



KAUPUNKI
AKADEMIA

URBAN STUDIES & PLANNING

WSP

Urban Challenge Studio 1

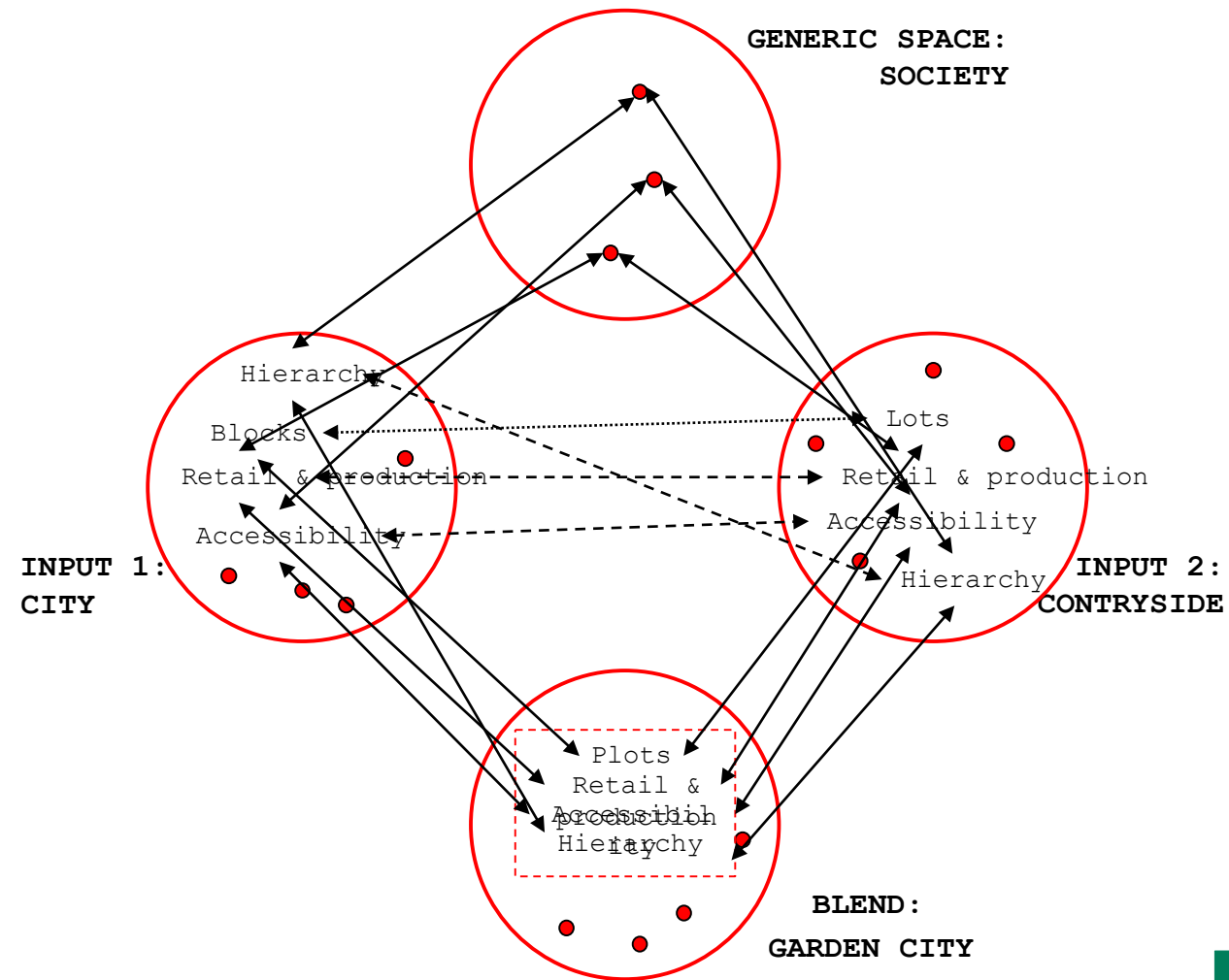
Network city - Sprawl

02.10.2020



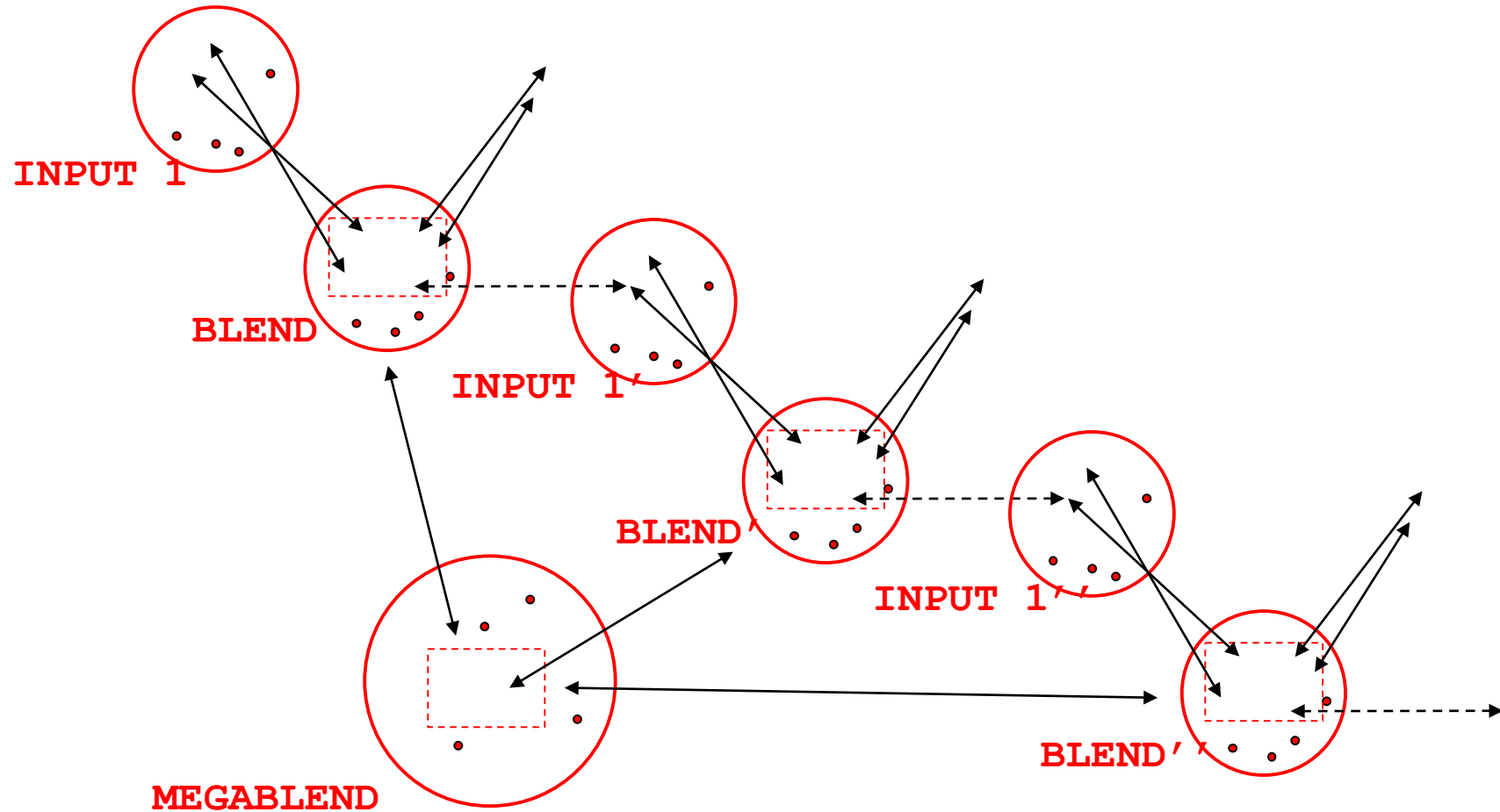
Conceptual blending

See: Fauconnier & Turner 2002



Conceptual blending

See: Fauconnier & Turner 2002

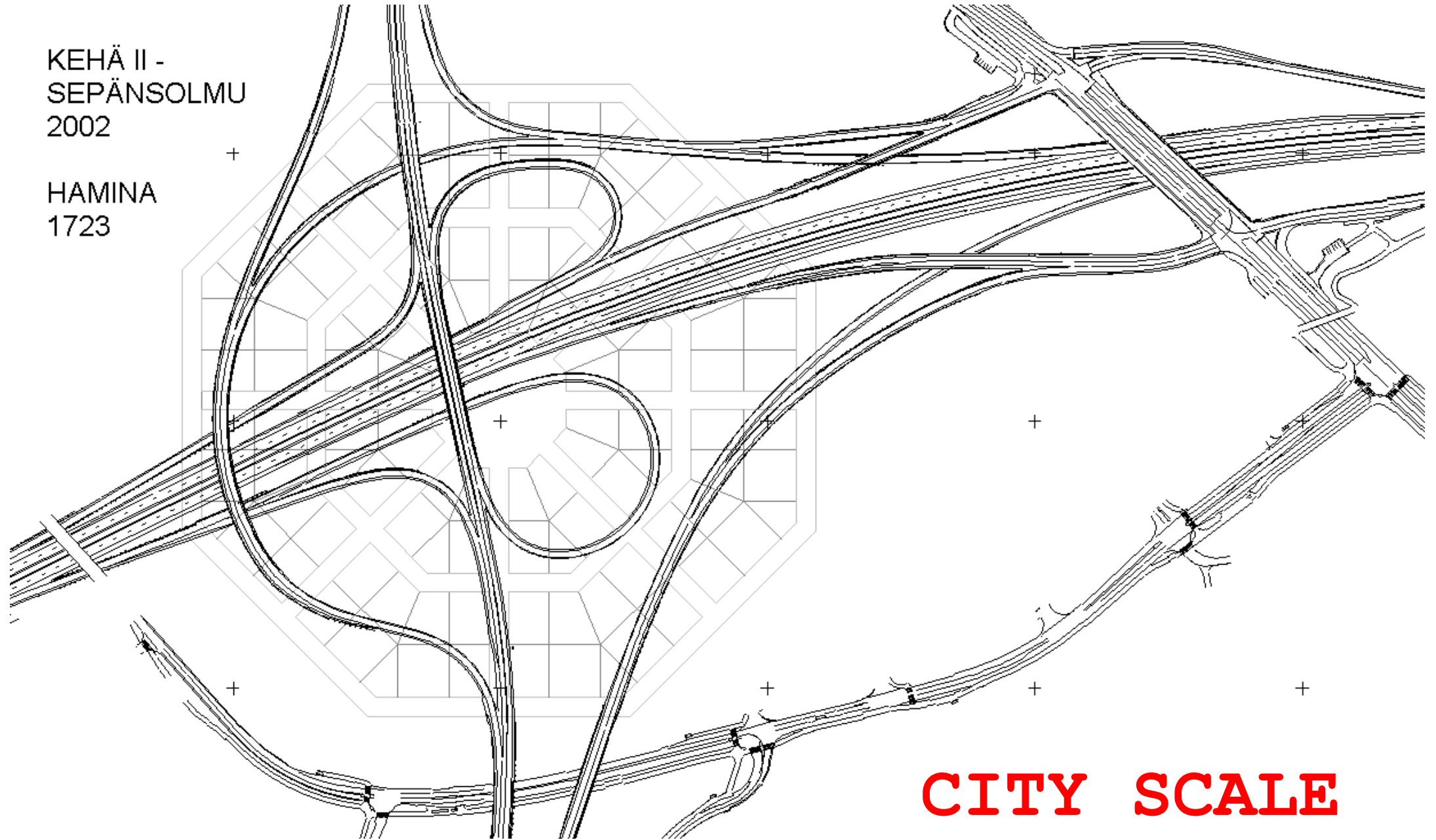


The image features a black silhouette of a city skyline at the top, with various building shapes of different heights. Below the skyline is a dense forest of evergreen trees, also in silhouette. The background is white. The text 'TRACES OF RECENT URBAN DEVELOPMENT' is centered horizontally across the middle of the image, overlaid on the dark background.

TRACES OF RECENT URBAN DEVELOPMENT

KEHÄ II -
SEPÄNSOLMU
2002

HAMINA
1723



CITY SCALE

"PERIURBANIZATION"



