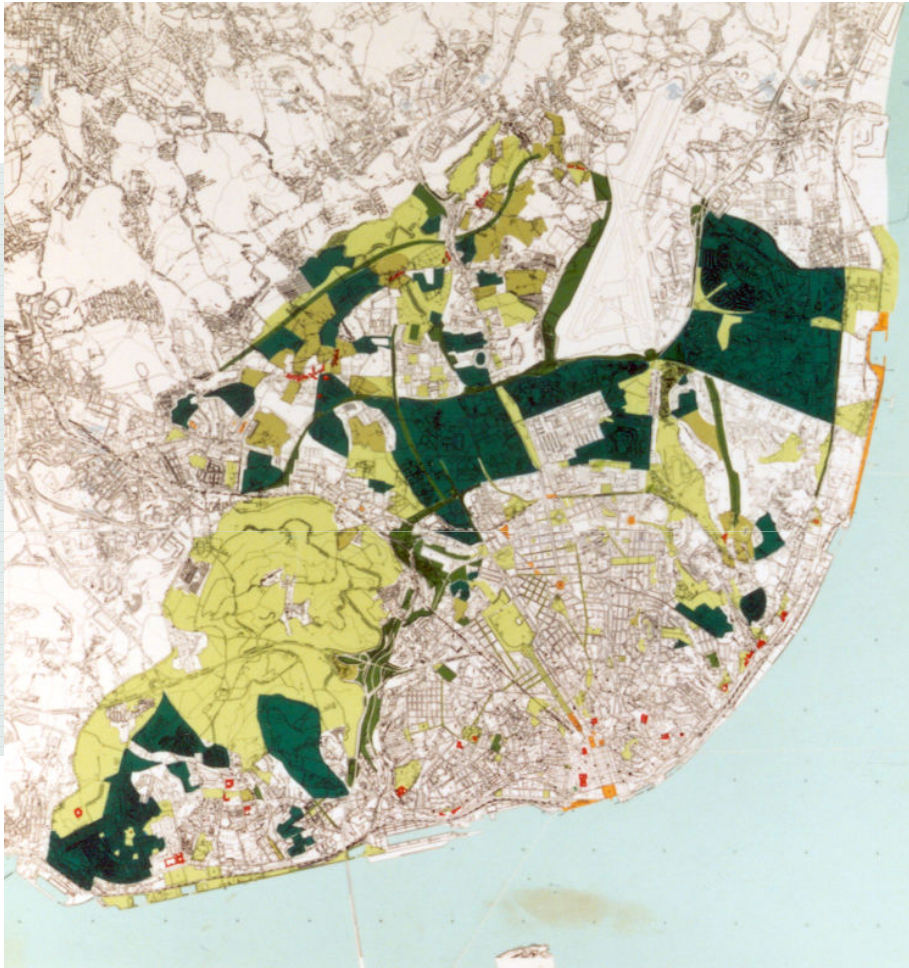


PARCO AGRICOLA SUD MILANO







AML - Estrutura Cultural e
da Mobilidade Suave, CEAP, 2003

PLANO DIRECTOR MUNICIPAL Plano Verde de Lisboa CEAP, ISA 1993



**Coordenação -
Prof. Gonçalo R. Telles**



-  ANEL PERIFÉRICO
-  ANEL INTERMÉDIO COM EQUIPAMENTOS COLECTIVOS INTERCALADOS
-  RADIAIS - SISTEMAS DE VALES
-  ESTRUTURA PONTUAL (DESCONTÍNUA) NA ZONA COLINAR



