Urban Challenge Studio 1

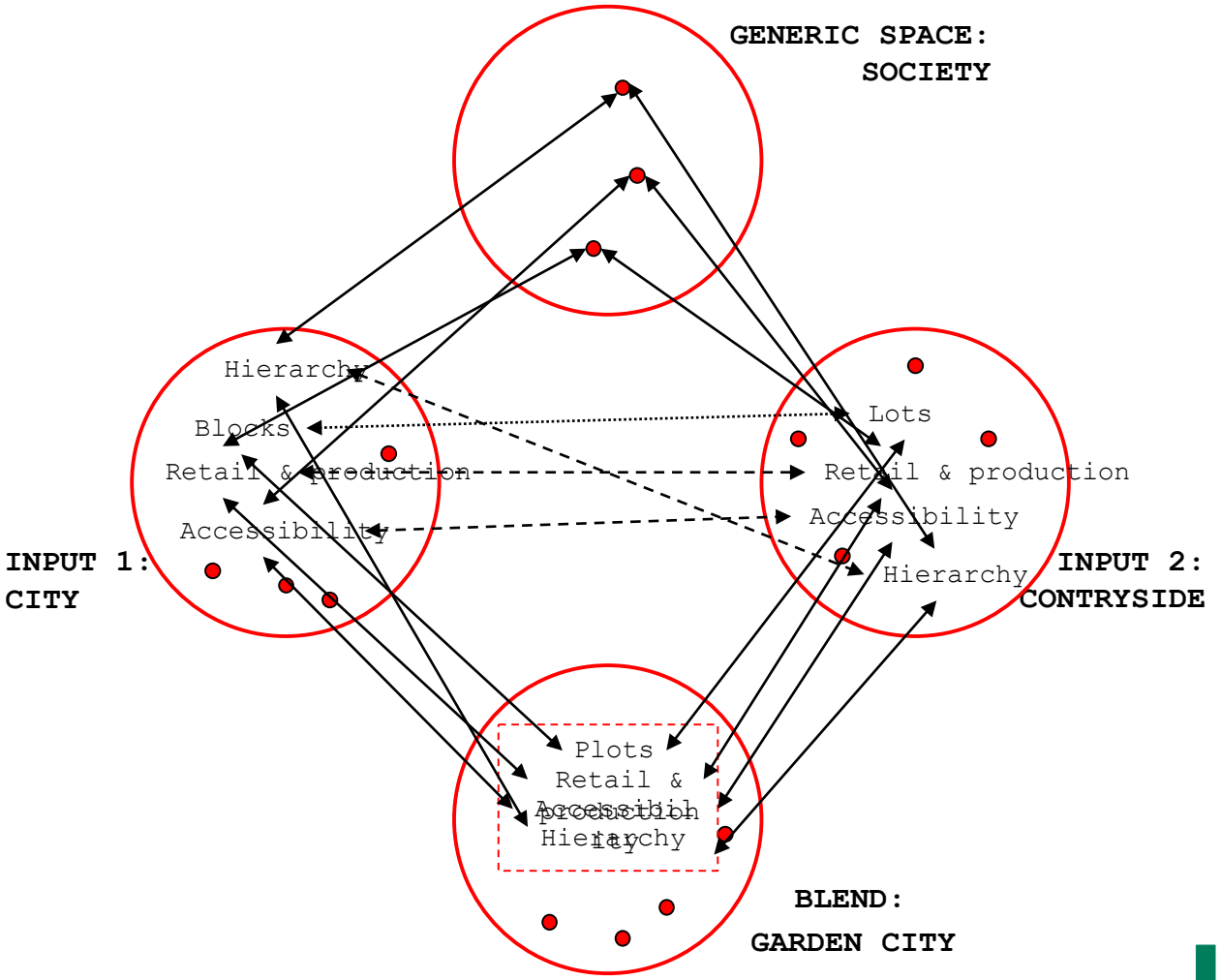
Network city - Sprawl

02.10.2020

A!

Conceptual blending

See: Fauconnier & Turner 2002

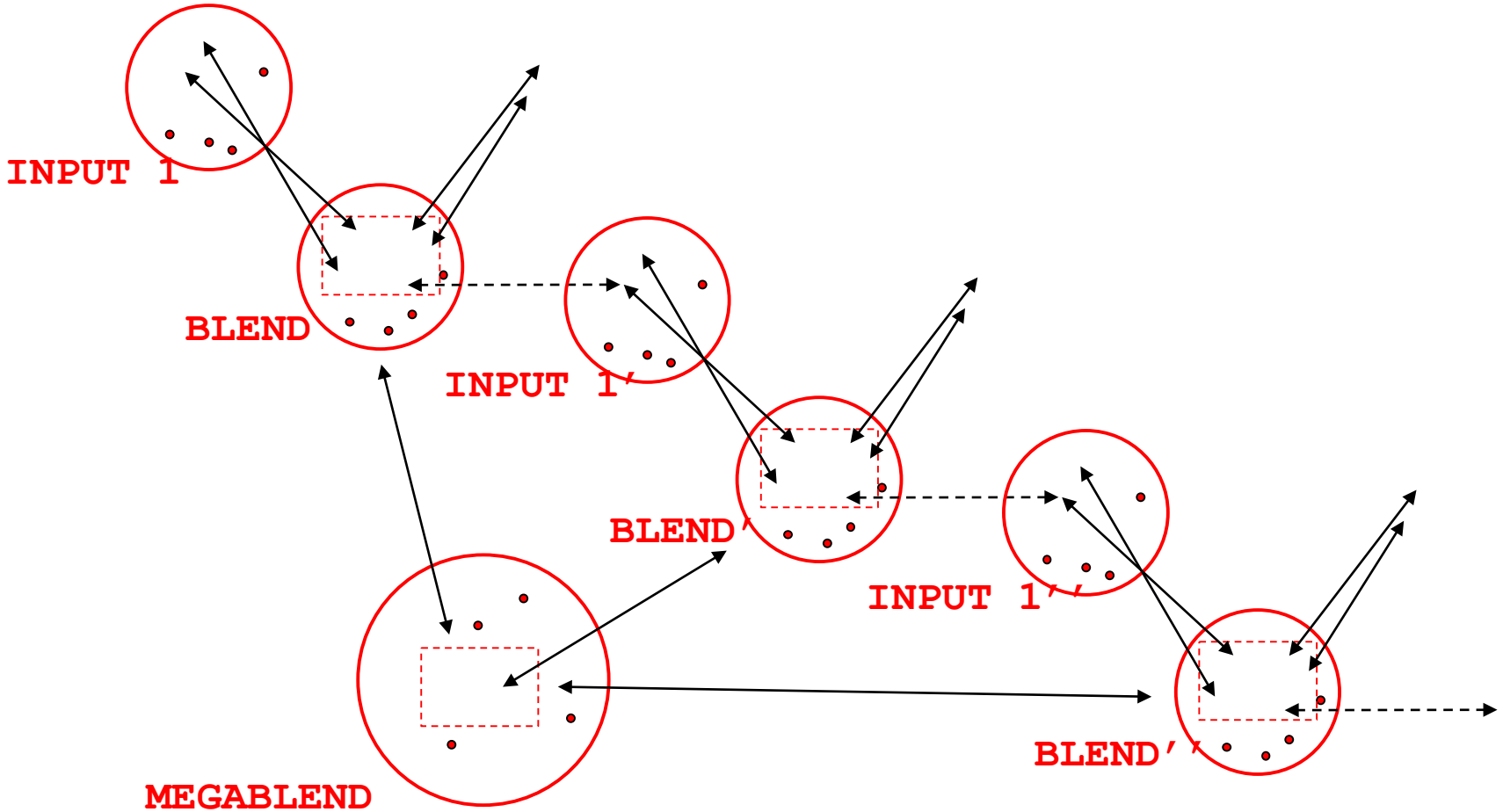


2

URBAN STUDIES & PLANNING

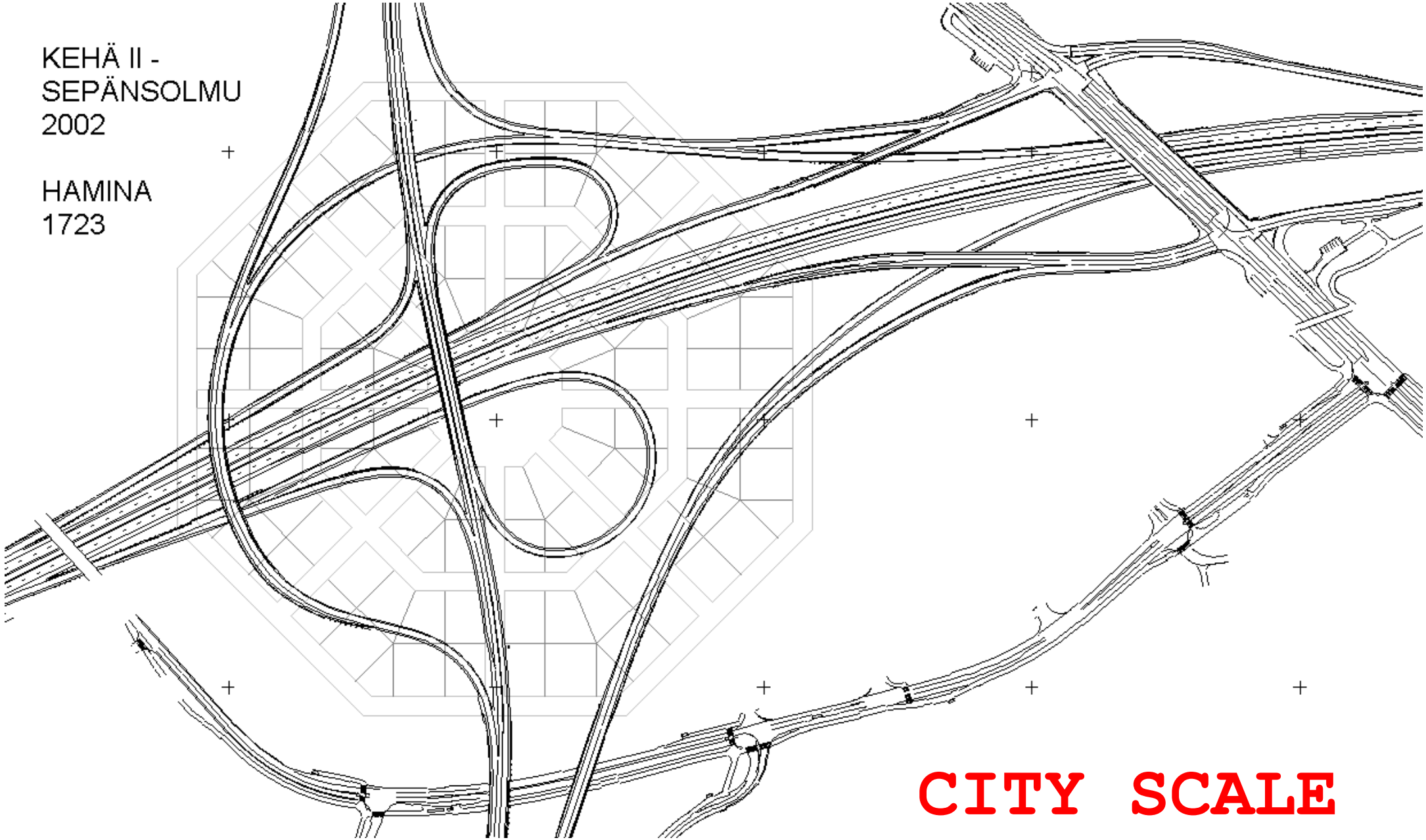
Conceptual blending

See: Fauconnier & Turner 2002



3

TRACES OF RECENT URBAN DEVELOPMENT



CITY SCALE

”PERIURBANIZATION”