CHANGE IN CITY CONCEPT

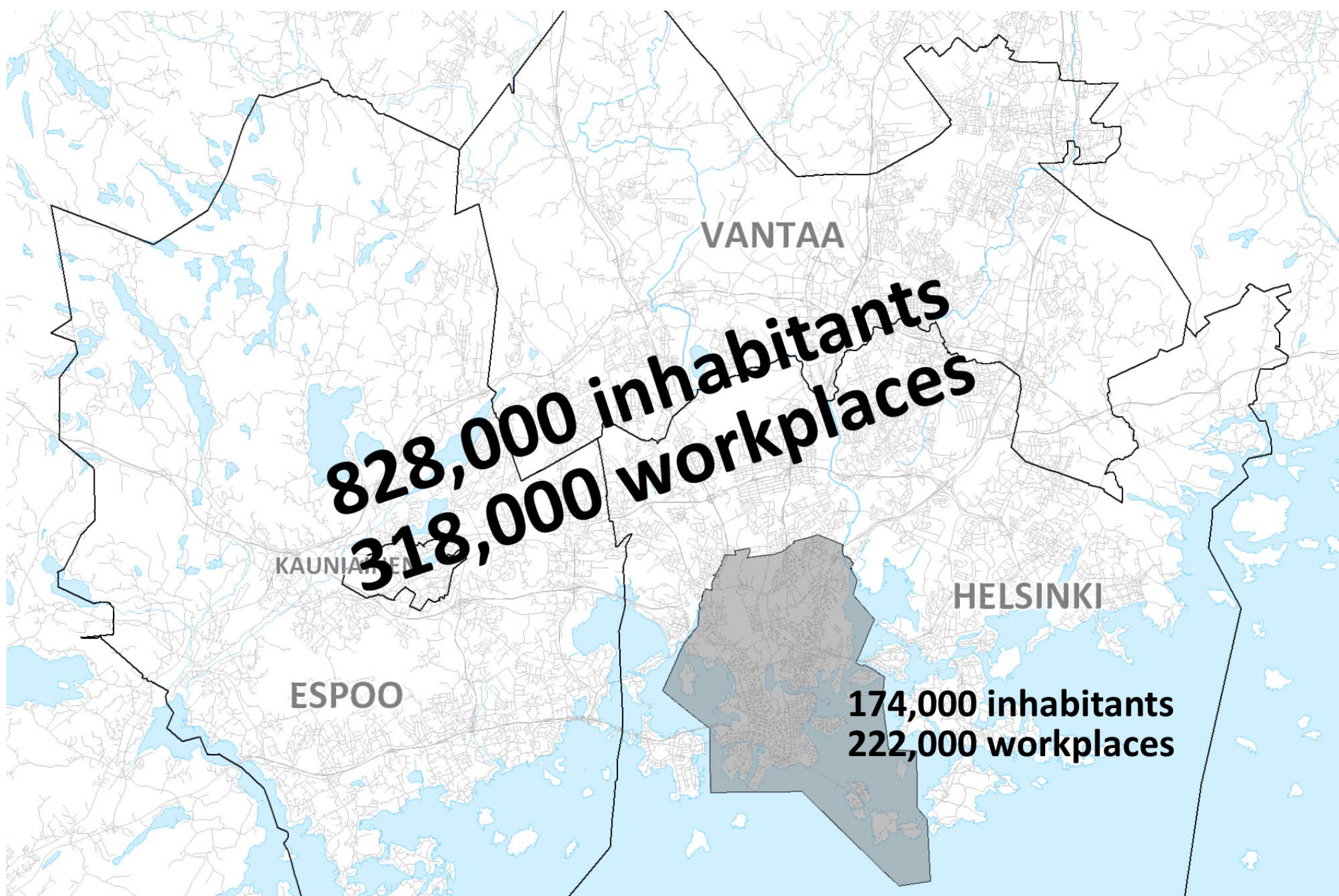


Market
Fort

Metropolis
Garden city

Sprawl
Network city

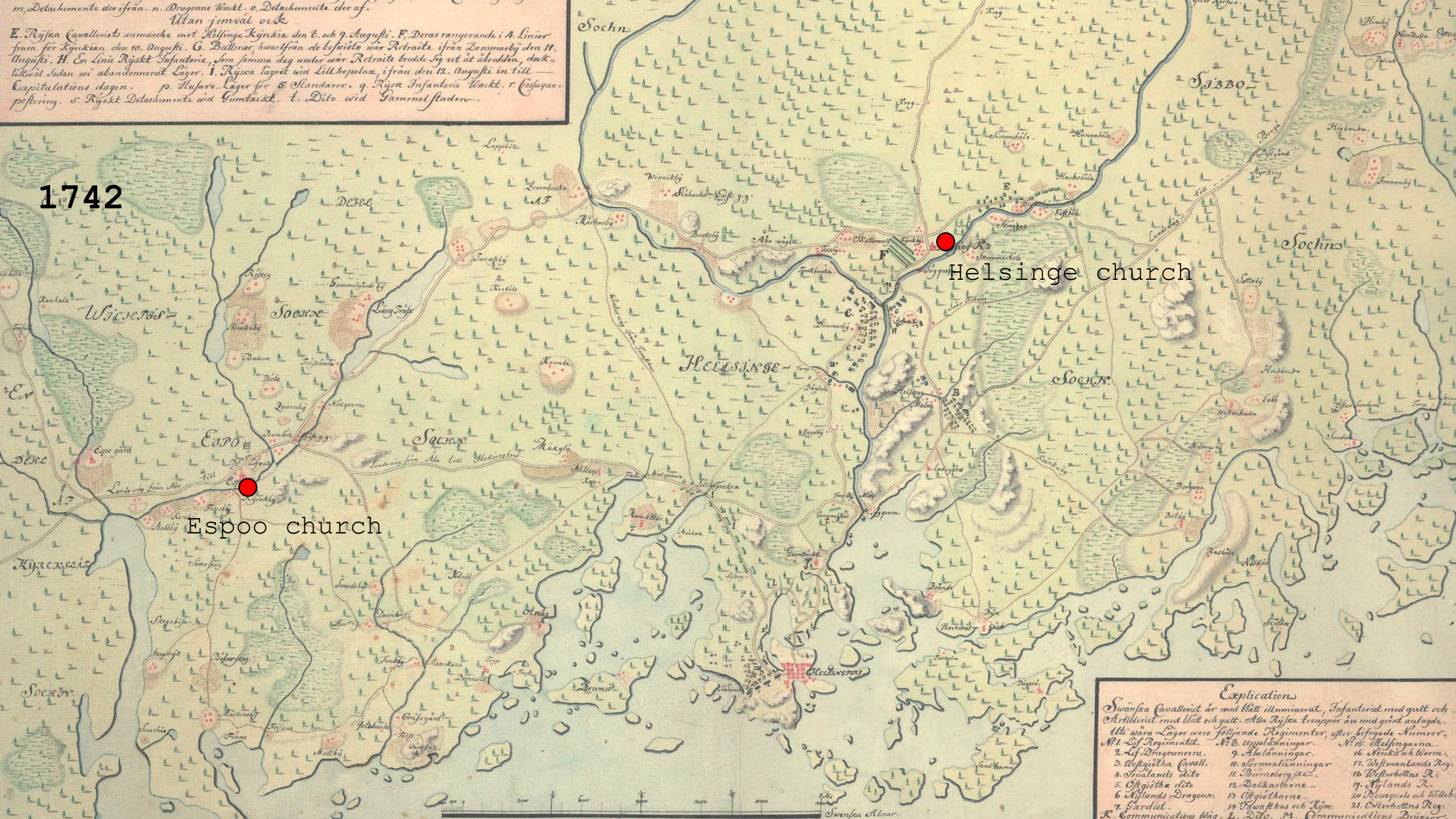
City" vs. Municipality



The image features a black silhouette of a city skyline at the top, with various building shapes of different heights. Below the skyline is a dense forest of evergreen trees, also in silhouette. The background is white. The text 'TRACES OF HELSINKI DEVELOPMENT' is centered horizontally across the middle of the image, overlapping the transition between the city and the forest.

TRACES OF HELSINKI DEVELOPMENT

1742
 m. Detachementet der ifrån. n. Drageens Wacht. o. Detachementet der af Utan jemväl ock
 E. Ryska Cavalieriet anmarcha mot Ryske Kyrckia den 8. och 9. Augusti. F. Deras rangerande i A. Linier fram för Kyrckian den 10. Augusti. G. Batterier hwarifrån de beskjöto war Retraite ifrån Dommarby den 11. Augusti. H. En Linie Ryskt Infanterie, som samma dag under war Retraite bröde sig ut ut äbradden, dock tillwät sedan wi abandonerat Lager. I. Ryska lägret wid Lillhopelax ifrån den 12. Augusti in till Capitulations dagen. p. Russars Lager för 6. Standaror. q. Rysk Infanteris Wacht. r. Casaquepostering. s. Ryskt Detachementet wid Guntast. t. Dito wid Gammelstaden.