PLANO VERDE DE LISBOA

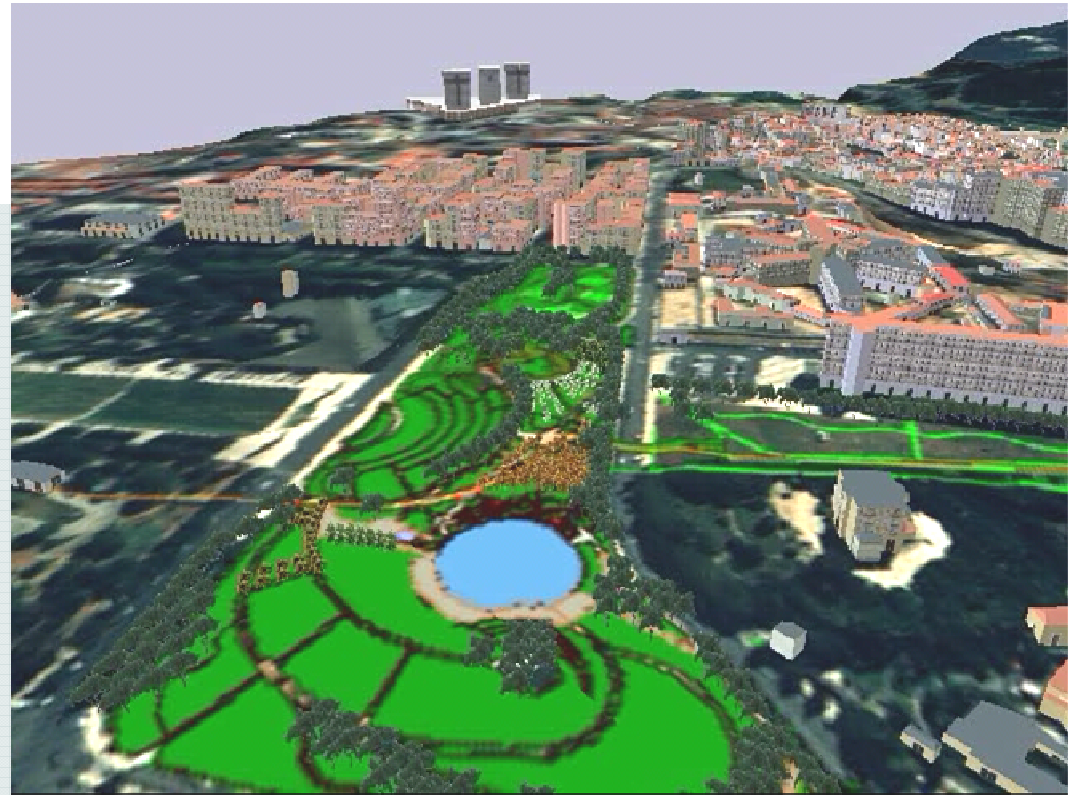


- 1- Parque de Monsanto
- 2 - Parque da Bela Vista
- 3 - Parque do Aeroporto
- 4 - Vale de Alcântara
- 5 - Parque Periférico
- 6 - Vale de Chelas
- 7 - Charneca
- 8 - Corredor Verde de Monsanto
- 9 - Mata do Aeroporto
- 10 - Zona Ribeirinha Oriental
- 11 - Zona Ribeirinha Central
- 12 - Zona Ribeirinha Ocidental
- 13 - Campo Grande

Unidades Operativas de Planeamento e Gestão da Estrutura Ecológica

Corredor P. Eduardo VII - Monsanto - 1999

Prof. Gonçalo R. Telles



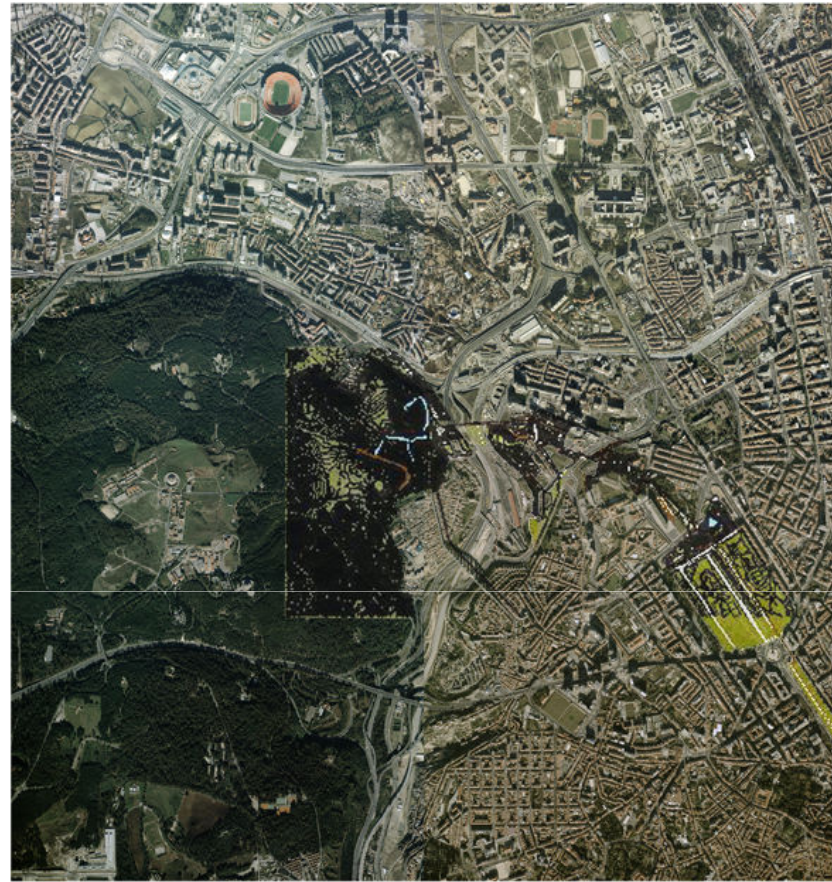
Visualização gráfica, IST, UTL "Lisboa Virtual"





PLANO VERDE DE LISBOA

00 CORREDOR VERDE DE MONSANTO



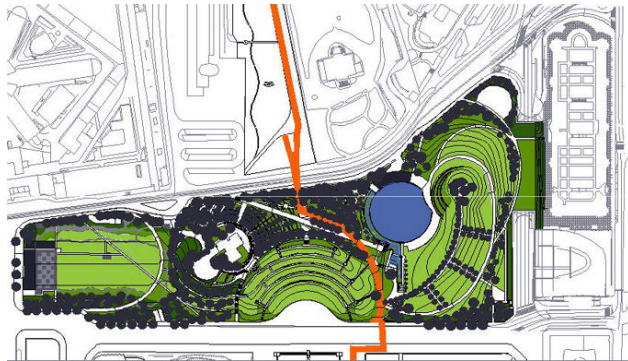
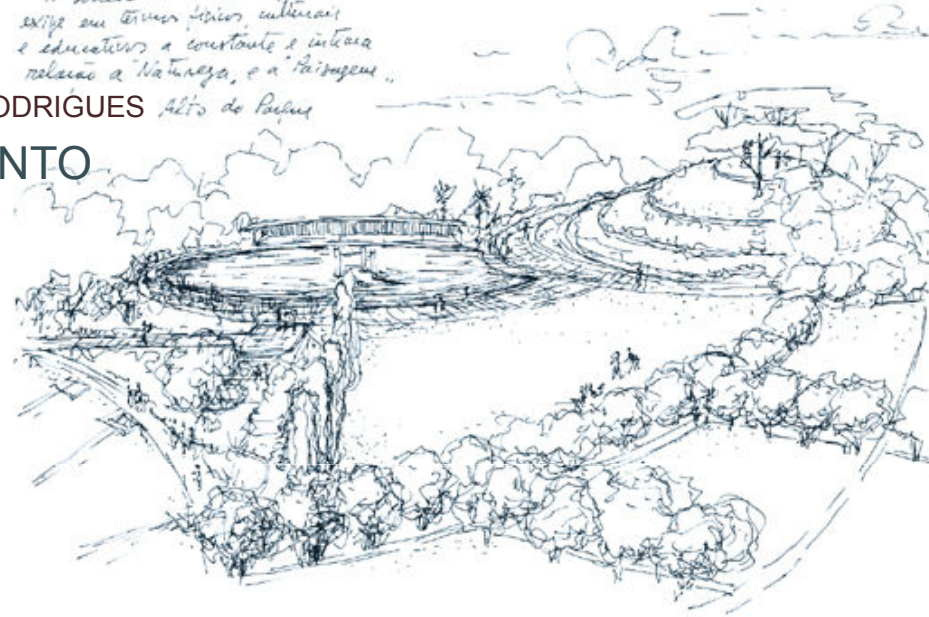