Source:Caruso 2005

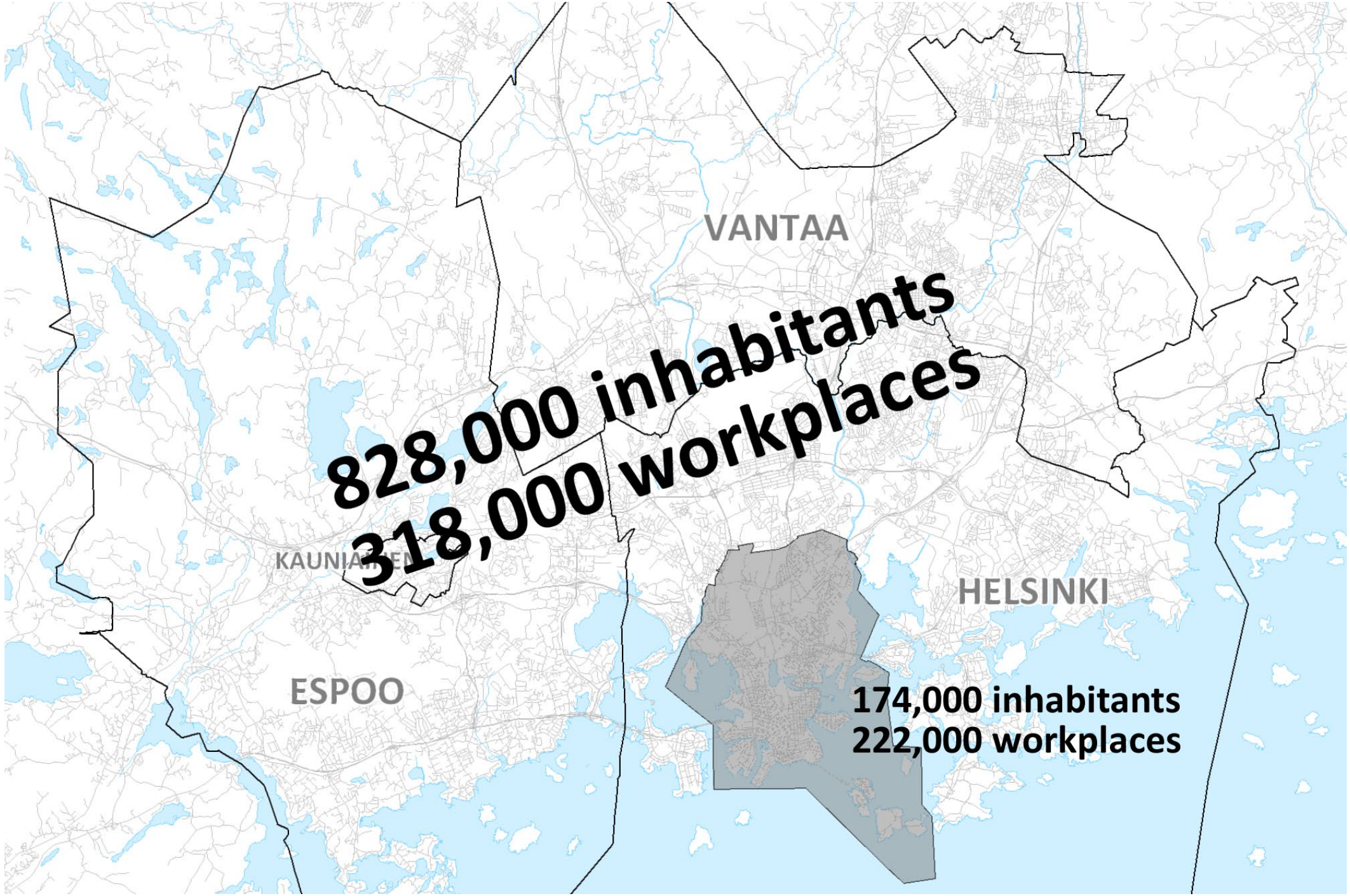
CHANGE IN CITY CONCEPT

Market
Fort

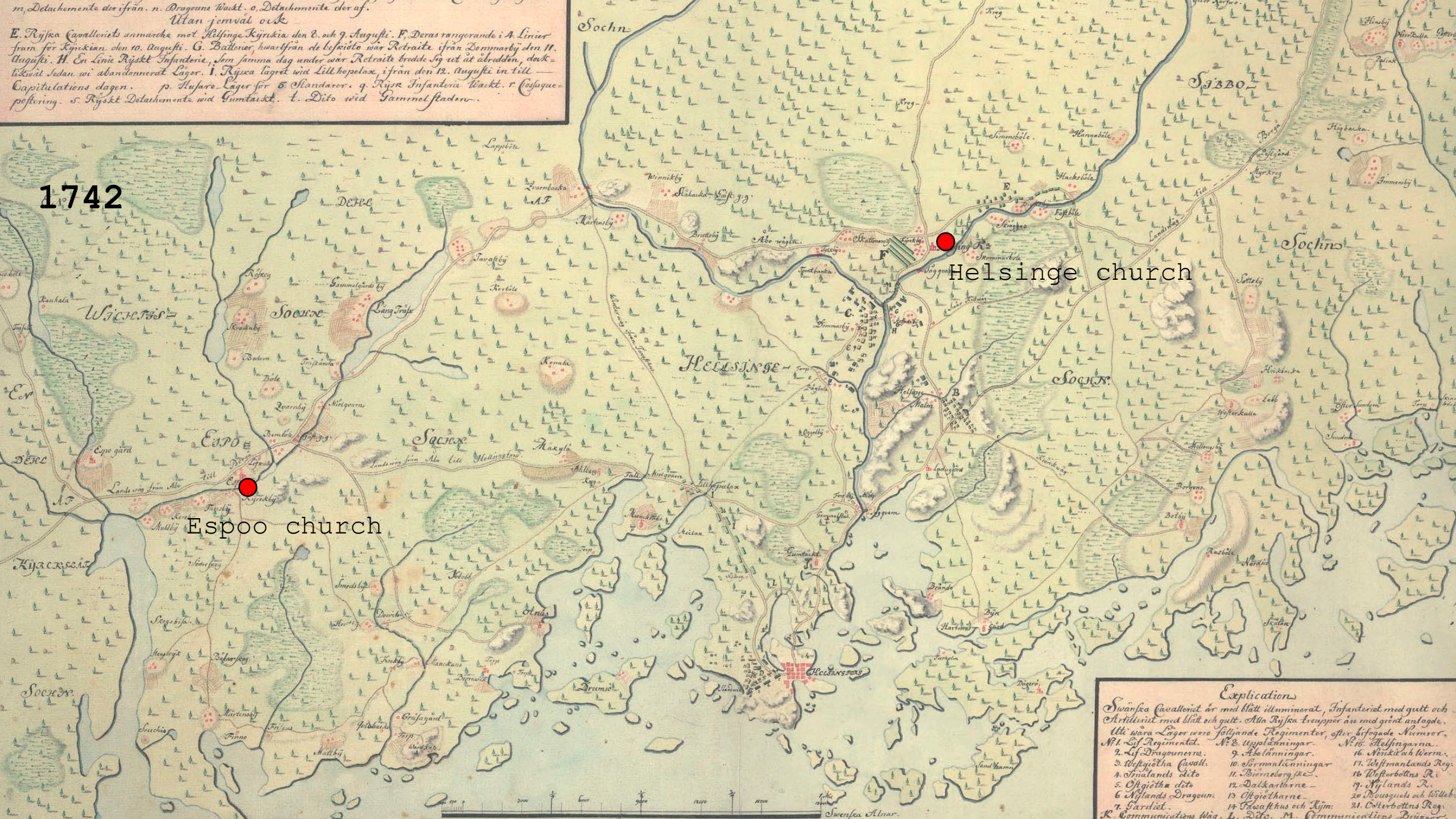
Metropolis
Garden city

Sprawl
Network city

"City" vs. Municipality



TRACES OF HELSINKI DEVELOPMENT


1742
Helsinge church
Espoo church

HELSINKI PRE-1900

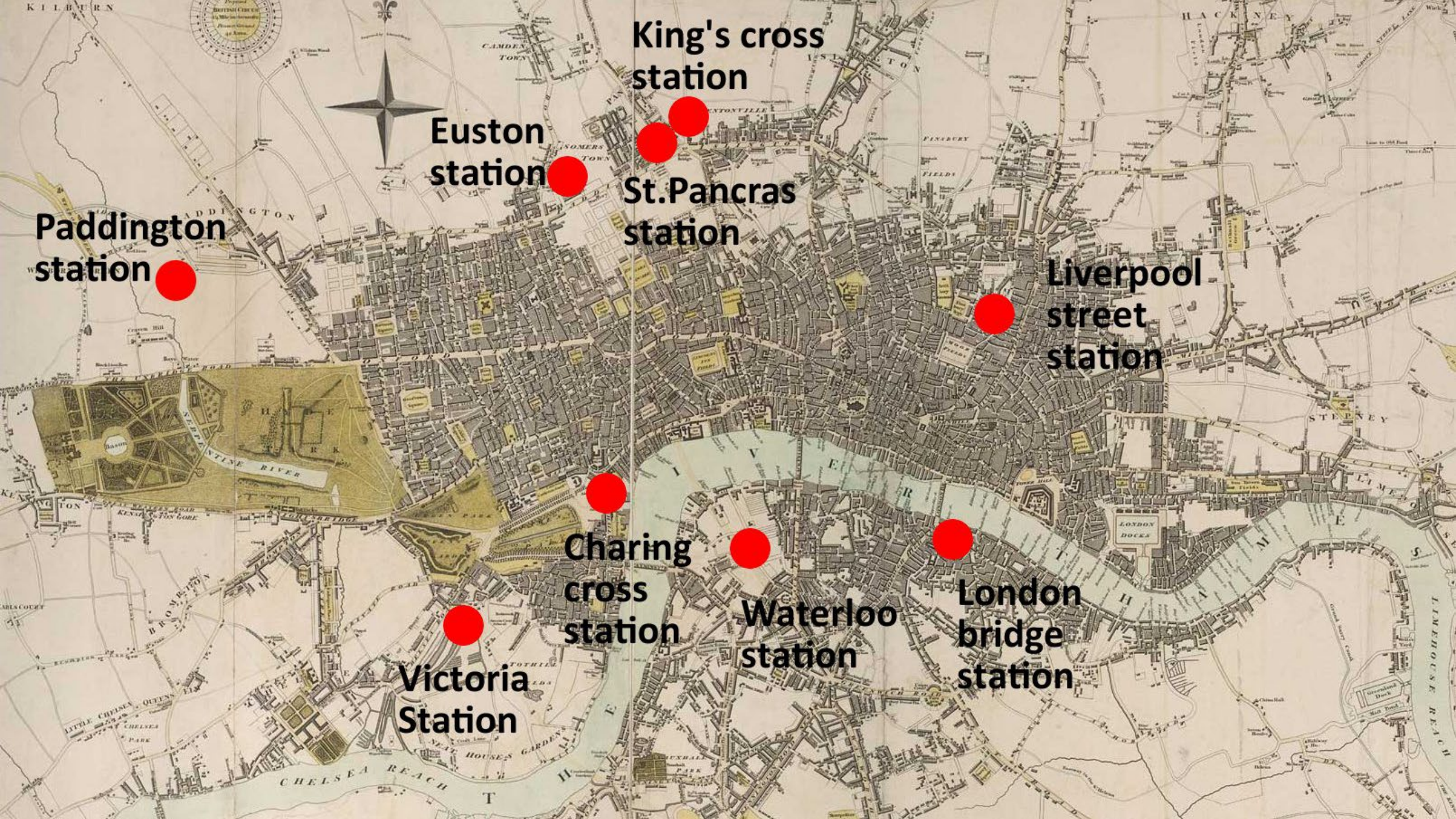
1800
4 000 inhab.

1830
8 000 inhab.