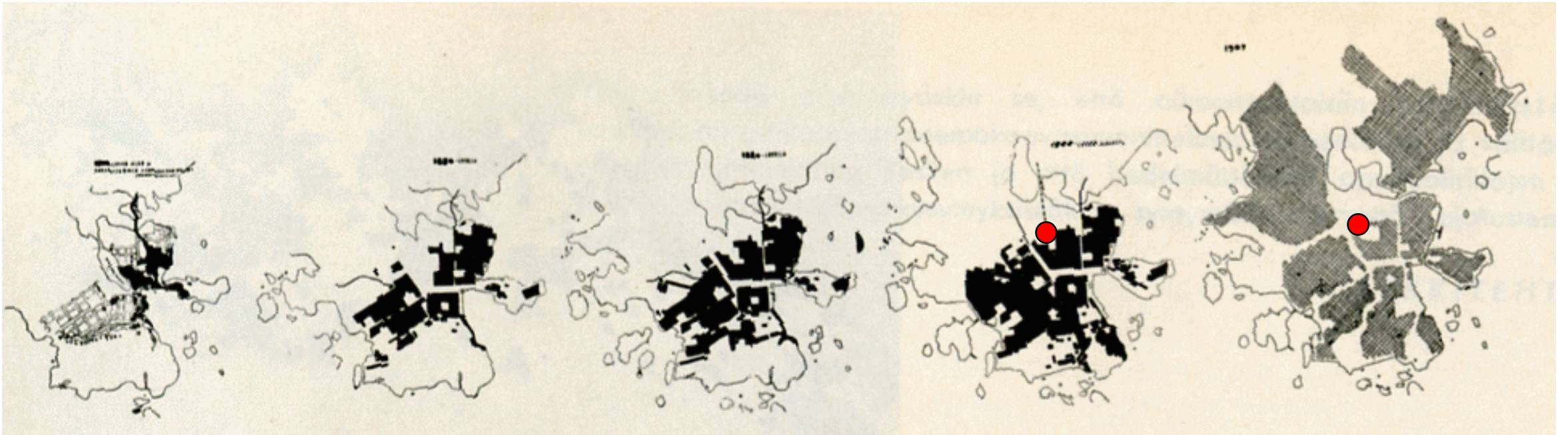
1742

Helsing church

Espoo church

Explication
 Swenska Cavalieriet är med blått illuminerat, Infanteriet med gult och Artilleriet med blått och gult. Alla Ryska trupper äro med grönt anlagde. Allt wara Lager woro följande Regimentor, för befogade Niemvor.
 A. 1. Ryskt Regiment. N. 2. Upplösnings. N. 15. Helsingarna.
 2. Rysk Dragoners. 9. A. öfverningar. 16. Niska och Wern.
 3. Wästgötha Cavall. 10. Öfvermanterningar. 17. Wästmanlands Reg.
 4. Smålands dito. 11. Björnålsreg. 18. Westerbottens R.
 5. Östgötha dito. 12. Dalcarlörne. 19. Nylands R.
 6. Nylands Dragoner. 13. Östgötharne. 20. Rossguols och Willeb.
 7. Gardet. 14. Fusa sthus och Kym. 21. Österbottens Reg.
 R. Communications Båq. L. Dito. M. Communications Båq.

HELSINKI PRE-1900



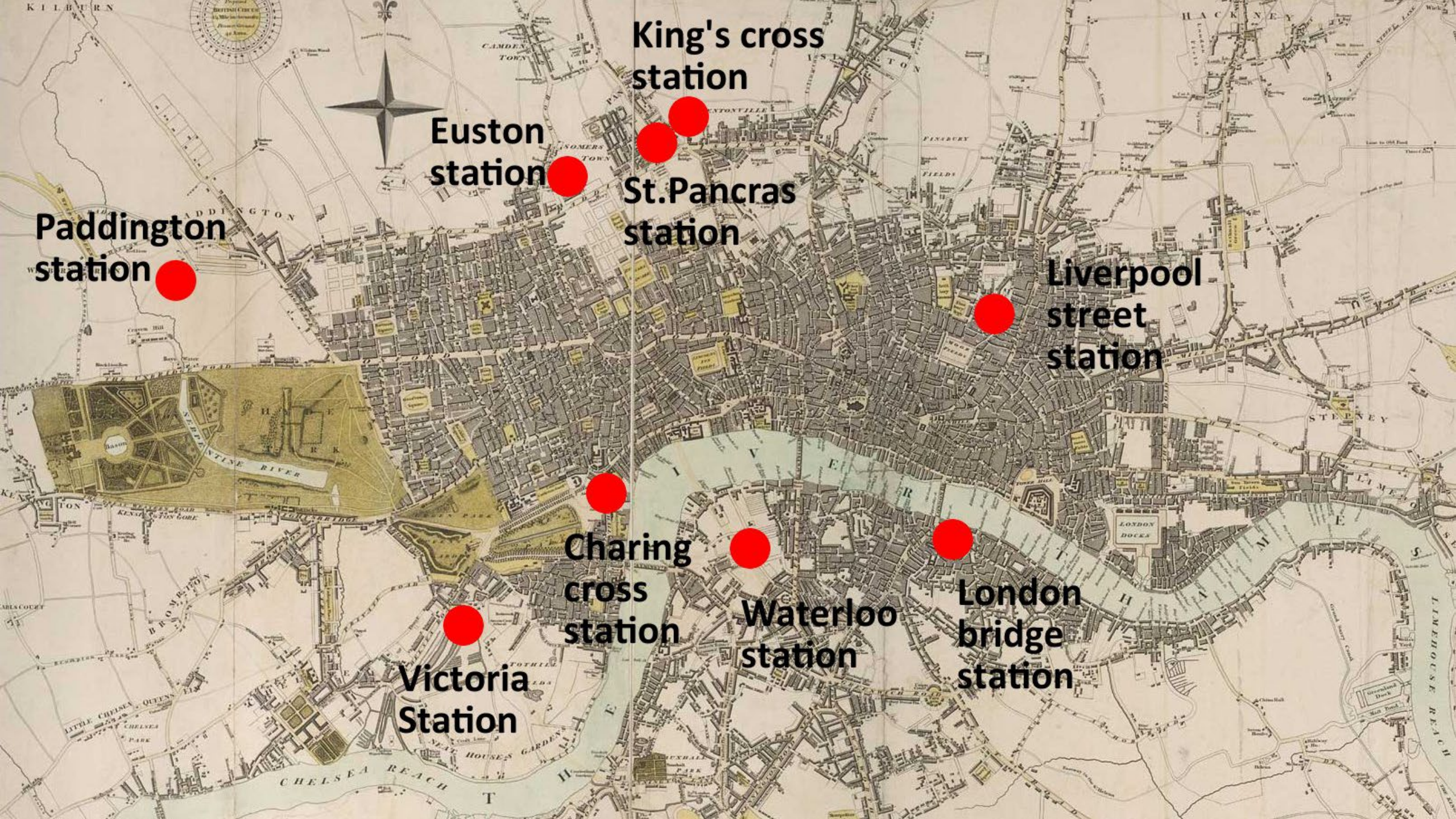
1800
4 000 inhab.

1830
8 000 inhab.

1850
21 000 inhab.

1900
80 000 inhab.

