

Reflections on (Urban) Nature

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Actual Problems of Landscape Sciences:
environment, society, politics
9-13 September, 2019, Tbilisi, Georgia



Changing perceptions of nature

A few centuries ago, nature was considered very dangerous.
e.g. Landslides, Mountains, Storms, Bears etc.

Rockslide, 18. April and 9. Mai 1991, Randa Switzerland



Changing perceptions of nature

Age of Enlightenment
Romanticism period

Philosopher Jean-Jacques Rousseau (1712-1778) 'Back to Nature'
Correct Urban Society's alienation from Nature.

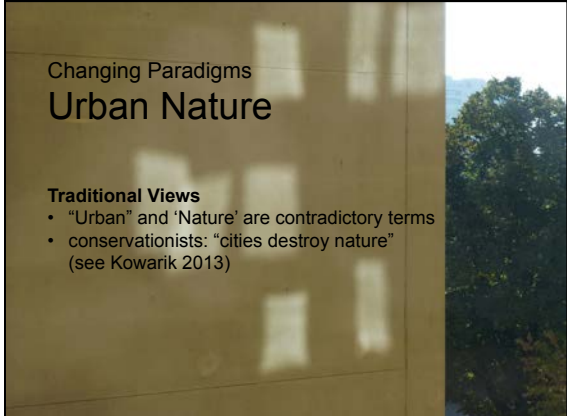
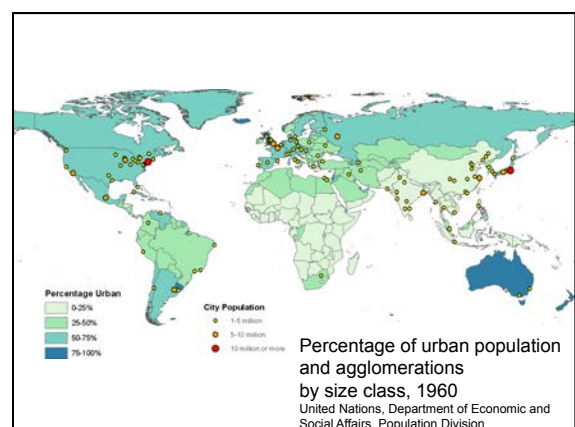
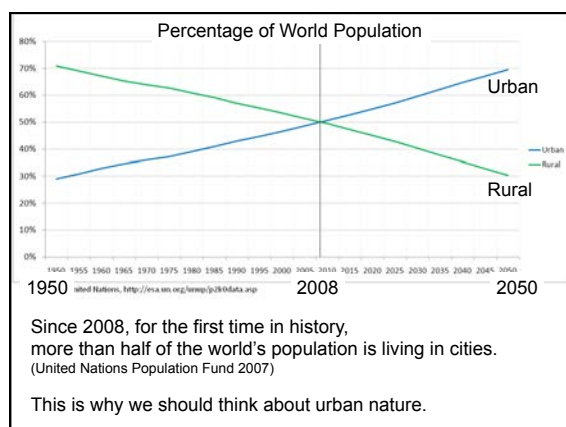
Claude Lorrain (1600-1682) Model for the English Landscape Style Park

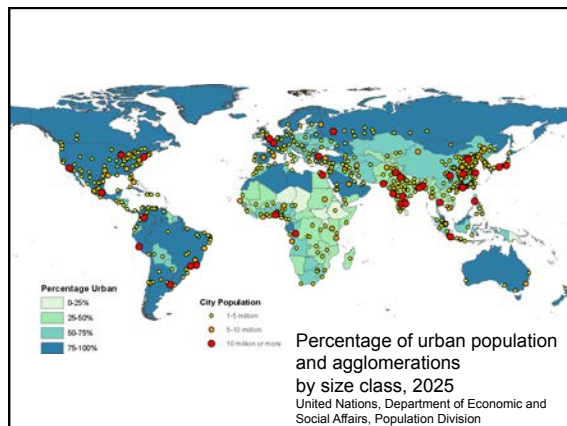


Changing Paradigms Urban Nature

Traditional Views

- "Urban" and 'Nature' are contradictory terms
- conservationists: "cities destroy nature" (see Kowarik 2013)