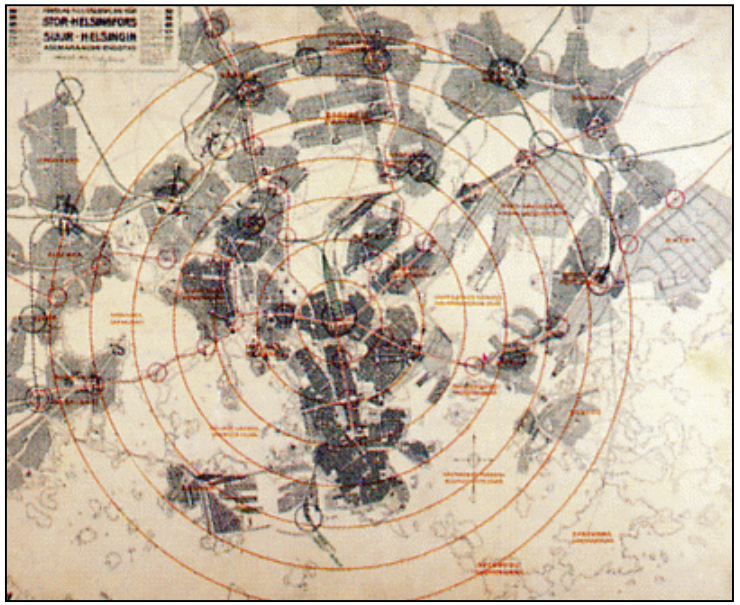
1850
21 000 inhab.

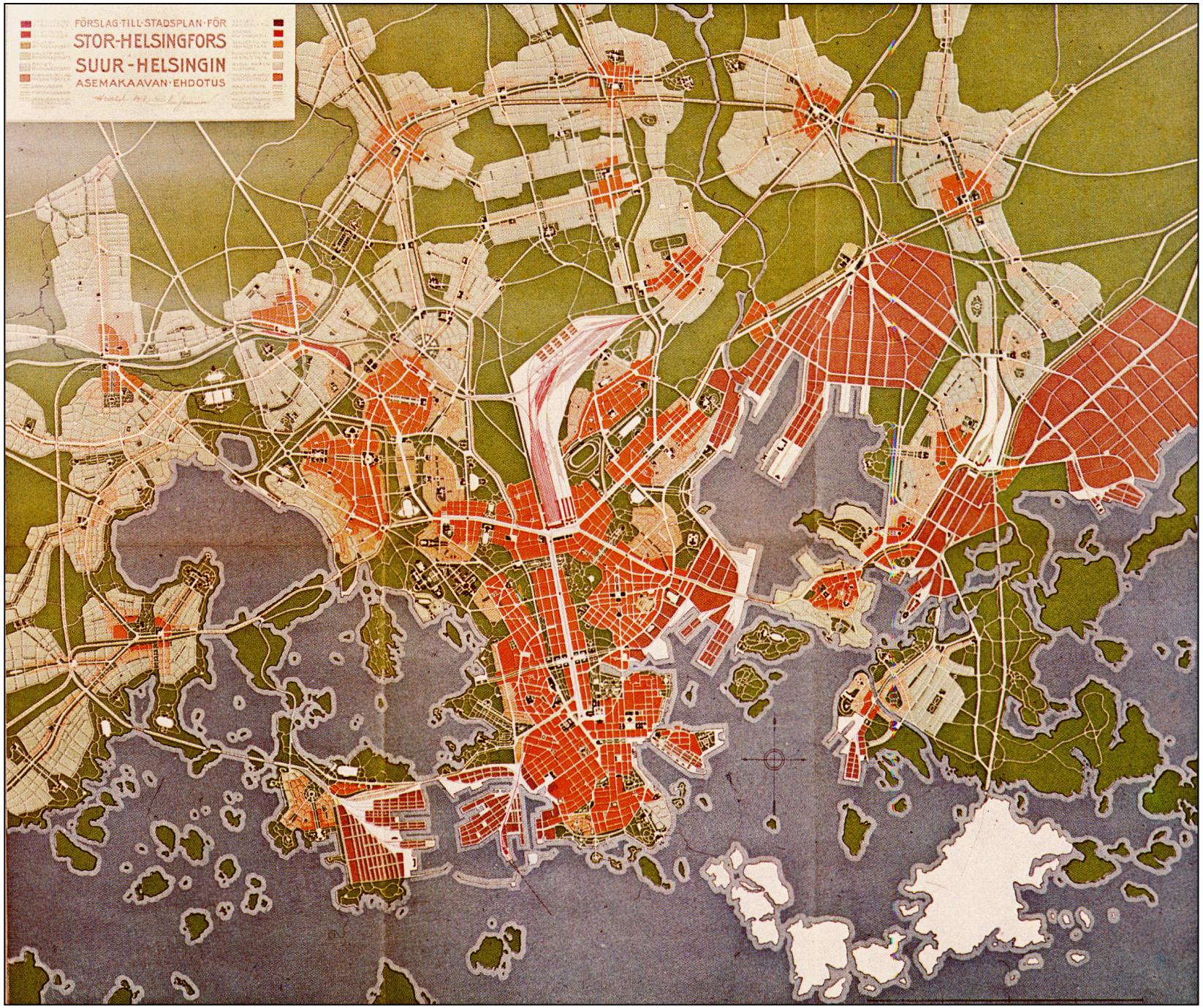
1900
80 000 inhab.

1910
120 000 inhab.
(currently 110 000 inhab.)


King's cross station
Euston station
St.Pancras station
Paddington station
Liverpool street station
Charing cross station
Waterloo station
London bridge station
Victoria Station