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



**Paddington
station**

**Euston
station**

**King's cross
station**

**St. Pancras
station**

**Liverpool
street
station**

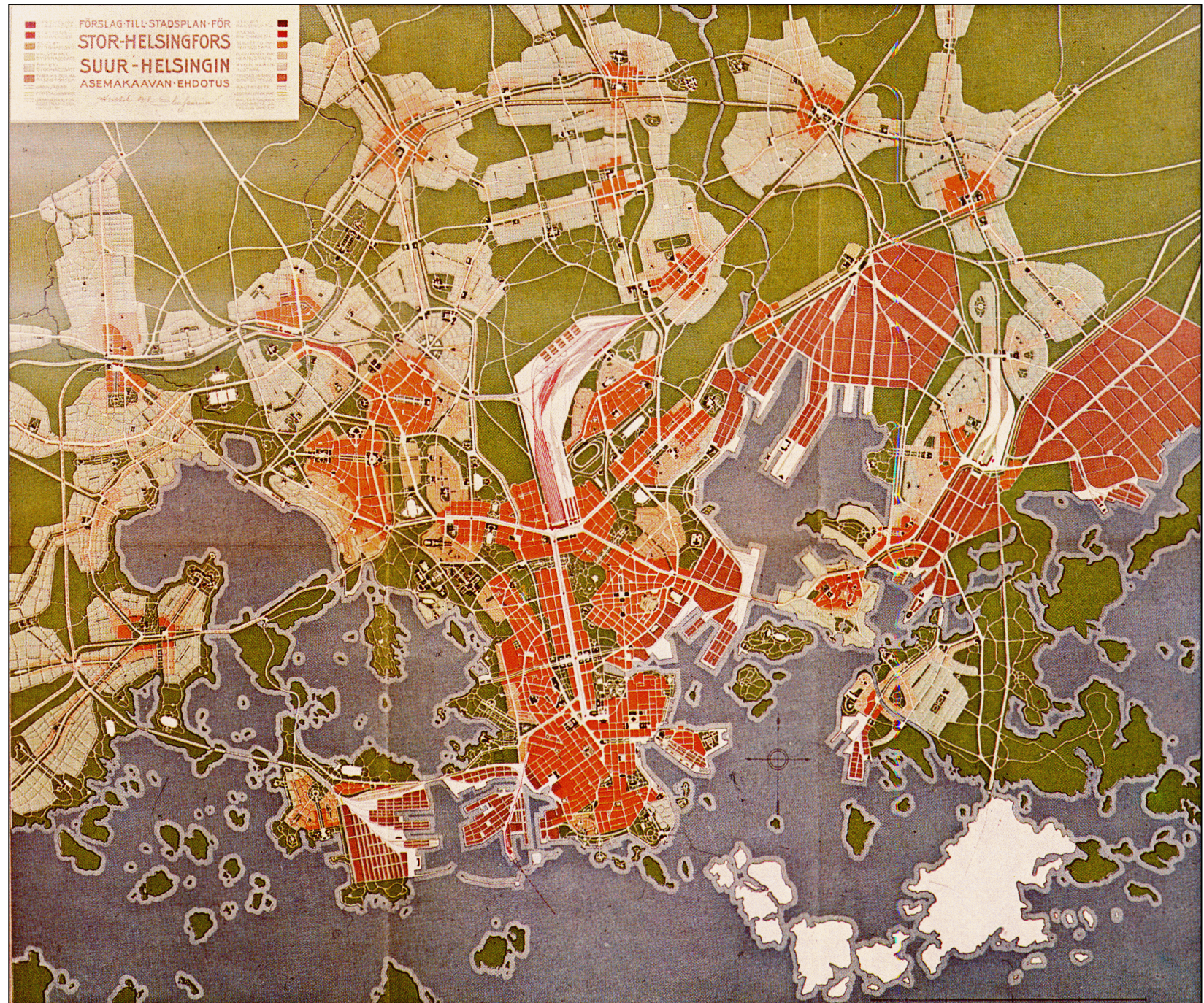
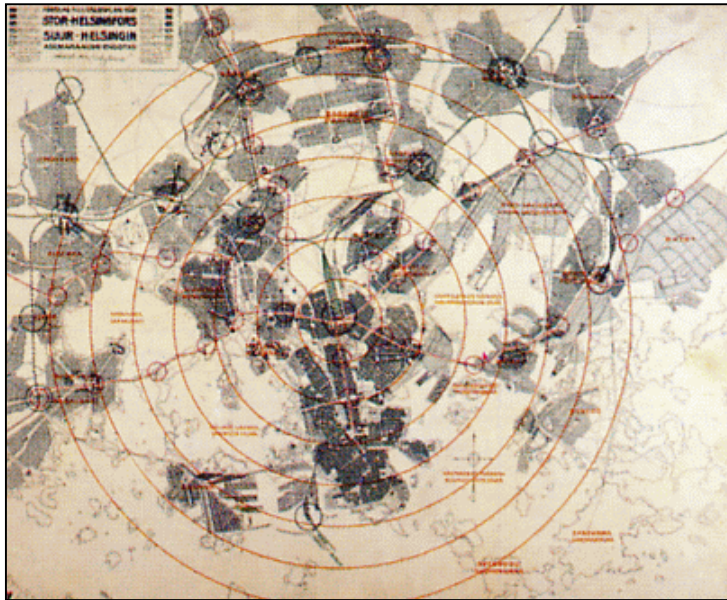
**Victoria
Station**