PLANO VERDE DE LISBOA

01 ALTO DO PARQUE - JARDIM AMÁLIA RODRIGUES CORREDOR VERDE DE MONSANTO

*A sociedade urbana do futuro
exige em termos físicos, culturais
e educativos a constante e intensa
relação a "Natureza, e a Paisagem".*

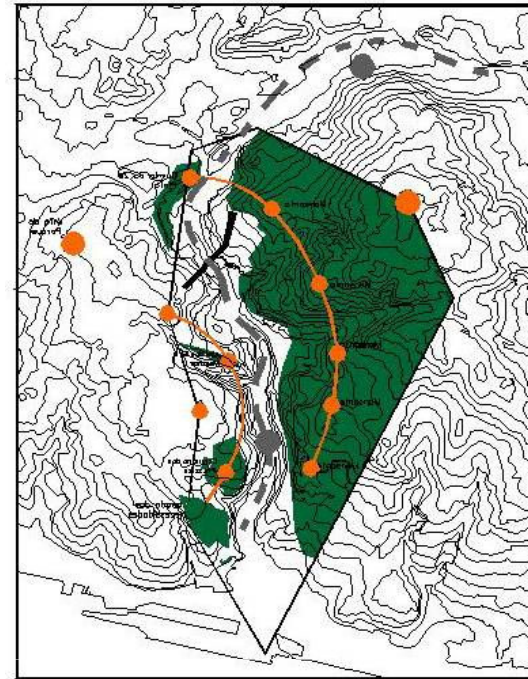
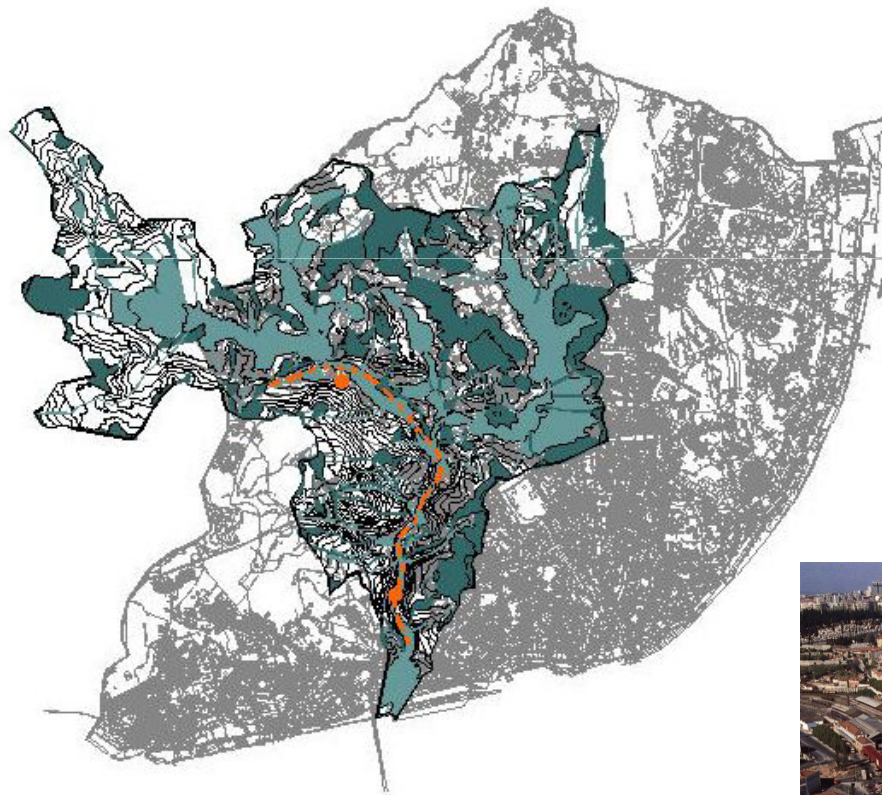
Alto do Parque