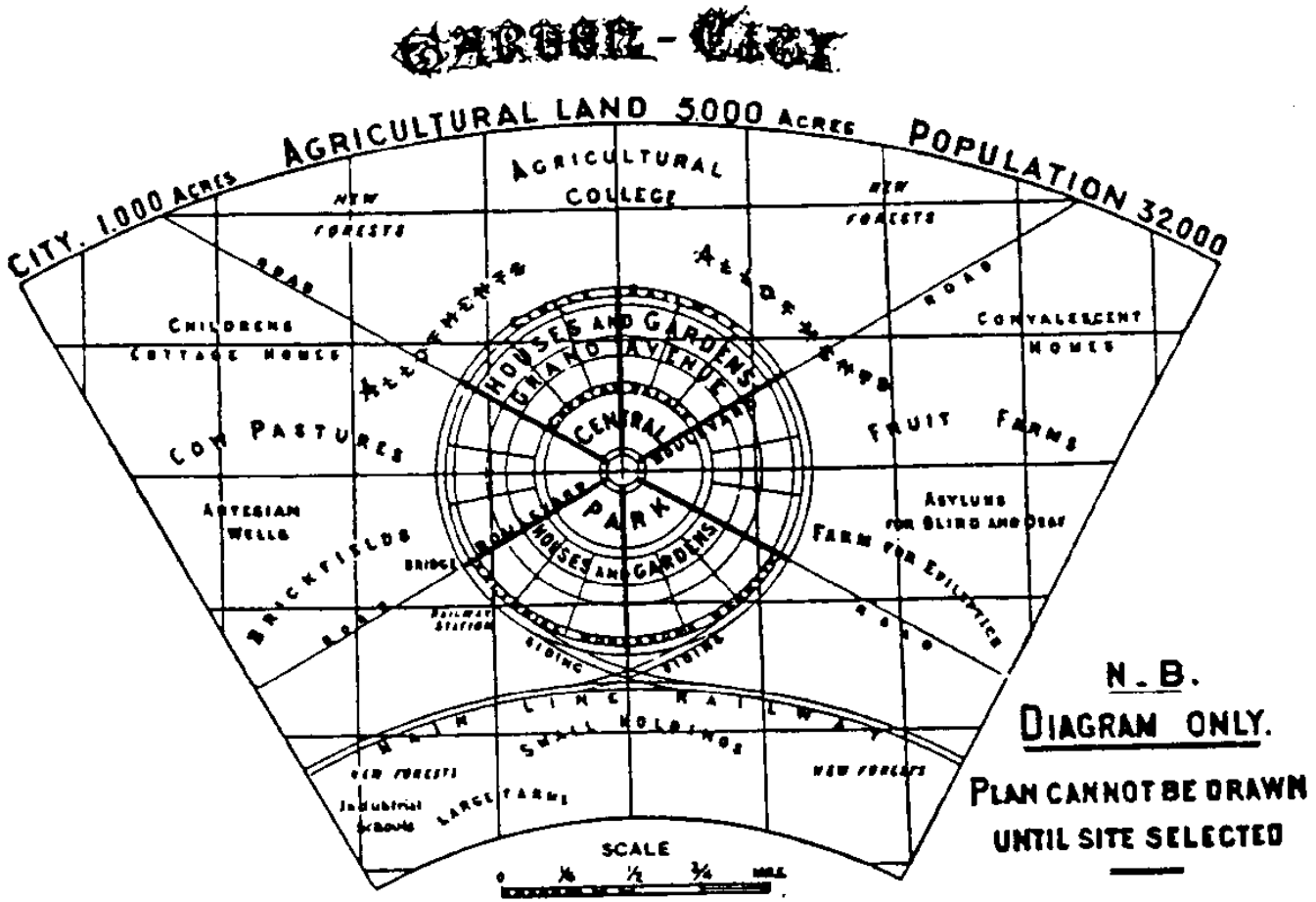
ELIEL SAARINEN 1915-1918

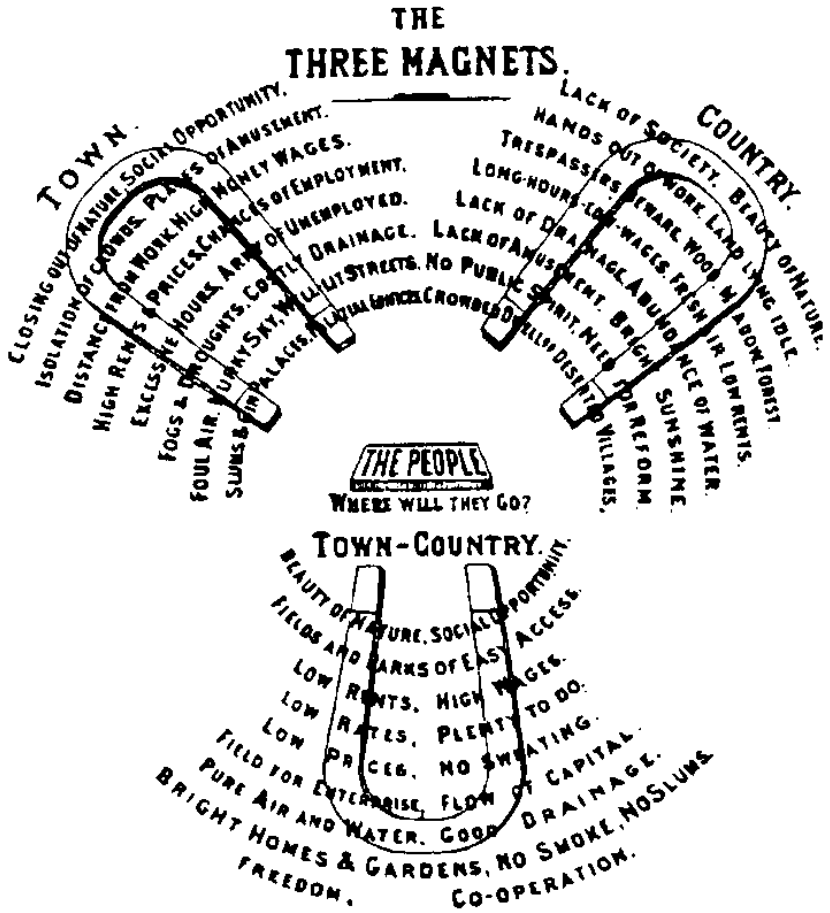




GARDEN CITY

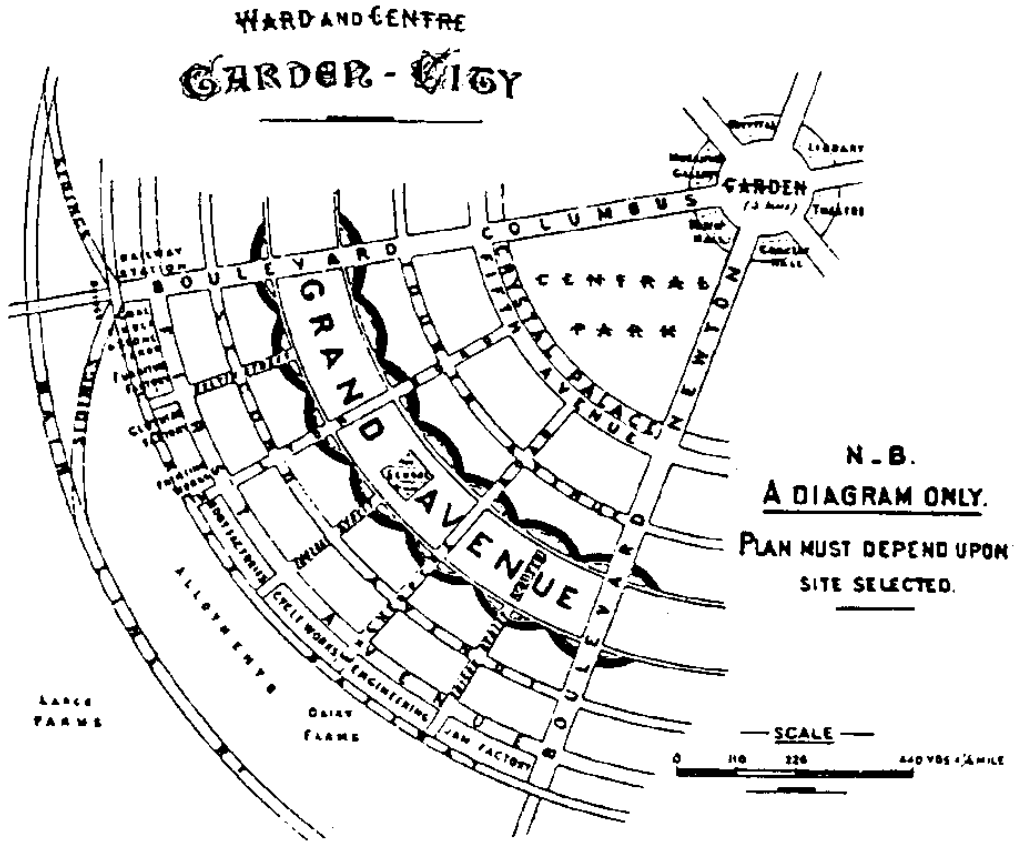
EBENEZER HOWARD
To-morrow: a Peaceful Path to Real Reform (1898)
Garden Cities of To-morrow (1902)

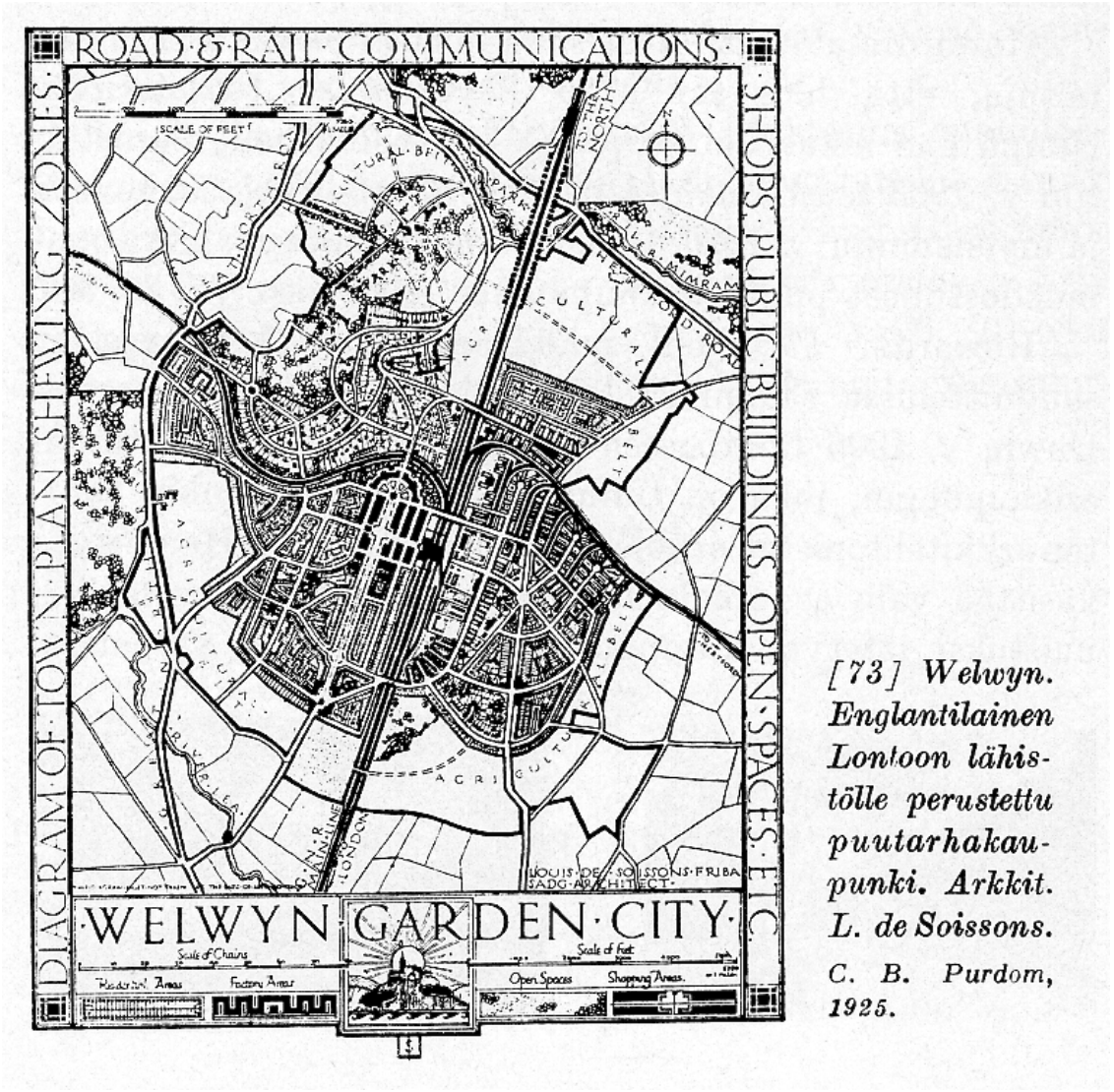




GARDEN CITY

EBENEZER HOWARD 1898/1902

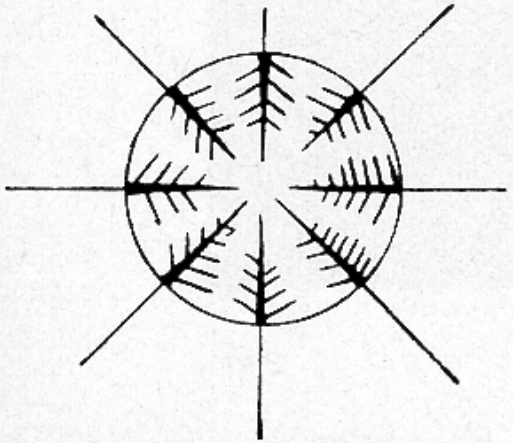




[73] Welwyn. Englantilainen Lontoon lähistölle perustettu puutarhakaupunki. Arkkit. L. de Soissons. C. B. Purdom, *1925.*

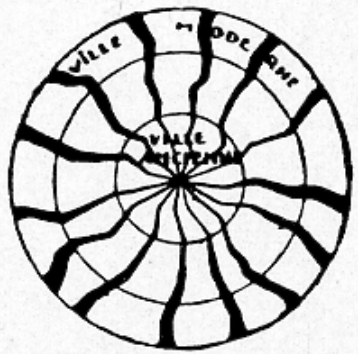
LE CORBUSIER

"Urbanisme" 1929



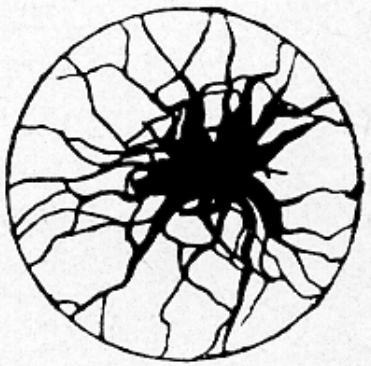
[21] Liikenne oli keskiaikaisissa kaupungeissa laidoilta keskukseen päin vähenevä.

Le Corbusier, 1929.



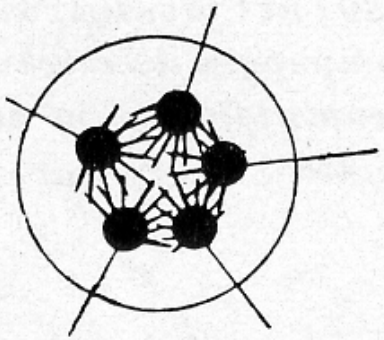
[86] Keskeltä ahdas, laidoilta tilava katuverkko, tähänastisen kehityksen tavallisin tulos.

Le Corbusier, 1929.



[87] Liikennemäärä on suurin keskikaupungilla ja edellyttäisi siellä tilavimpia katuja.

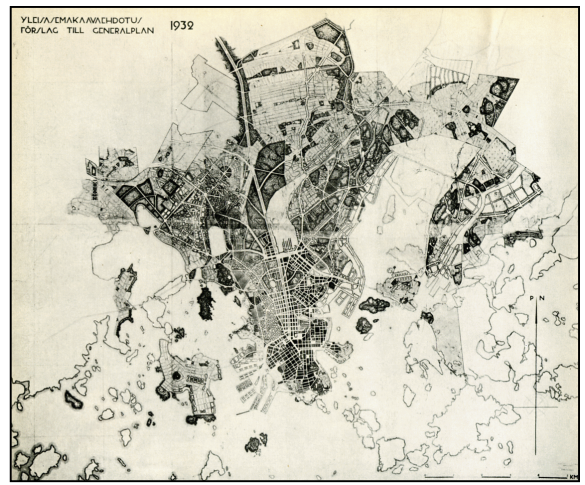
Le Corbusier, 1929.