**Charing
cross
station**

**Waterloo
station**

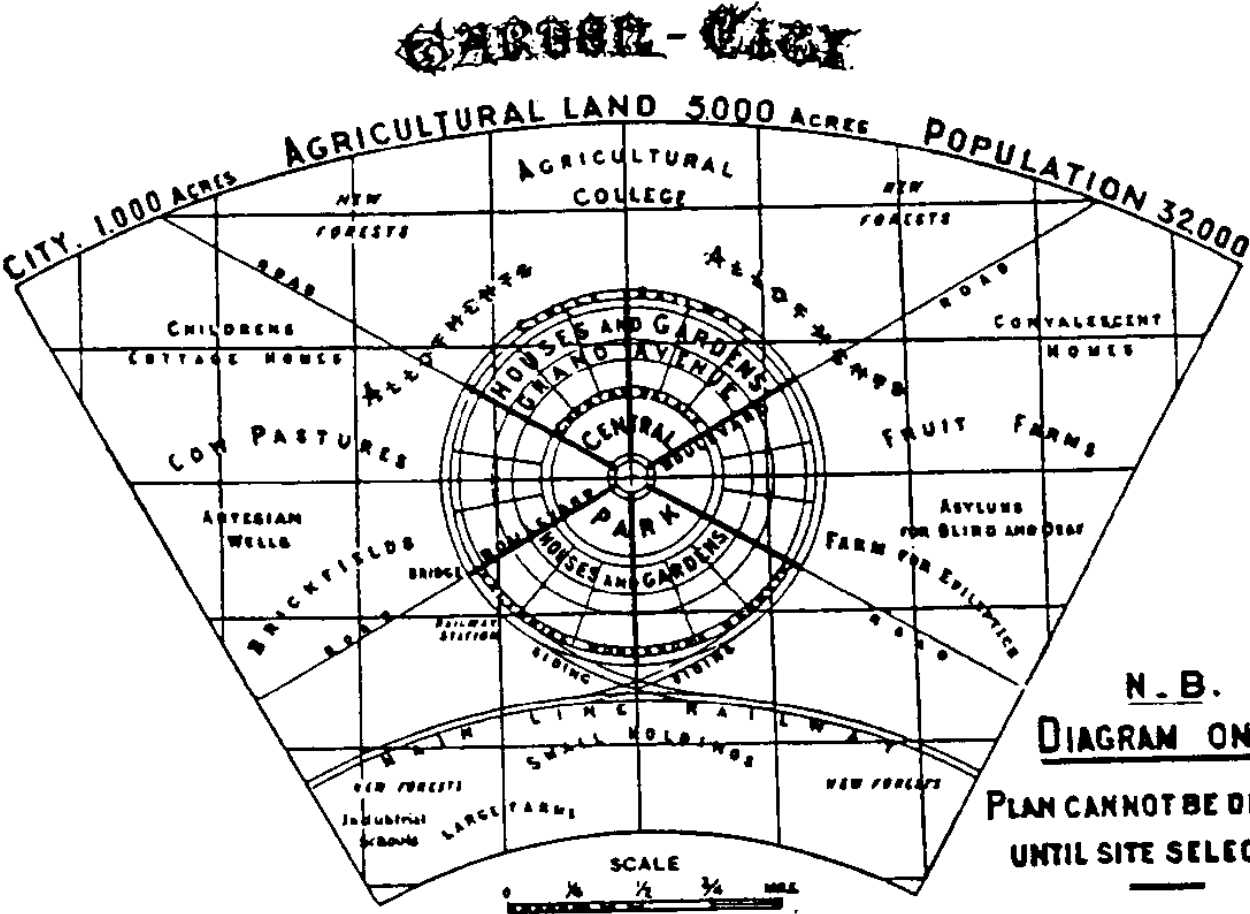
**London
bridge
station**

ELIEL SAARINEN 1915-1918

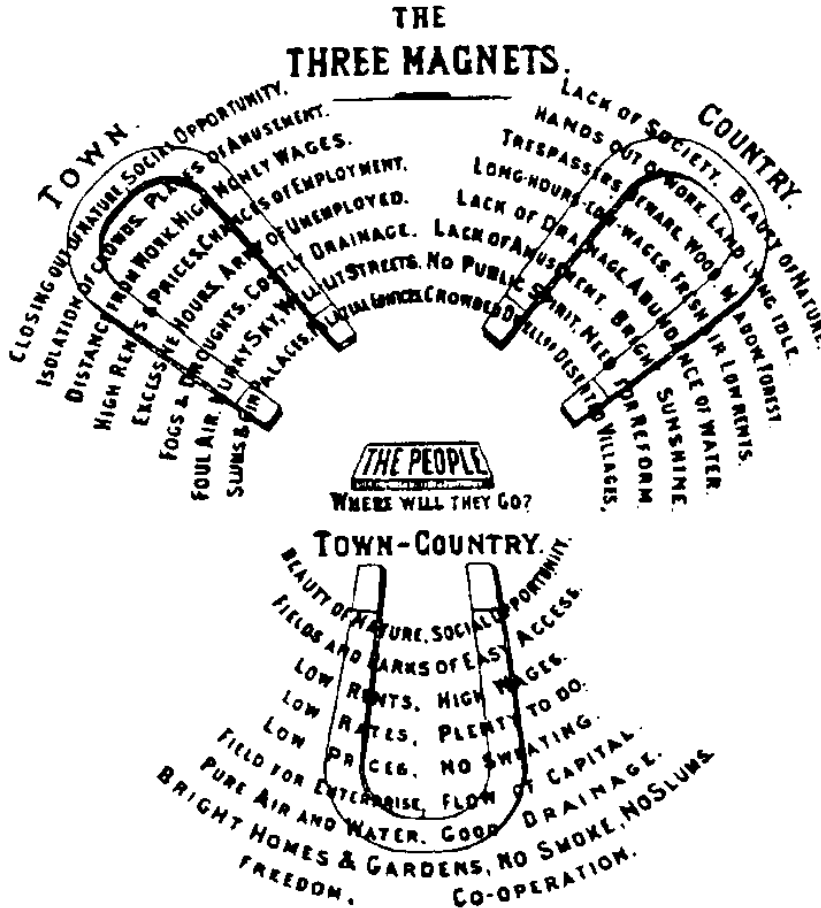


GARDEN CITY

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

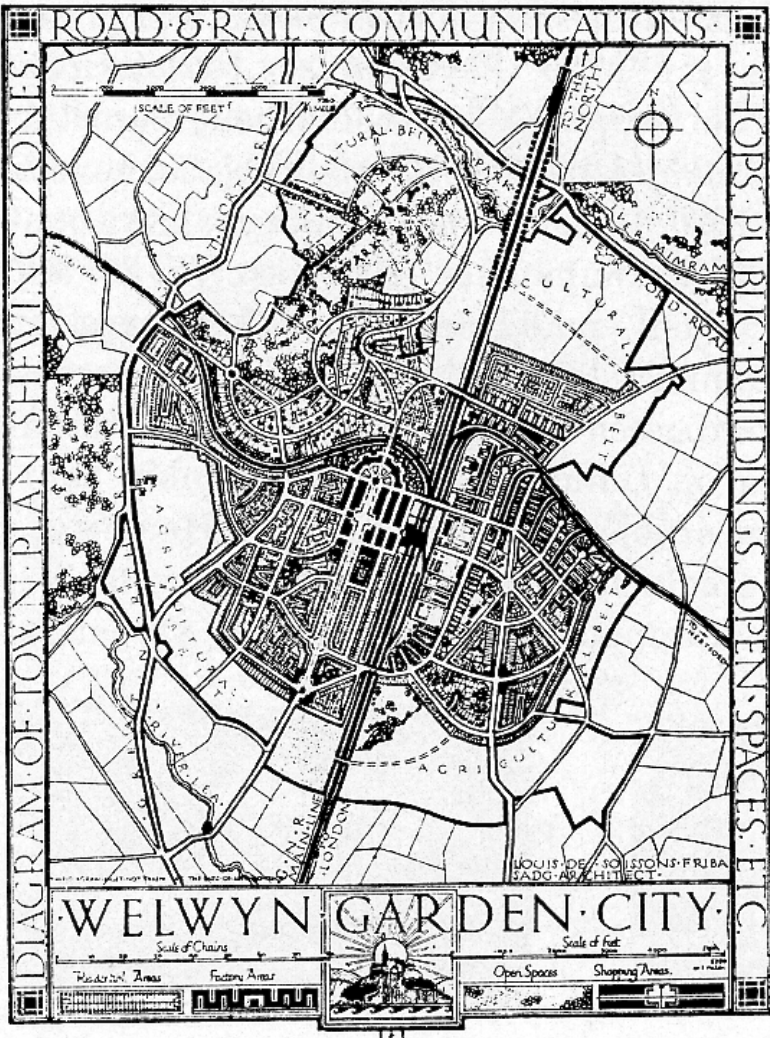
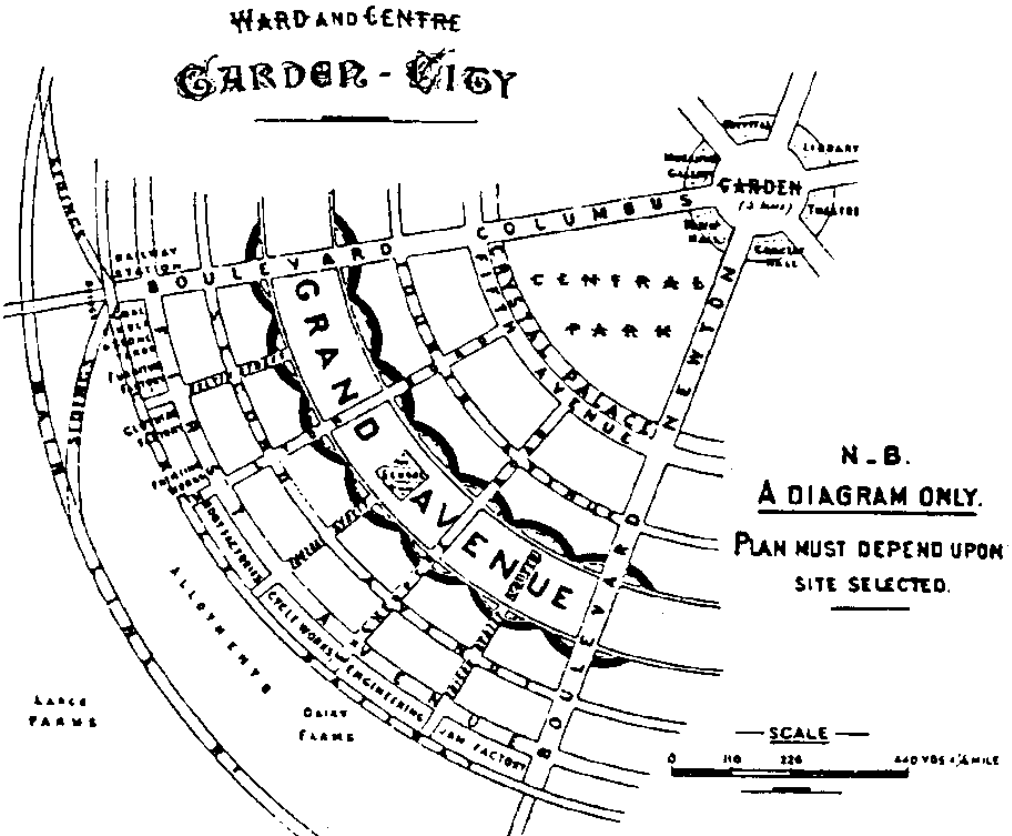