PLANO VERDE DE LISBOA

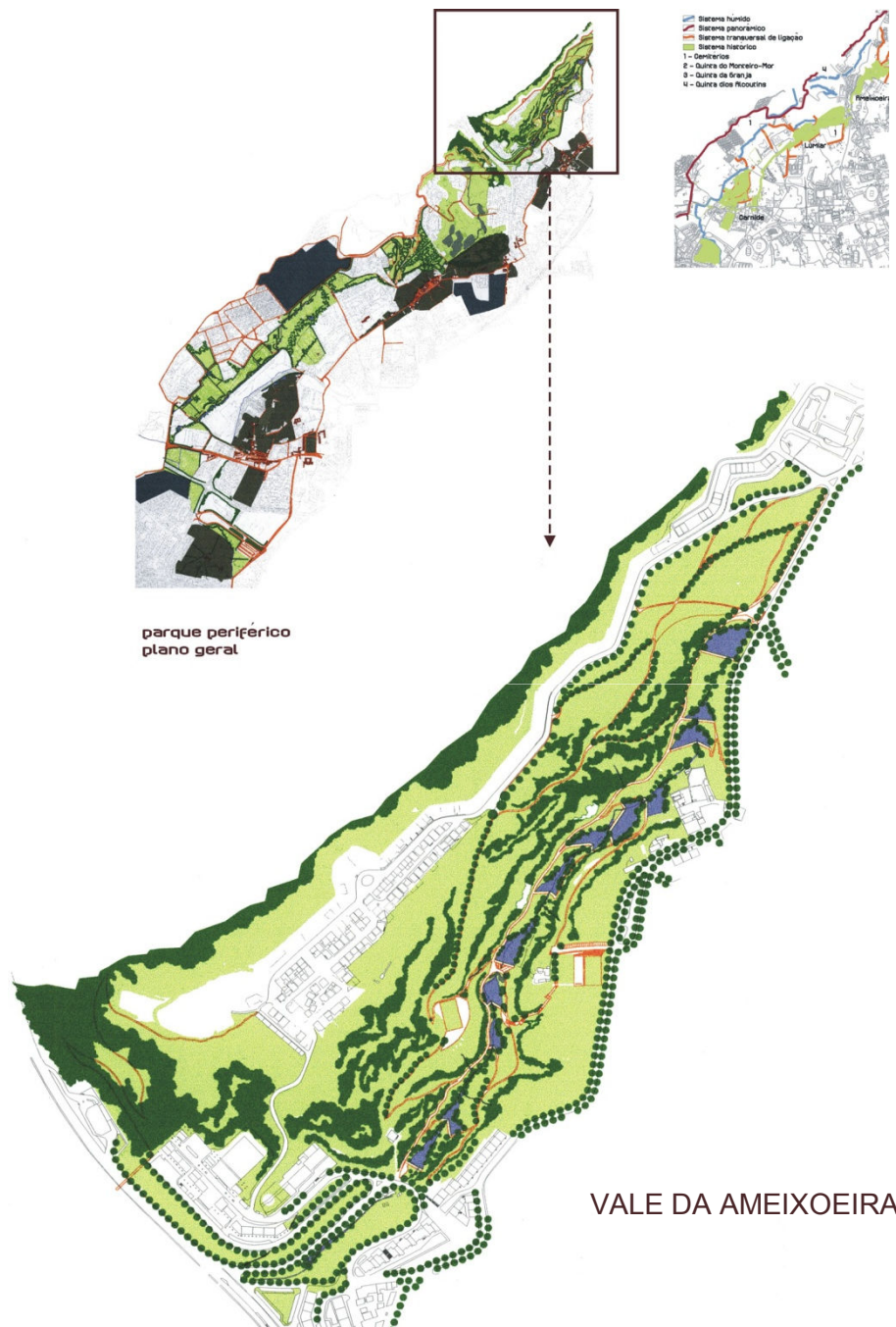
01 CORREDOR DA RIBEIRA DE ALCÂNTARA





PLANO VERDE DE LISBOA

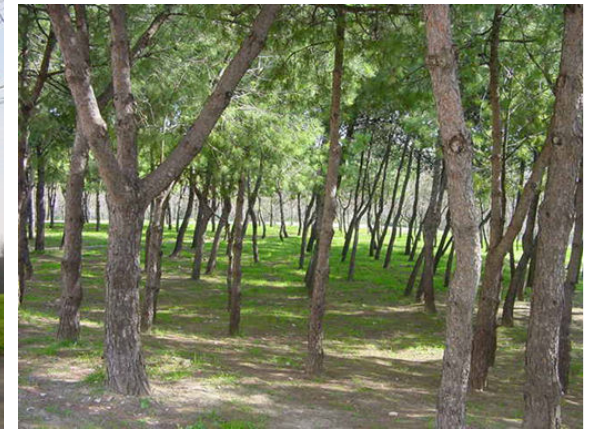
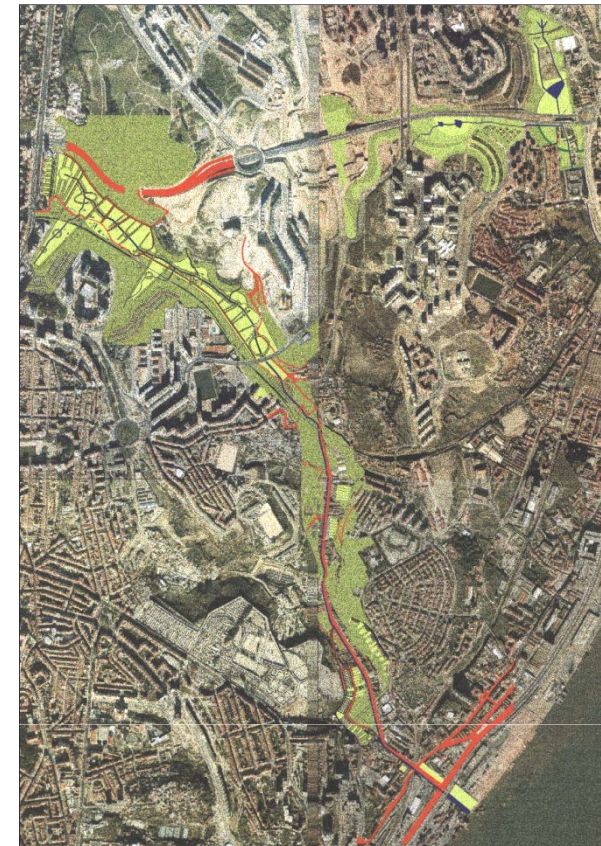
PARQUE PERIFÉRICO





PLANO VERDE DE LISBOA

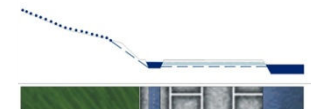
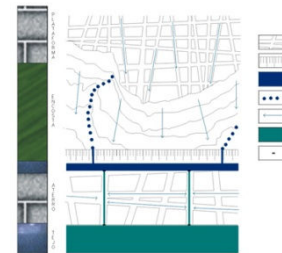
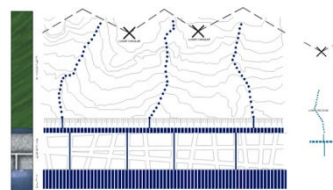
SISTEMA DE CHELAS