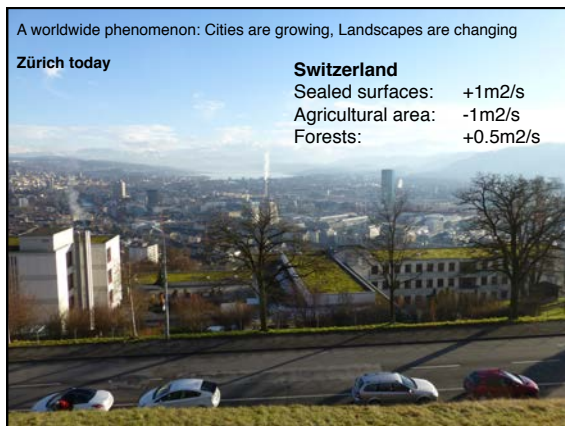
A worldwide phenomenon: Cities are growing, Landscapes are changing

Zürich 1884/85



A worldwide phenomenon: Cities are growing, Landscapes are changing

Zürich today



Switzerland

Sealed surfaces: +1m2/s
Agricultural area: -1m2/s
Forests: +0.5m2/s

Key Driver: Land Use Change

The Problem:
Land as a resource is finite
Human demands are not

EU 7th Environment Action Programme

- Target: No net-land take by 2050

EU key land cover trends 2006-2012 (for EU 28, EEA 2016)

- Man-made surfaces (artificial areas, commercial development, residential sprawl)
+ 1065 km²/year
- Agricultural areas (transformed mostly to urban areas)
- 1000 km²/year
- Forests (transformation of farmland, dry semi-natural land)
+ 105 km²/year

City ???

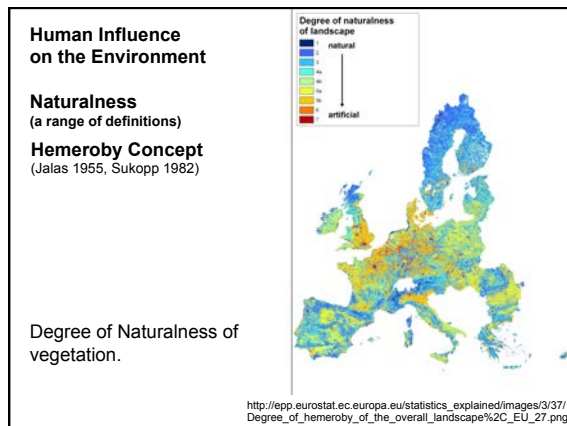
European Union/OECD, Eurostat approach:

- Density is higher than 1500 inhabitants per km² (e.g. Shanghai 3800/km²)
- Contiguous high-density cells are clustered
- Minimum population of 50000 inhabitants

Nature ???

The physical world and everything in it (such as plants, animals, mountains, oceans, stars, etc.) that is **not made by people** (Merriam-Webster.com)

The phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, **as opposed to humans or human creations** (OxfordDictionaries.com)



Human Influence on the Environment

4 Natures Concept

1st nature
Wilderness, not made by People

2nd nature
Agriculture, Production Landscapes

3rd nature
Gardens, Symbolic / Designed Nature

4th nature
- Ruderal / Disturbed Lands
- Media Representations



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"We sow corn, we plant trees,
we fertilize the soil by irrigation,
we dam the rivers and direct
them where we want. In short,
by means of our hands we try to
create as it were a **second
nature within the natural world.**"

Cicero (45 BC)
De natura deorum
(On the nature of the gods)




'Meanwhile' sites, temporary garden(ing) projects, Manchester

communityforestsnorthwest
supporting the mayor, red rose and pennine edge forests

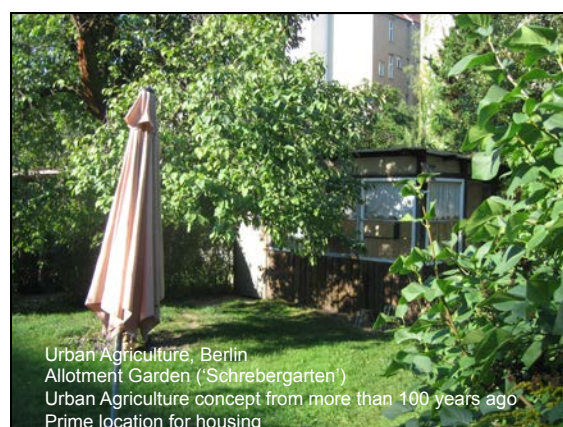
Food growing training for citizens
On temporary sites, planting beds