N. B.
DIAGRAM ONLY.
PLAN CANNOT BE DRAWN
UNTIL SITE SELECTED



GARDEN CITY

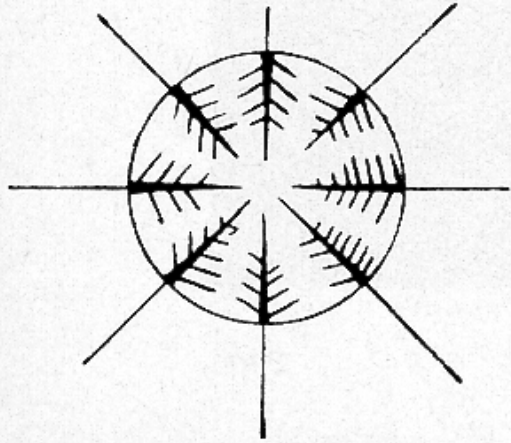
EBENEZER HOWARD 1898/1902



[73] Welwyn.
Englantilainen
Lontoon lähis-
tölle perustettu
puutarhakaup-
unki. Arkkit.
L. de Soissons.
C. B. Purdom,
1925.

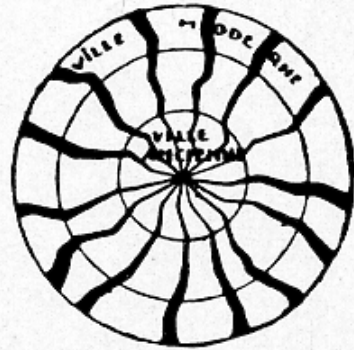
LE CORBUSIER

“Urbanisme” 1929



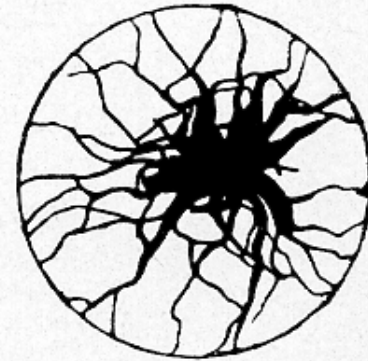
[21] *Liikenne oli keskiaikaisissa kaupungeissa laidoilta keskukseen päin vähenevä.*

Le Corbusier, 1929.



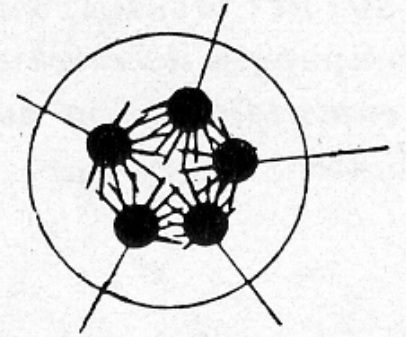
[86] *Keskeltä ahdas, laidoilta tilava katuverkko, tähänastisen kehityksen tavallisin tulos.*

Le Corbusier, 1929.



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

Le Corbusier, 1929.

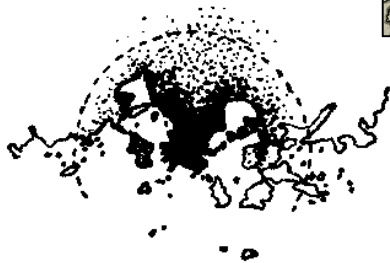


[88] *Rautatieasemat syöksivät hetkittäin suuria ihmismääriä aivan kaupungin keskustaan.*

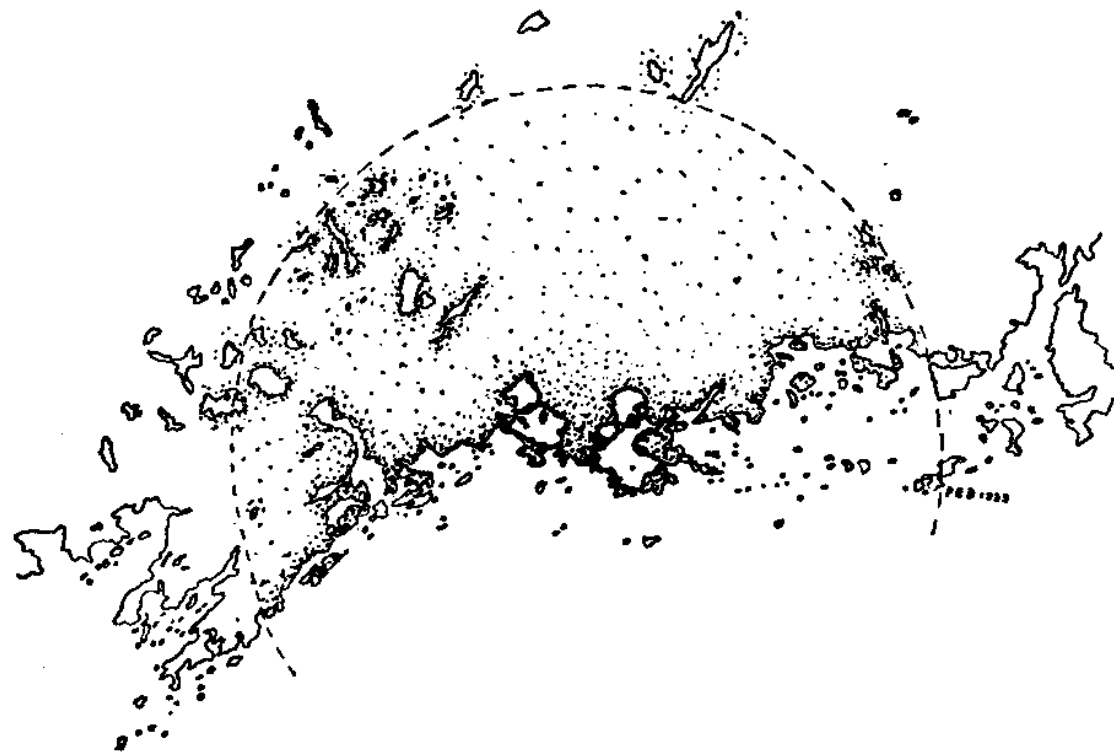
Le Corbusier, 1929.