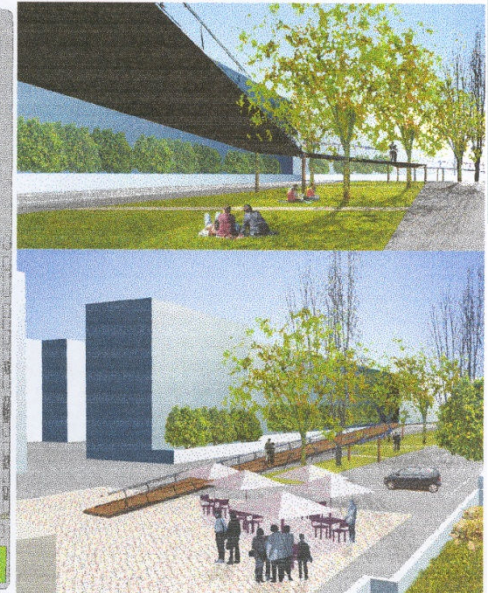
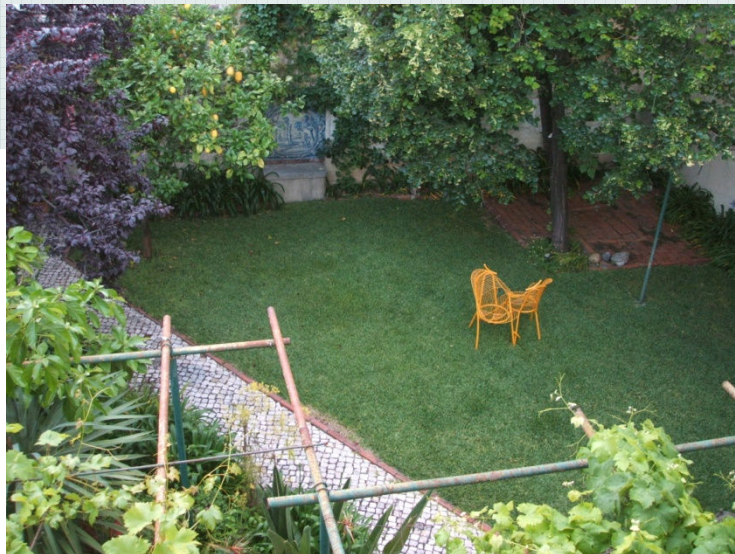
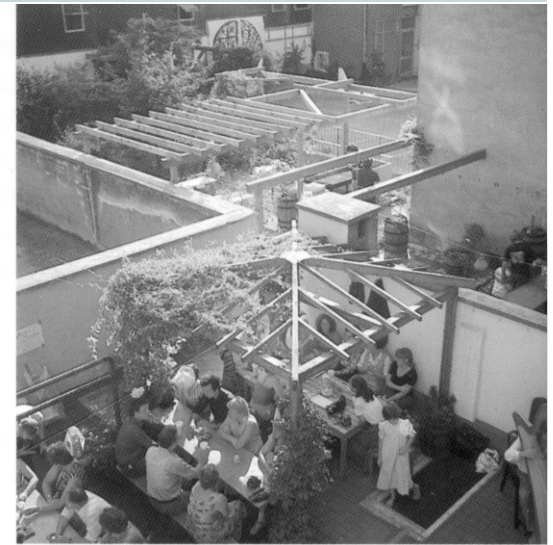
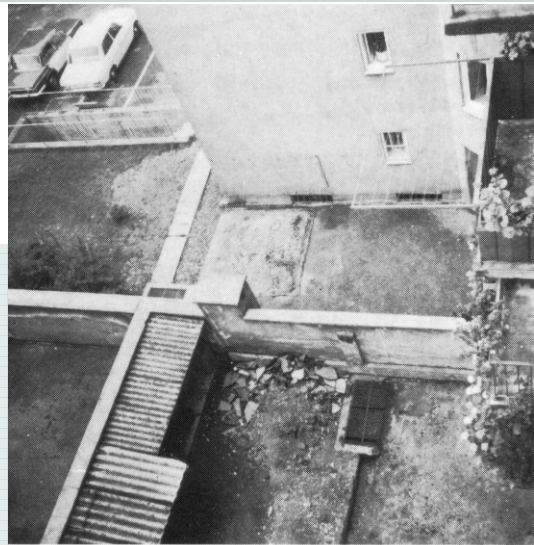


PLANO VERDE DE LISBOA

00 MARGEM RIBEIRINHA



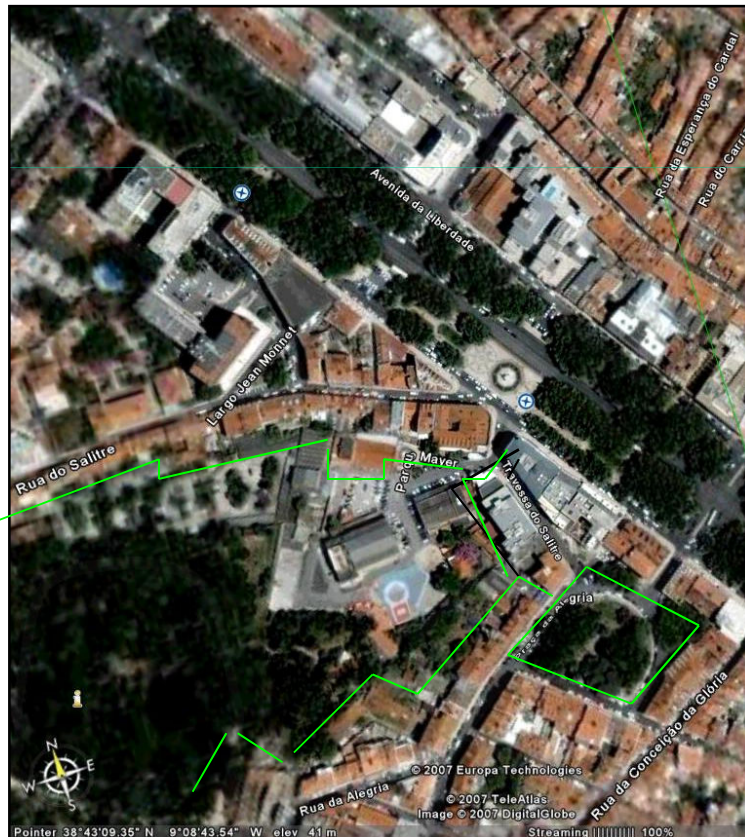
Logradouros interiores





PLANO VERDE DE LISBOA

02 AVENIDA DA LIBERDADE - CORREDORES DE ENCOSTA ESTRUTURA ECOLÓGICA INTEGRADA



Rede Ciclável de Lisboa (2000-2001)