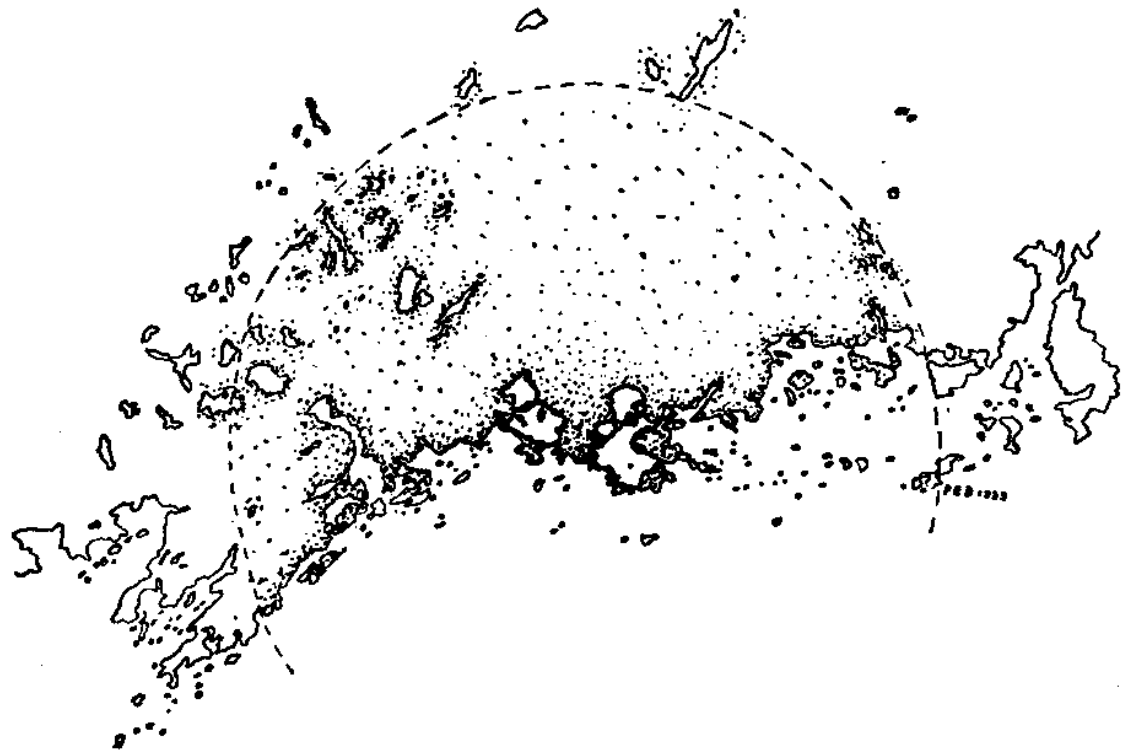
[88] Rautatieasemat syöksevät hetkittäin suuria ihmismääriä aivan kaupungin keskustaan.

Le Corbusier, 1929.

P.E. BLOMSTEDT 1932

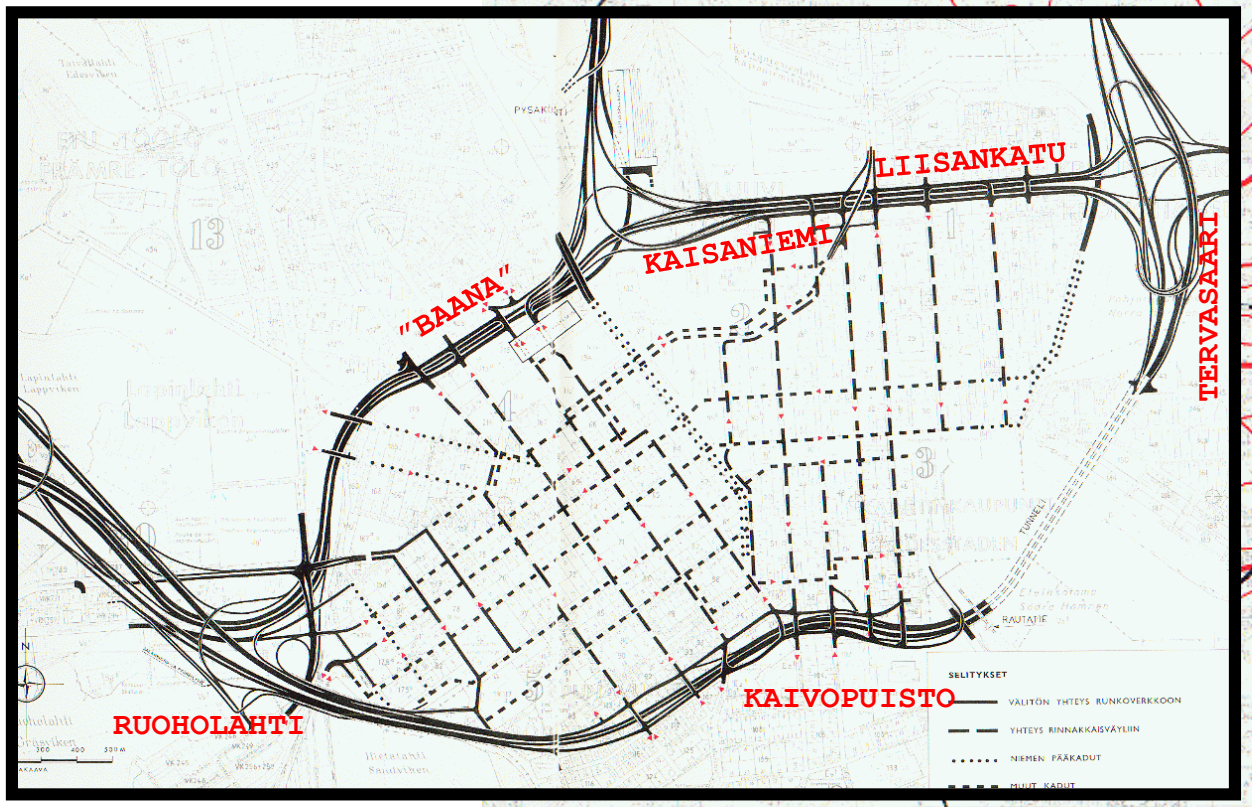


Pikku „Suur-Helsinki".
Laajennusmahdollisuudet
vuonna 1918.



Tulevaisuuden „Suur-Helsinki".
Väestön sijoittautumismahdollisuudet ovat kokonaan muttuneet, väestötiheys moninkertaisesti väljempi.

SMITH & POLVINEN
1968



SELITYKSET

MOOTTORITIE

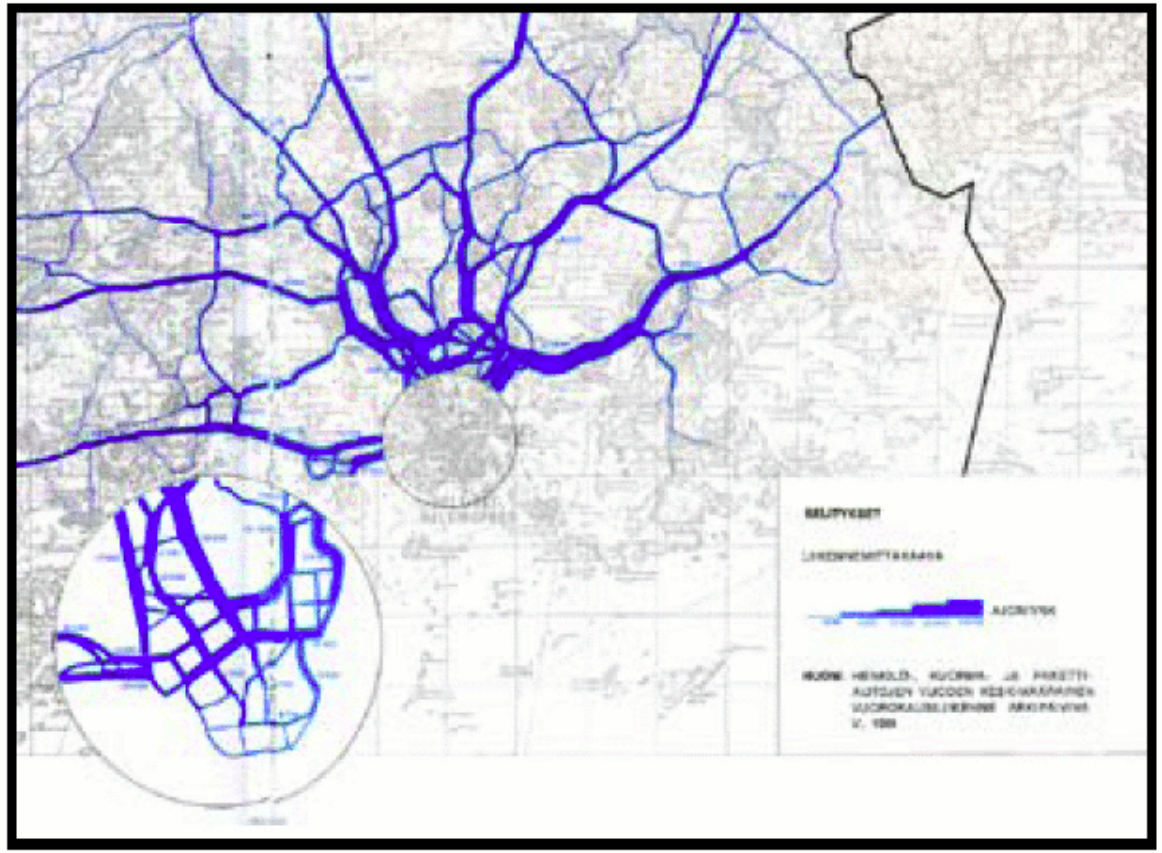
MOOTTORIKATU

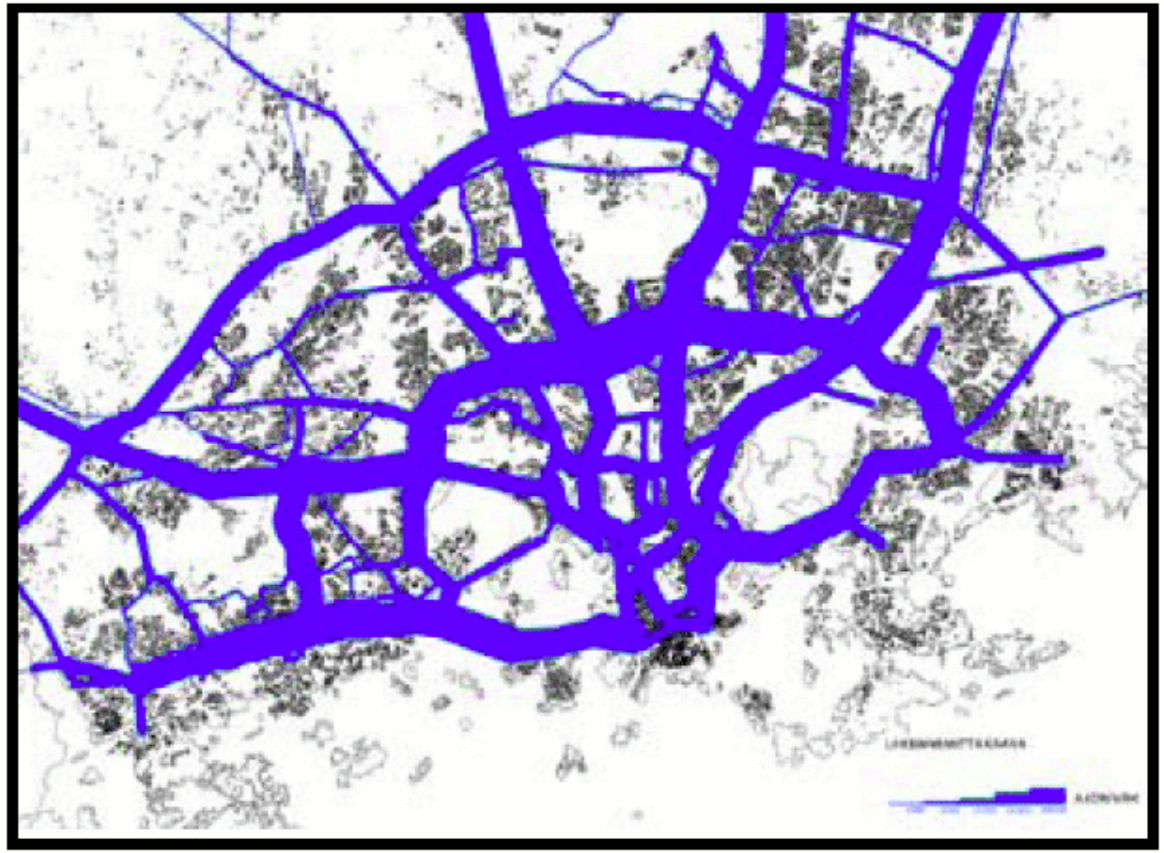
PÄÄTIE

RAUTATIE

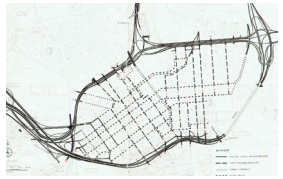
METRO

Before (1968) – After (2005)