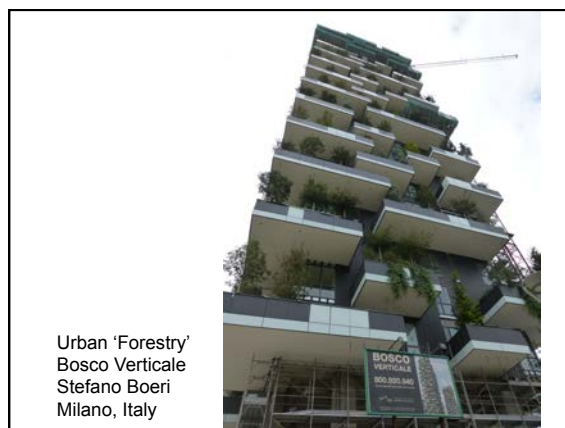
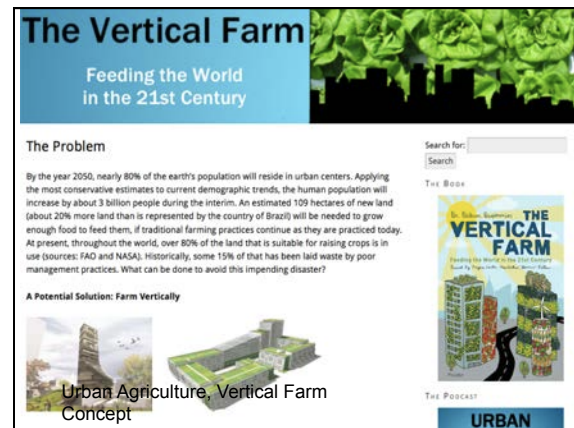
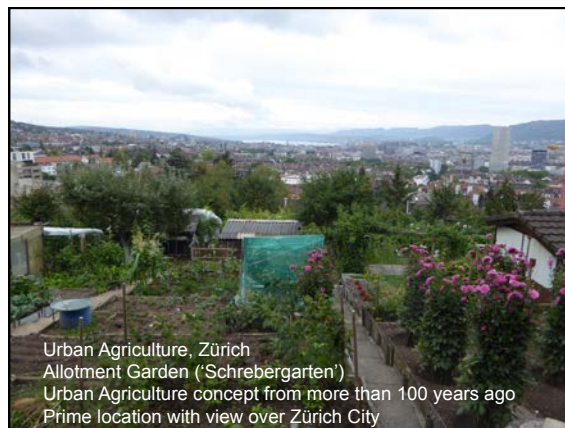


THE RED ROSE FOREST
developing well-wooded, multipurpose landscapes to improve the quality of life across the Northwest of England

redroseforest

Pennine Edge Forest
www.cfnw.org



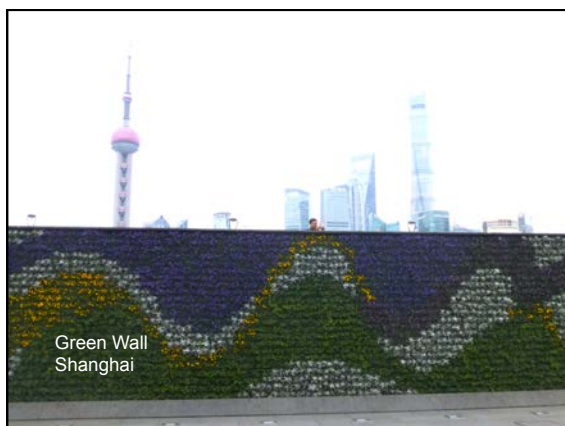
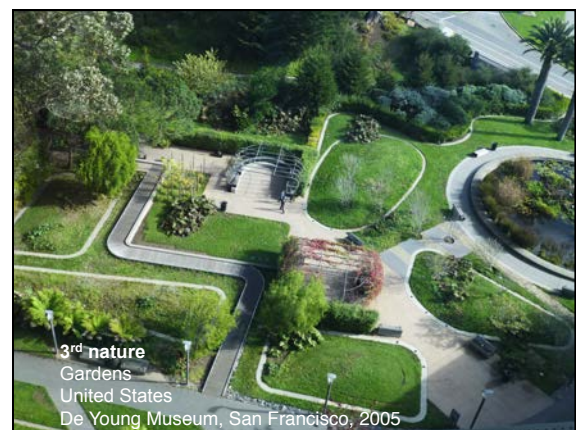
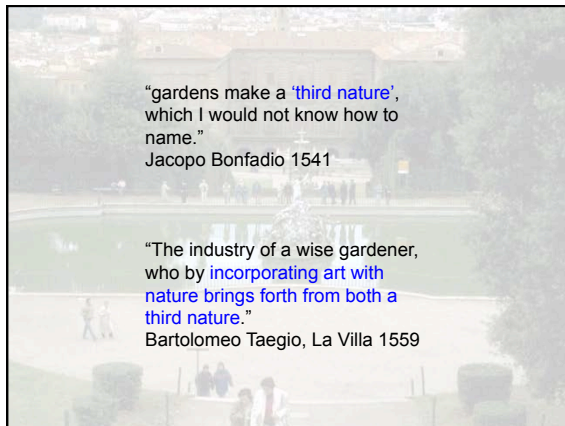