238Km

Coordenação: Prof^a. Arq^a. Pais. Manuela Raposo Magalhães

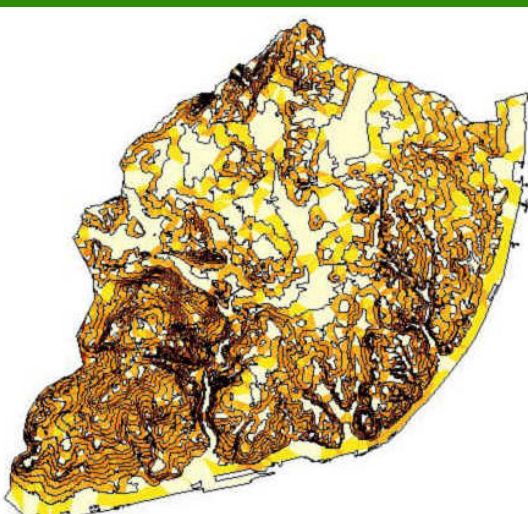
Arq.Pais. Duarte d'Araújo da Mata

Arq. Paisagista Natália Cunha (colaboração)

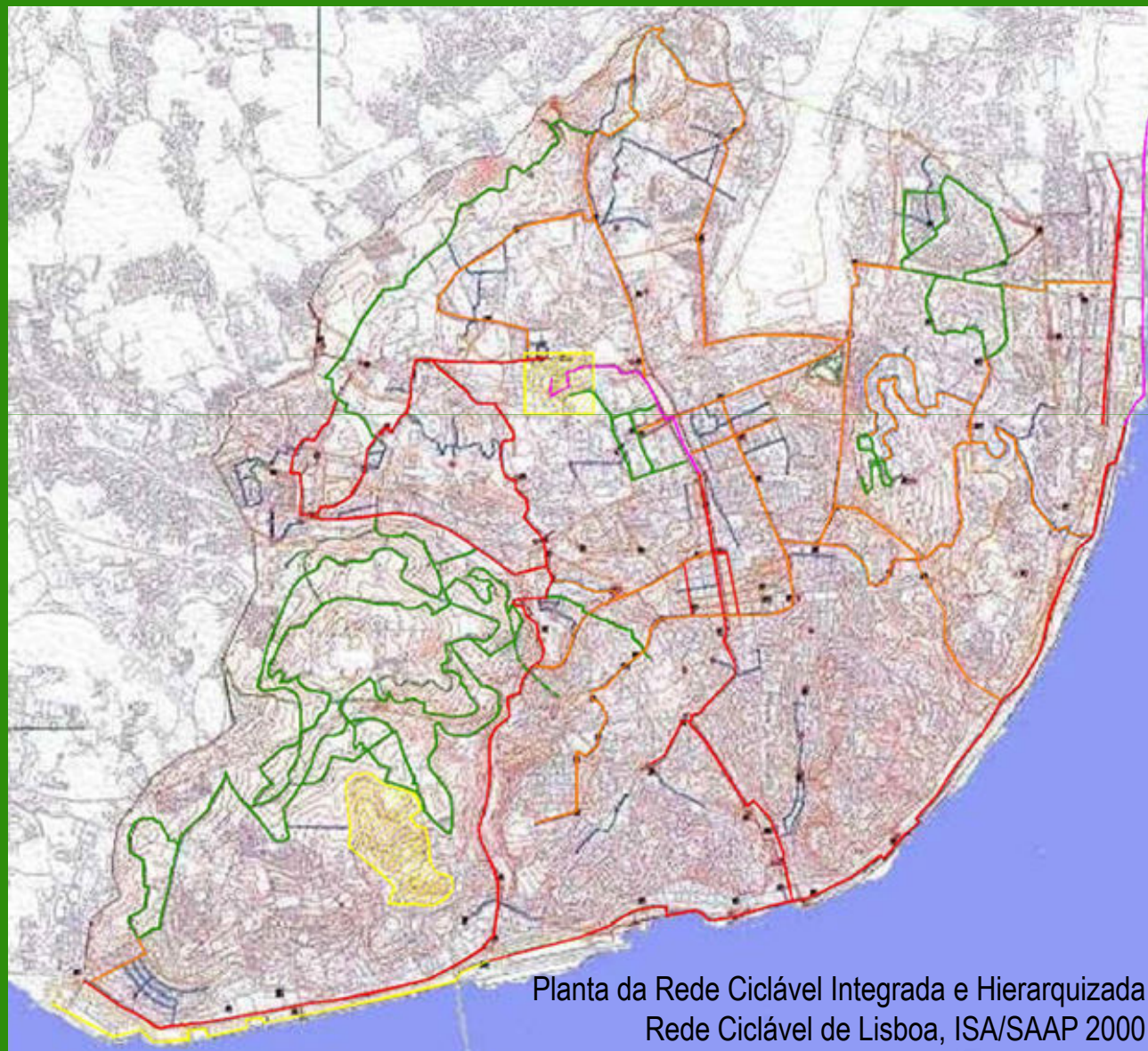
Estagiária arquitectura paisagista Mariana Sargo (colaboração)