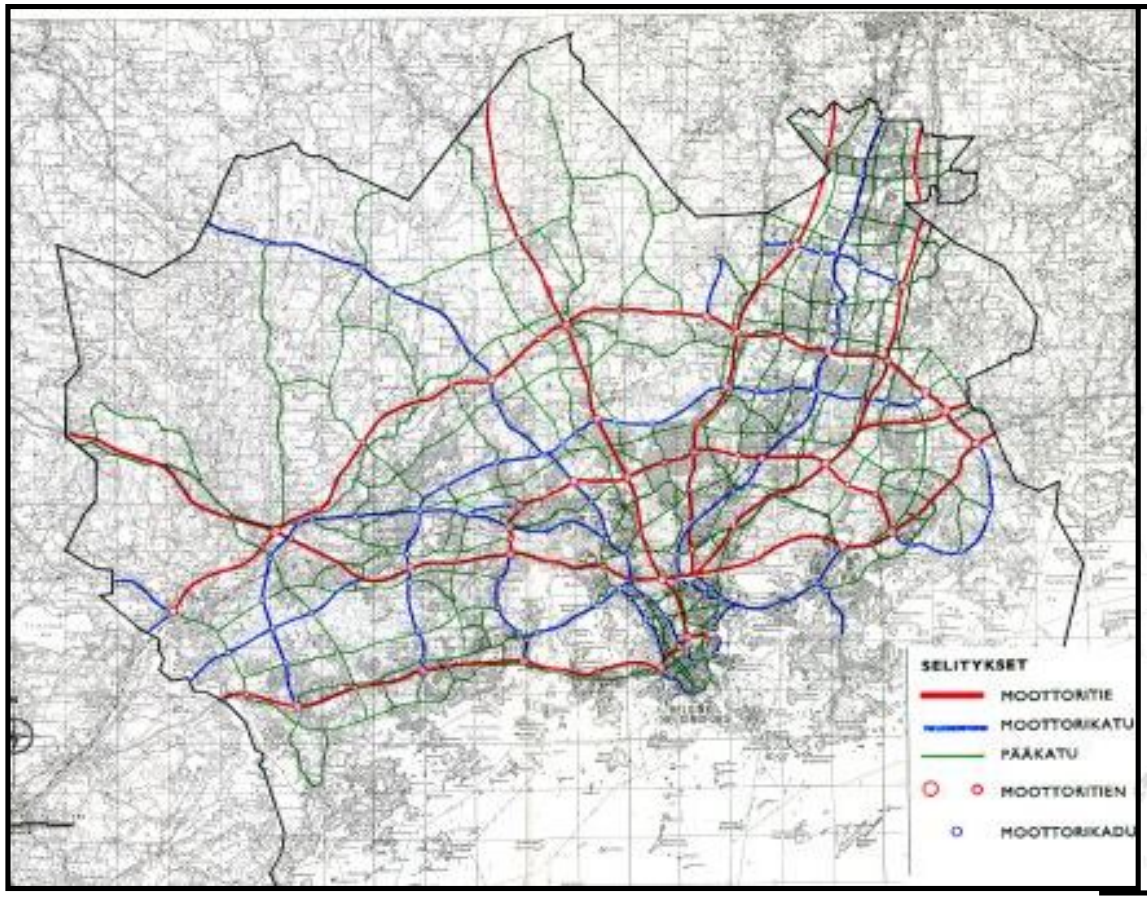


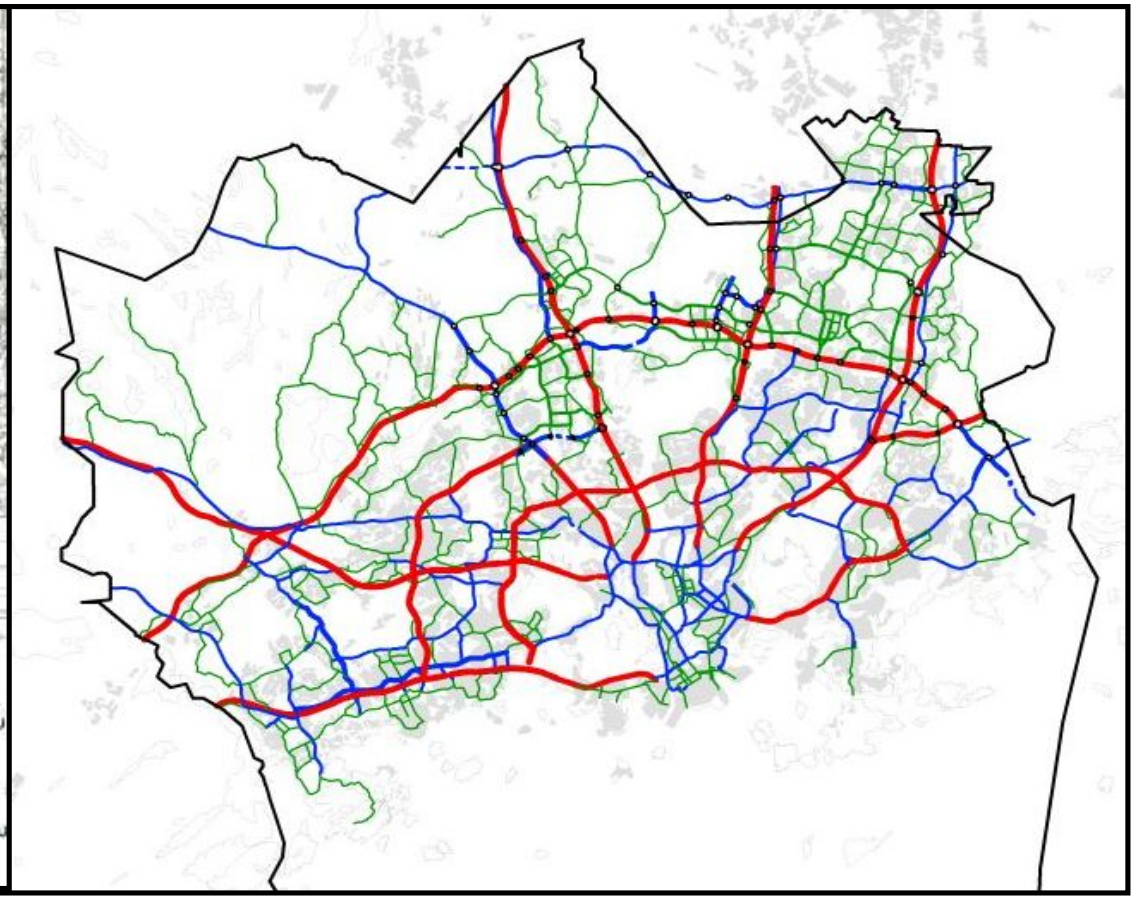


Find five differences?

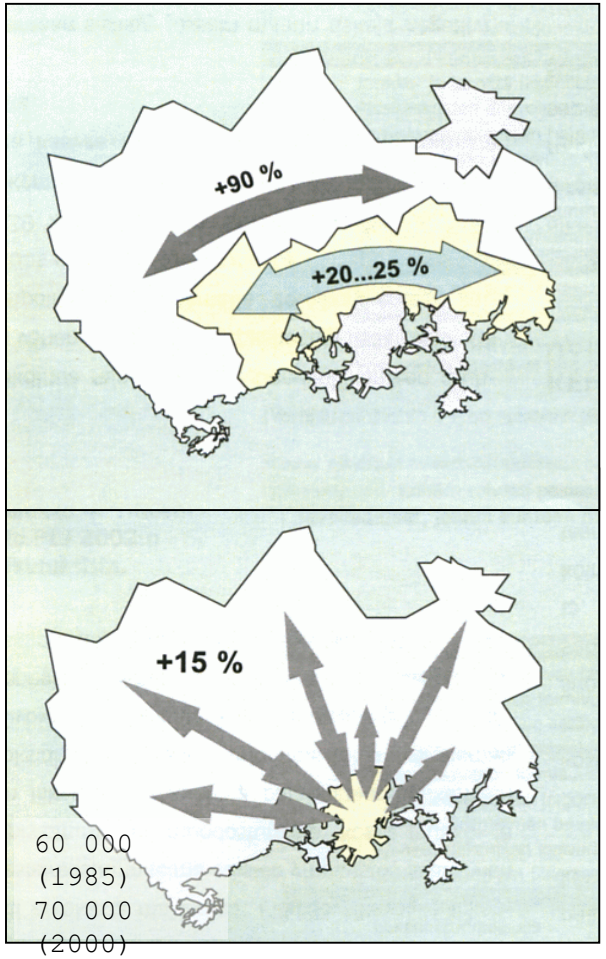


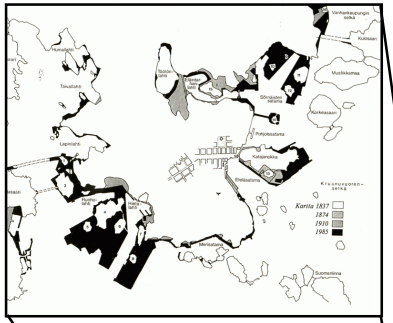
Smith&Polvinen (1968) vs. Greater Helsnki general plans (2005)