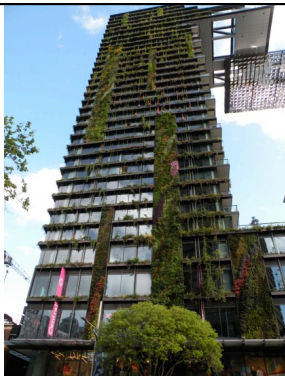
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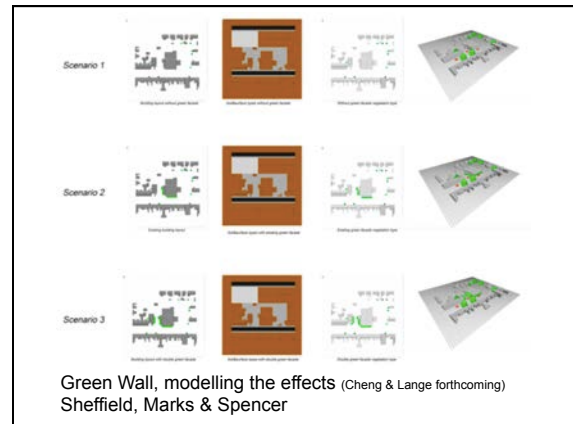
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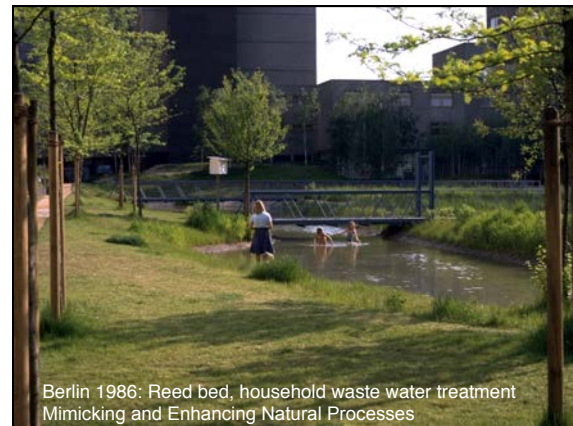




One Central Park, Sydney
(the walls are using between 50 – 80 lts of water per m2 per day!!!!!!)



Facebook, New Headquarters, Menlo Park, California
Large-Scale Accessible Roof Gardens



Berlin 1986: Reed bed, household waste water treatment
Mimicking and Enhancing Natural Processes

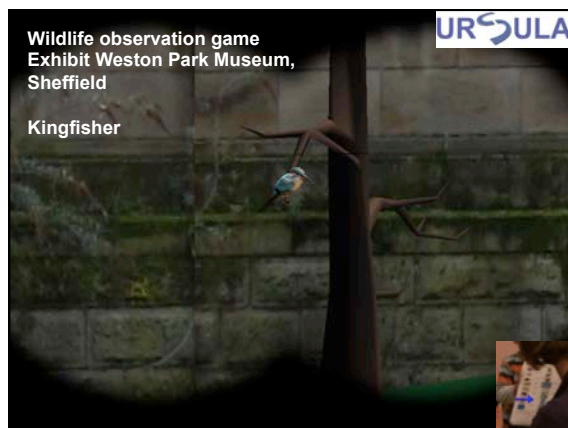
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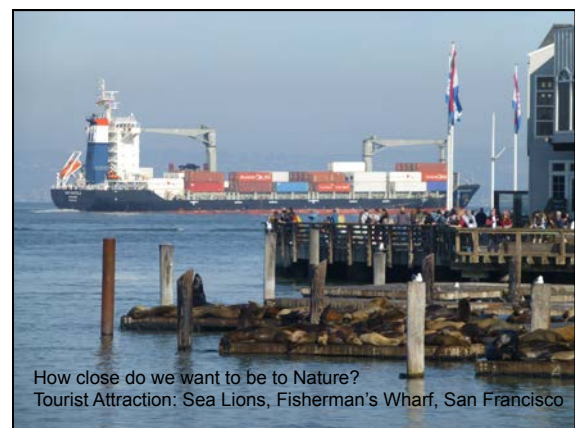
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4th nature (Kowarik 2013)
Ruderal lands, spontaneous vegetation on disturbed lands
United Kingdom
Former Croda Coke Works (contaminated site), 2011







Questions

- How much nature do we want/need in the urban area?
- Do we want the look of nature, or the 'real thing'?
- To what degree can we mimic and enhance natural processes (e.g. when dealing with water)?