Estrutura Ecológica - Plano Verde de Lisboa
ISA/SAAP - 1993



Declives - Rede Ciclável de Lisboa,
ISA/SAAP 2000



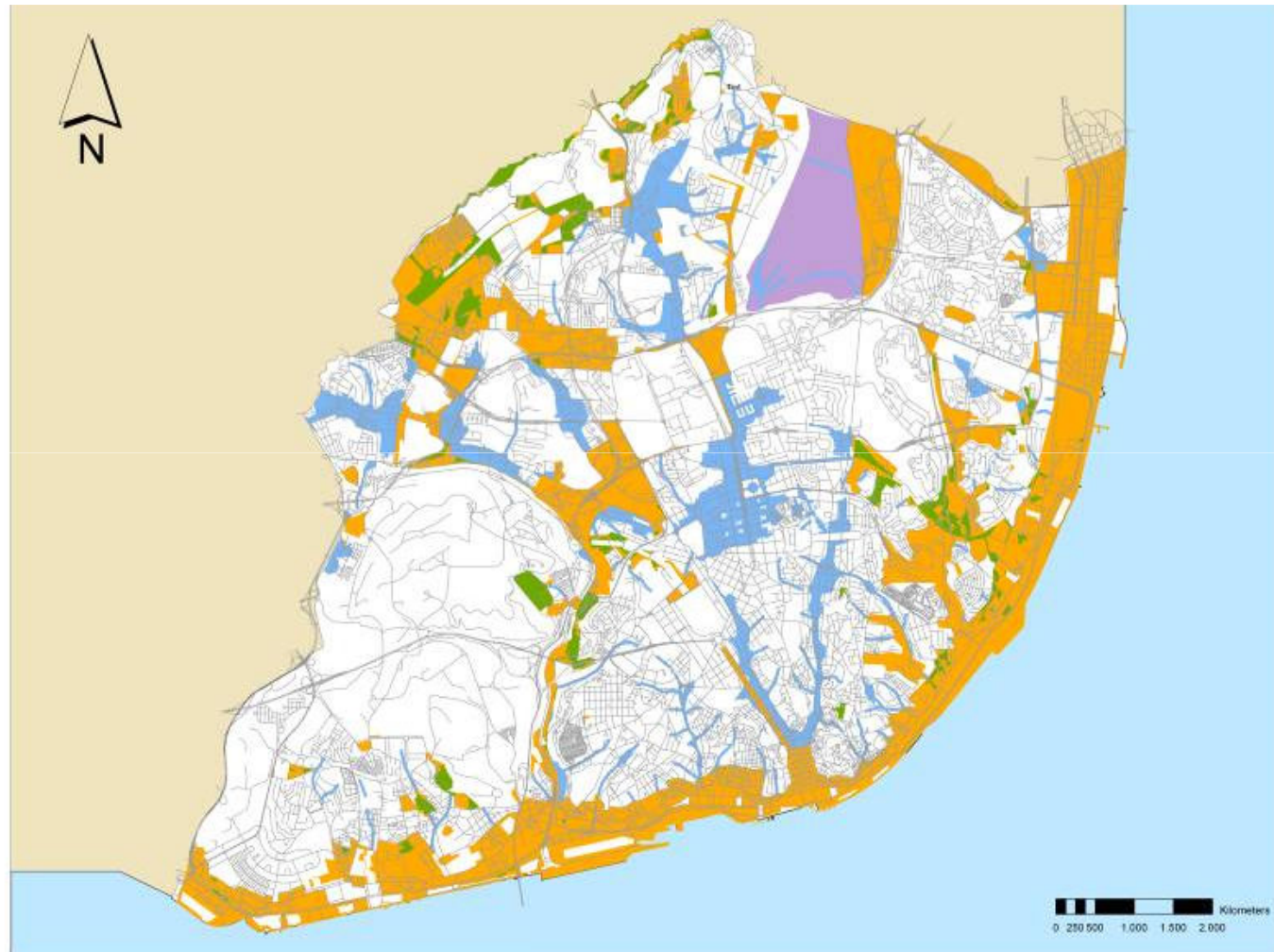
Planta da Rede Ciclável Integrada e Hierarquizada
Rede Ciclável de Lisboa, ISA/SAAP 2000