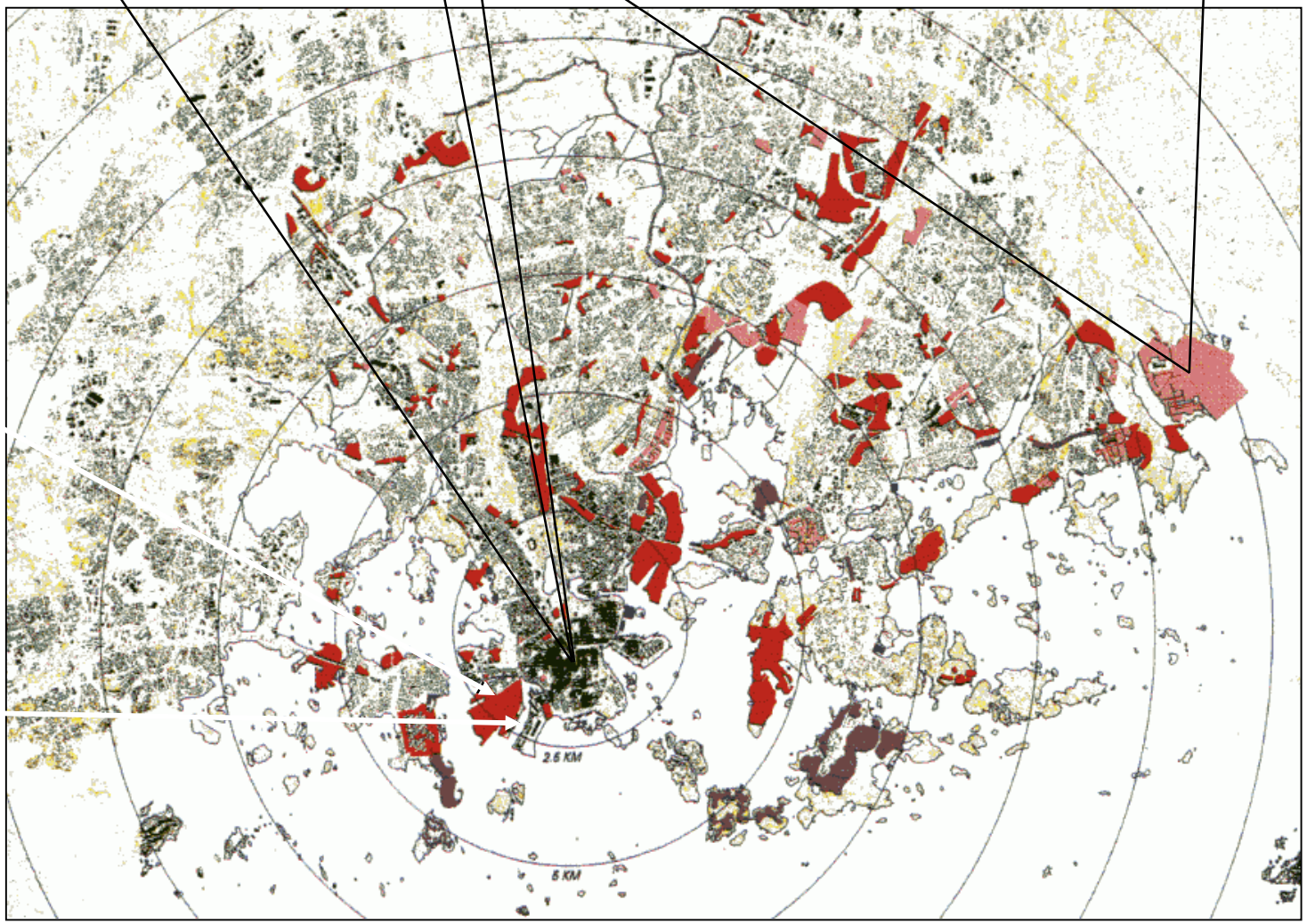




GENERAL PLANS 1992

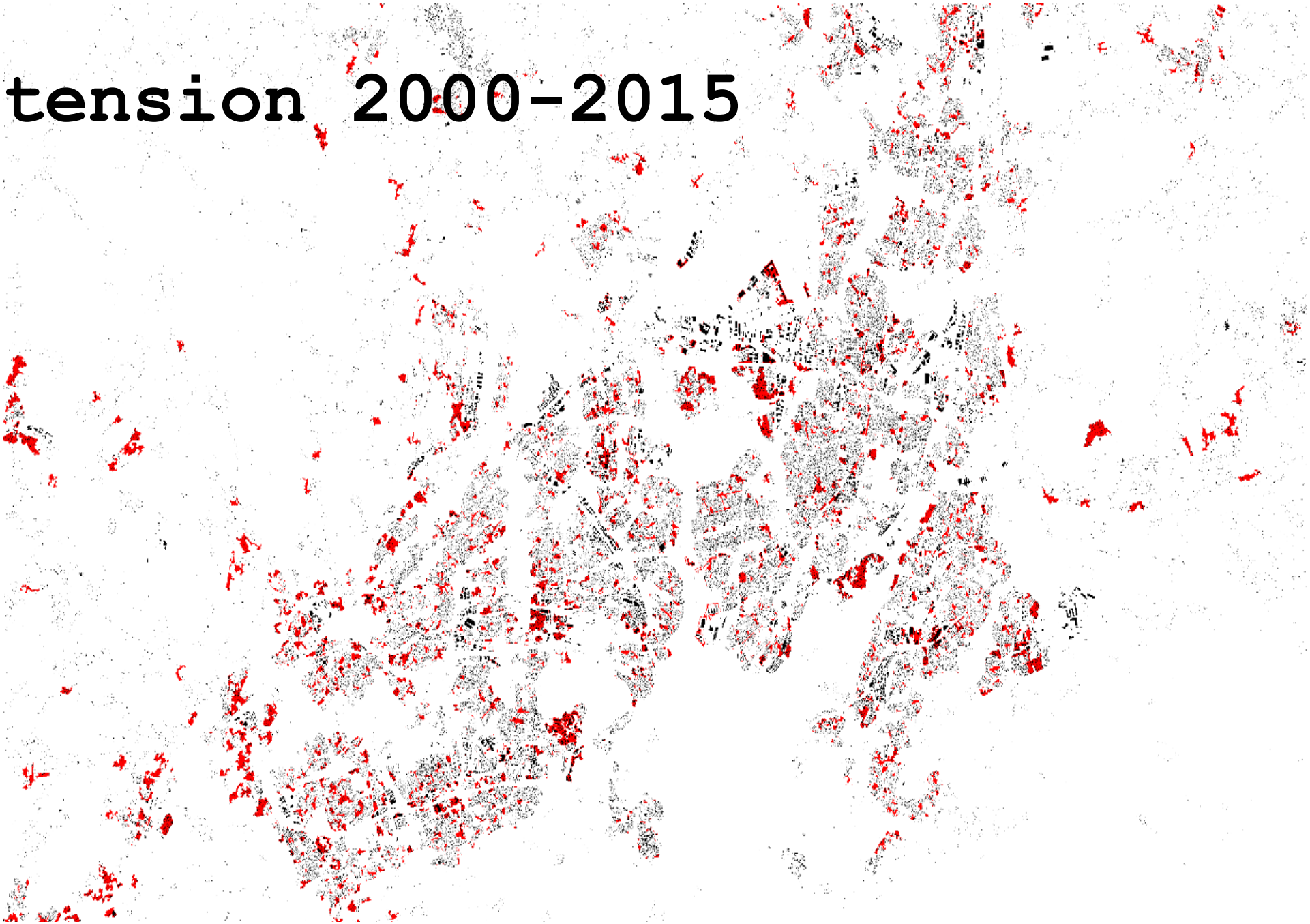




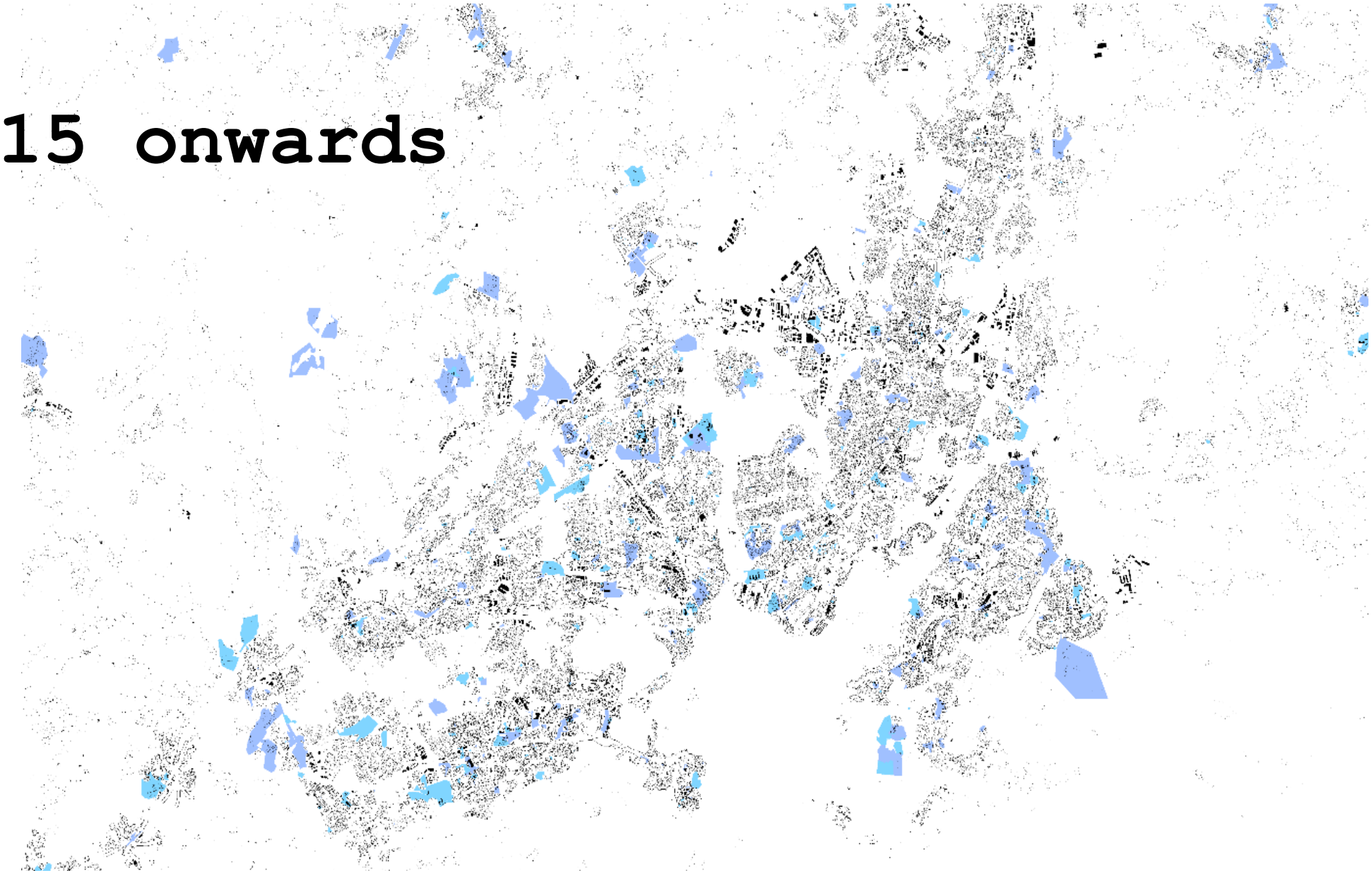


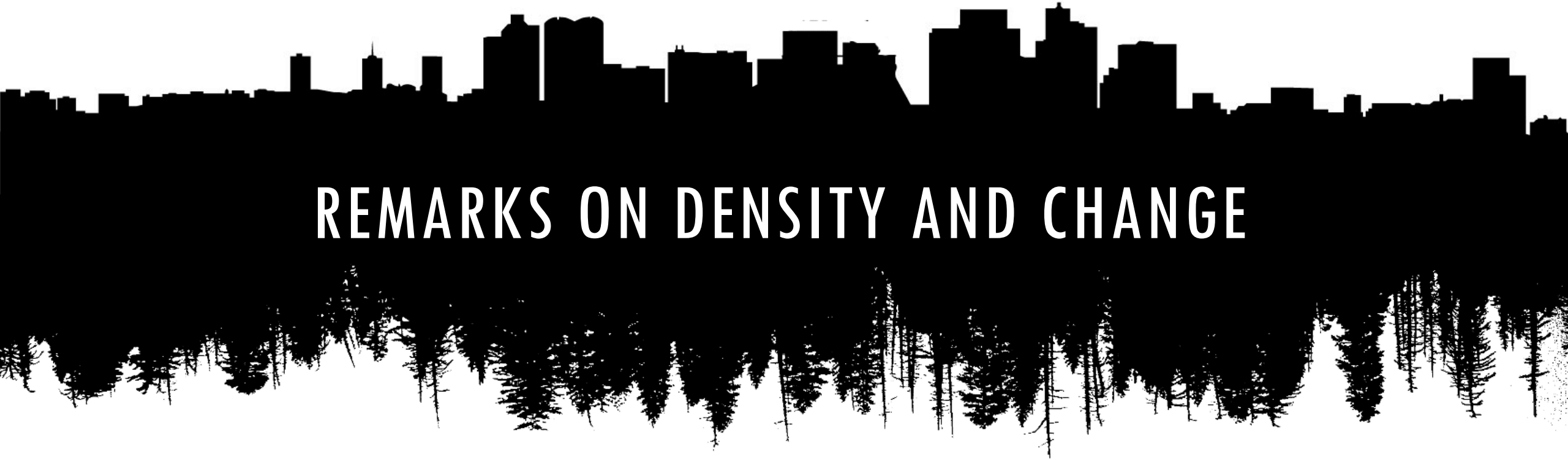
Periurbanization

Extension 2000-2015



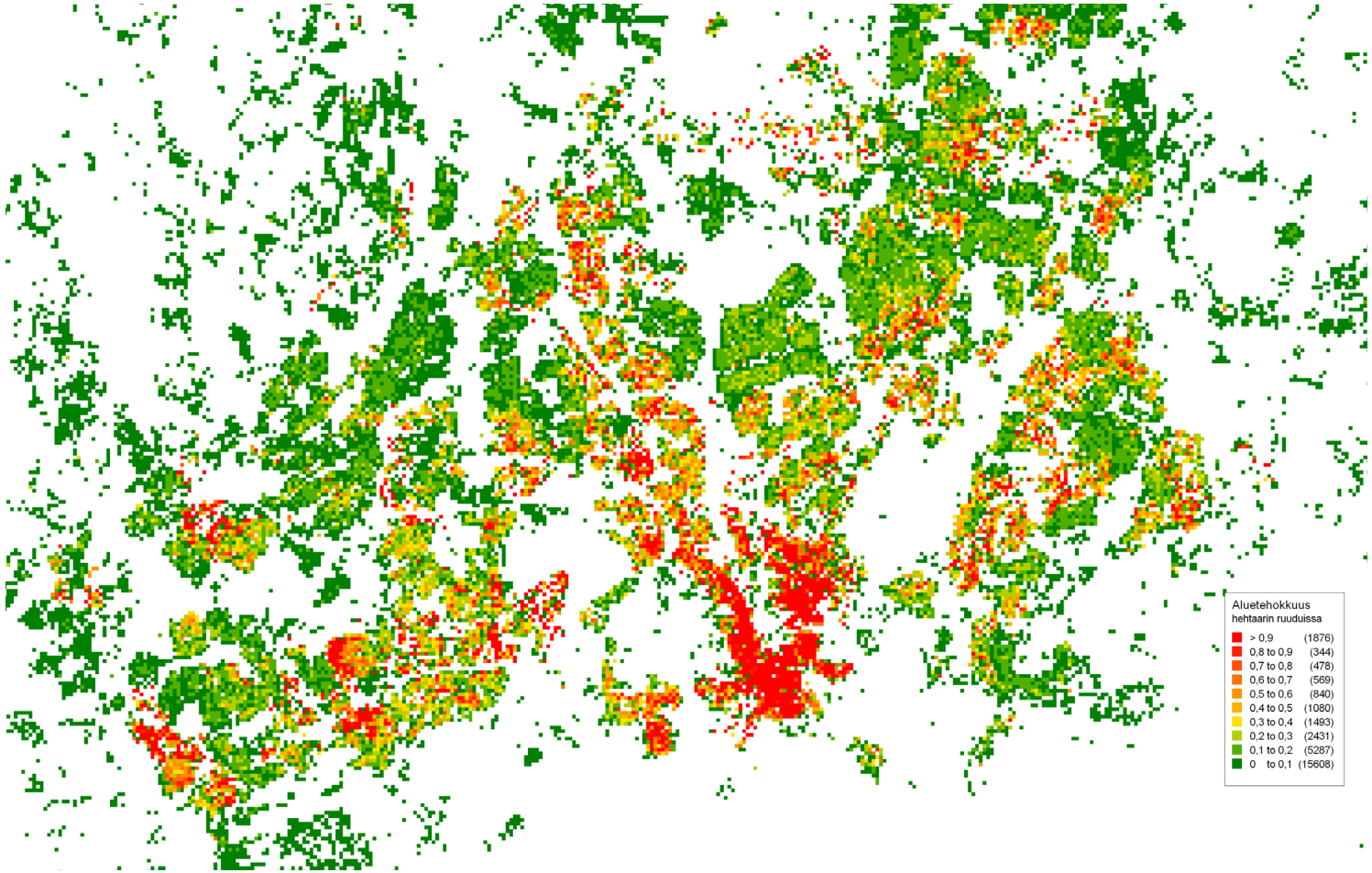
2015 onwards

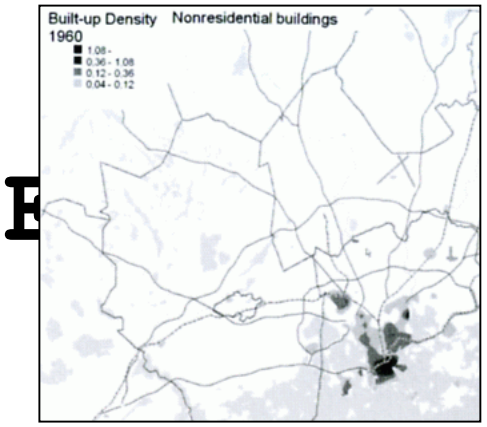


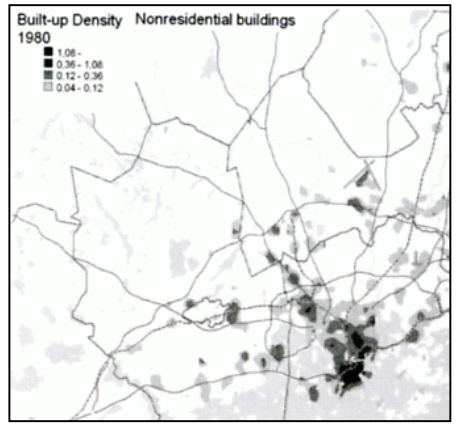


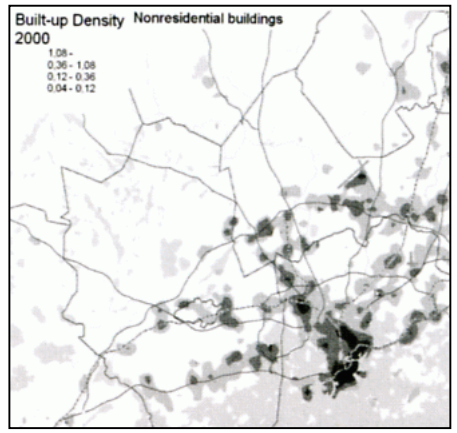
REMARKS ON DENSITY AND CHANGE

CHANGE IN NON-ReSIDENTAL USE

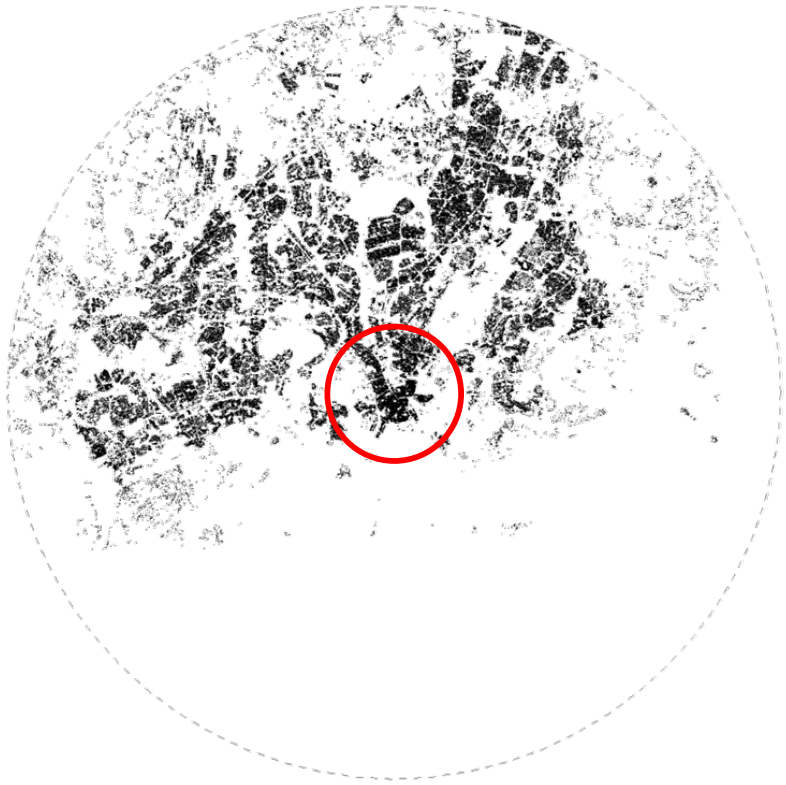








FACTS ON SIZE AND DENSITY

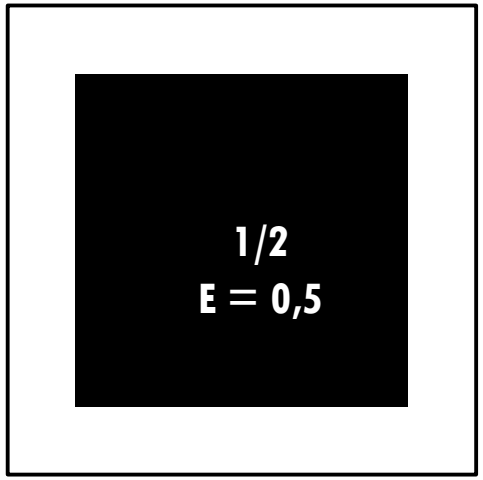


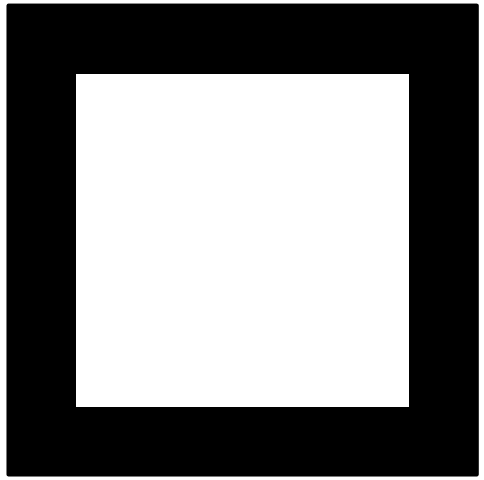
Exercise

Density explained

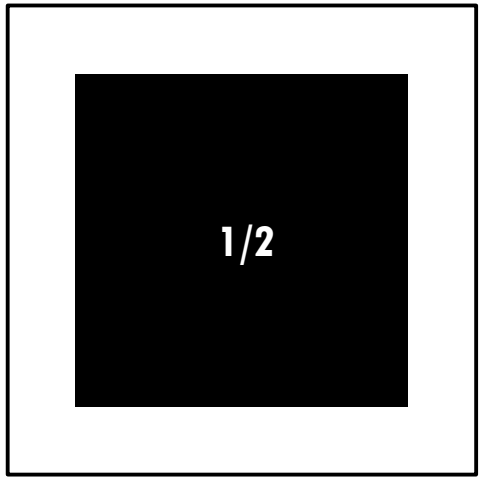
---------- density increase ---------->

- Density = items per reference container
- Density is a non-qualitative measure
- Only two sources on confusion
  - Wrong reference plane/volume
  - Wrong items to calculate
- **Density is not explaining feature, but one to be explained!**


1/2
E = 0,5



URBAN STUDIES & PLANNING



Testing reference area

1. Define density of Helsinki, Espoo, Vantaa and Kauniainen
2. Define density of Helsinki, Espoo, Vantaa and Kauniainen suburban area
3. Define density of Helsinki, Espoo, Vantaa and Kauniainen suburban area excluding nature
4. Define density of Helsinki, Espoo, Vantaa and Kauniainen suburban area excluding nature in varying subunits

URBAN STUDIES & PLANNING

Testing density items

1. Define suburban building density
2. Define suburban population density
3. Define suburban workplace density
4. Define suburban population density in age groups
5. Define density of something else that you find interesting

URBAN STUDIES & PLANNING

Ex.4 Density

In principle, density is a trivial concept with two unknown variables – it quantifies entities per reference area. Therefore it is difficult to use as a static local measure to describe the ever enlarging opportunities people have to interact with their surroundings. Despite this (not-so-minor) assumption that all density analyses contain, they stil remain part of the basic tool kit of urban analysis.

Density analysis is not a single measurement, but rather a family of measurements that quantify important features in a relevant spatial container.

This said, this week's task is threefold:

1) Which feature of density, considering your own interest or disciplinary perspective, could be most relevant to good/bad urban environment?

2) How can it be measured?

<IF NO ANSWER, GO BACK TO QUESTION 1.>

3) Perform analyses and post it to the up.aalto.fi/ by Friday morning.

URBAN STUDIES & PLANNING