CÂMARA MUNICIPAL DE LISBOA

DIRECÇÃO MUNICIPAL DE AMBIENTE URBANO / DIRECÇÃO MUNICIPAL DE PLANEAMENTO URBANO

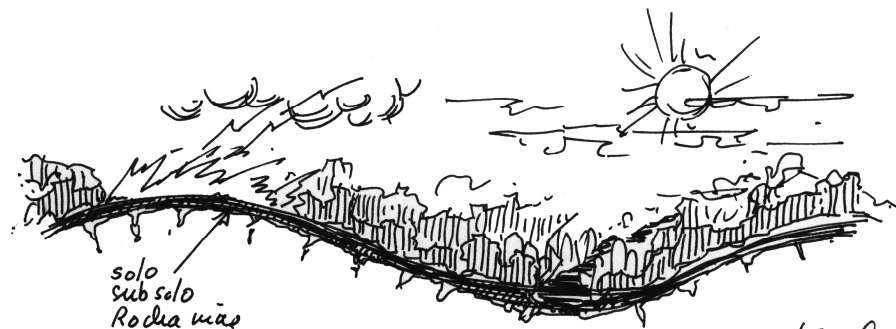
PLANTA DE CATEGORIAS DE ÁREAS SUJEITAS A MEDIDAS CAUTELARES



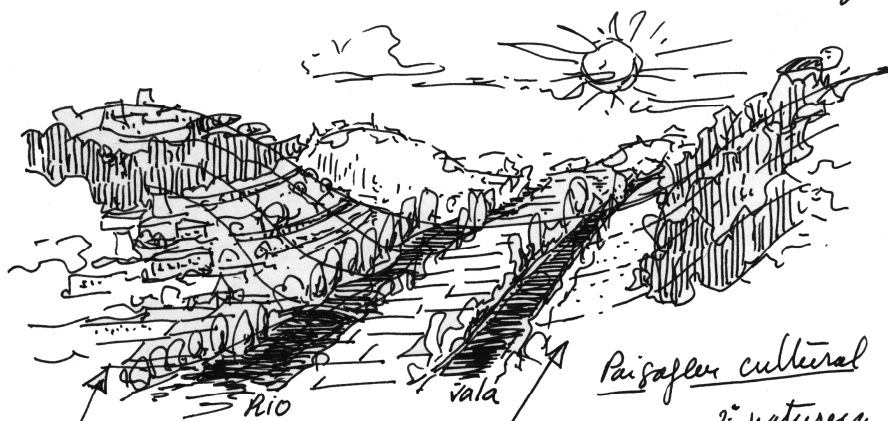
- | | | | |
|---|--|---|----------------------------|
|  | LIMITAÇÃO DE USO |  | PARECER VINCULATIVO |
|  | LIMITAÇÃO A PARECER
TÉCNICO
HIDROLÓGICO |  | ZONA DO AEROPORTO |

REFLEXÃO SOBRE PAISAGEM

Reflexão sobre paisagem



Paisagem natural
1.ª natureza



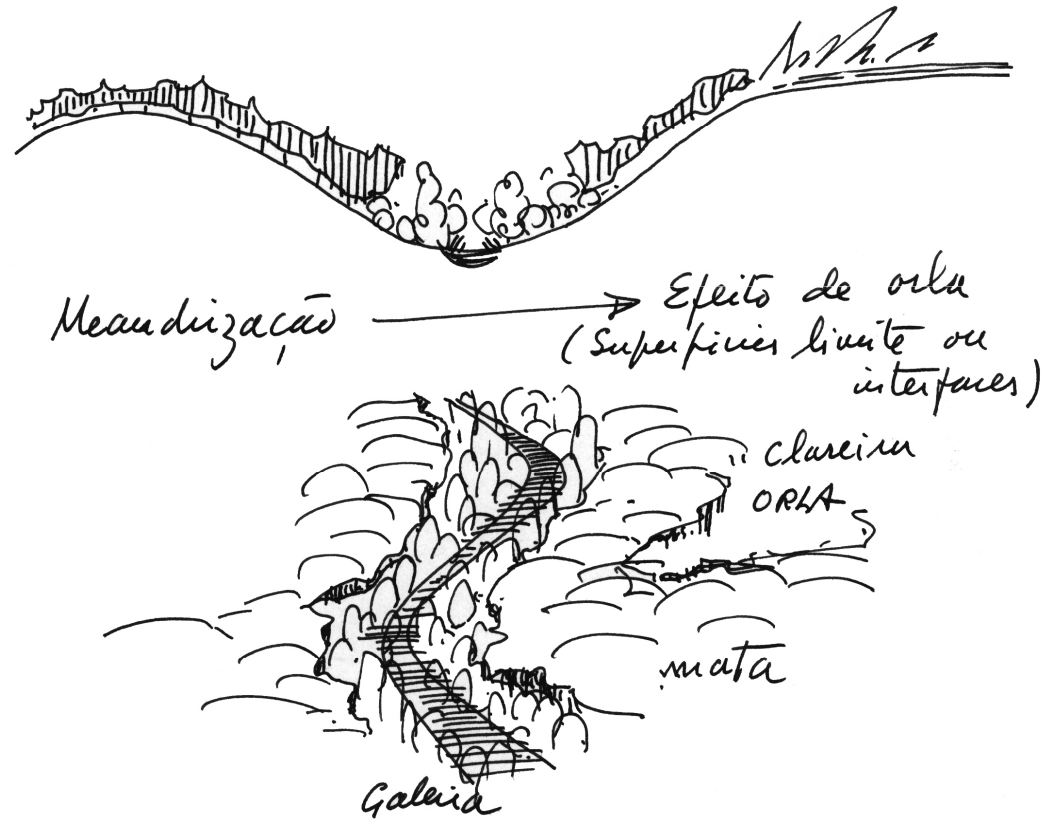
2.ª natureza

"facies"
edificado
Paisagem urbana

"facies" natural
paisagem rural

Paisagem global

CONDIÇÕES FUNDAMENTAIS DA PAISAGEM
liberdade de troca entre limites
variedade

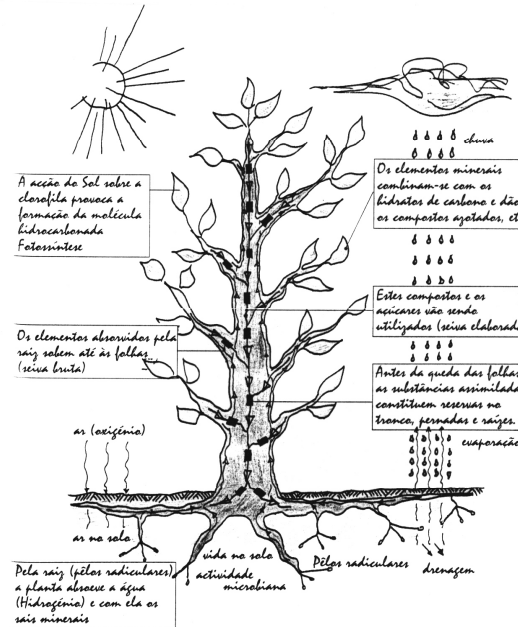


PLANEAMENTO E ORDENAMENTO DA PAISAGEM

estrutura espacial

vegetação

Forma da árvore isolada



Forma natural da mata



A NOVA PAISAGEM - A CIDADE REGIÃO

A Nova Paisagem - A cidade-região
Ordenamento