P. E. BLOMSTEDT

1932

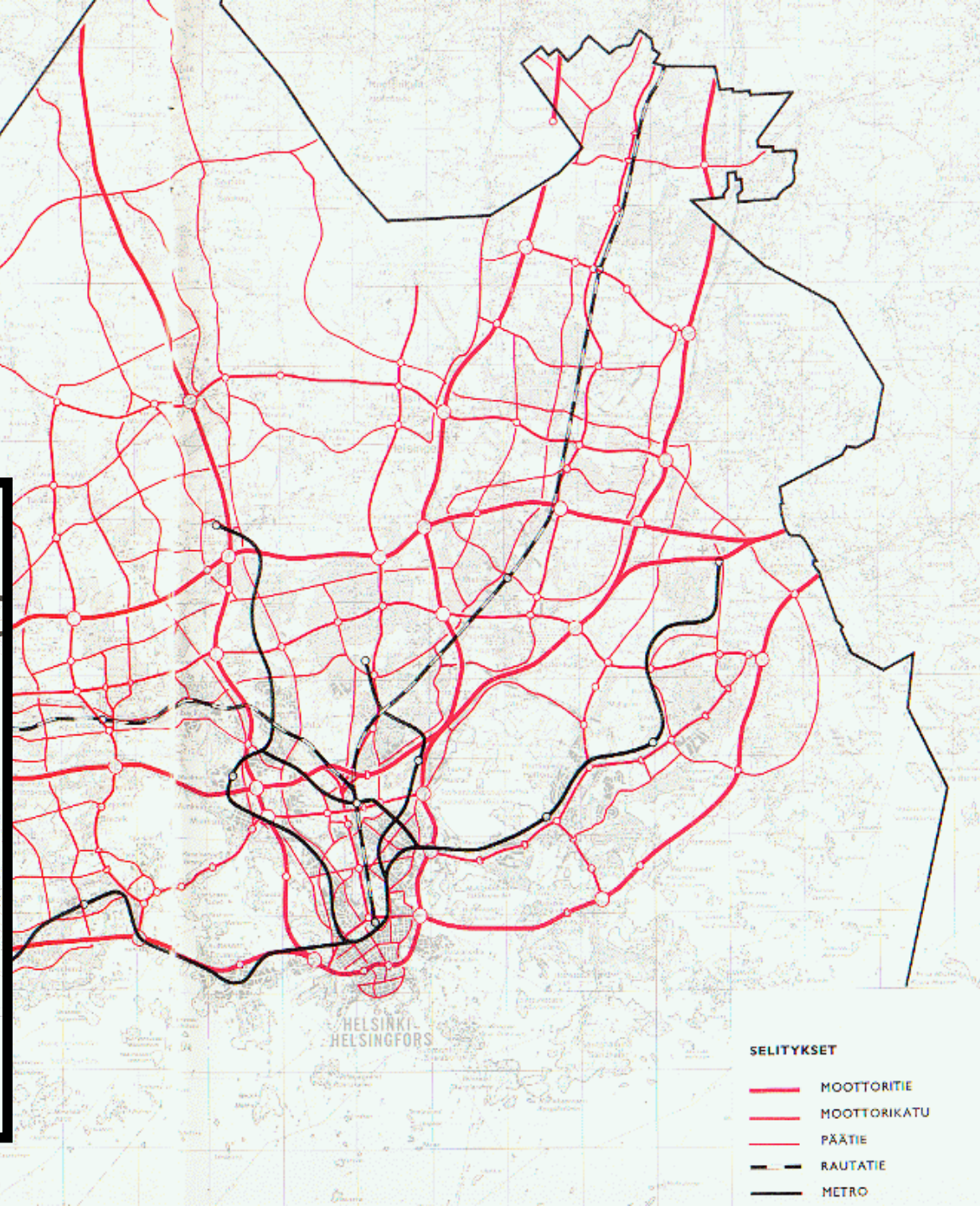
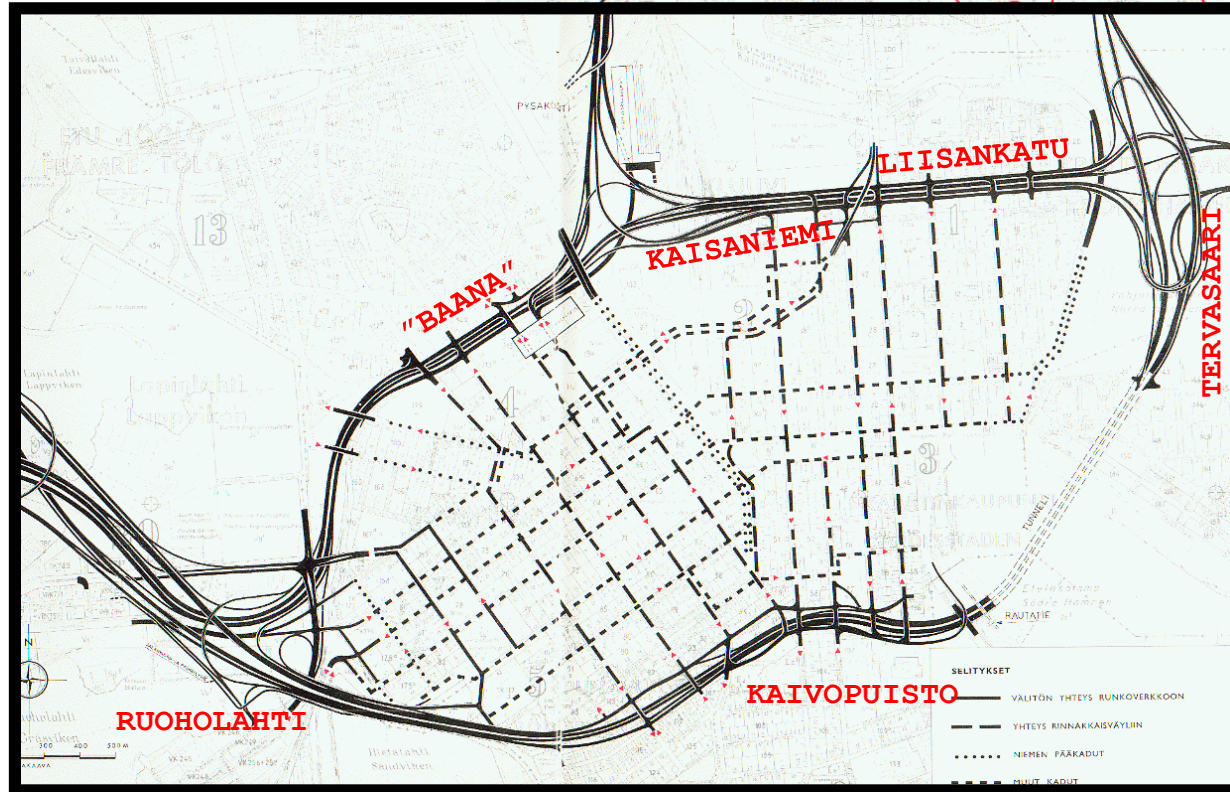


Pikku „Suur-Helsinki”.
Laajennusmahdollisuudet
vuonna 1918.

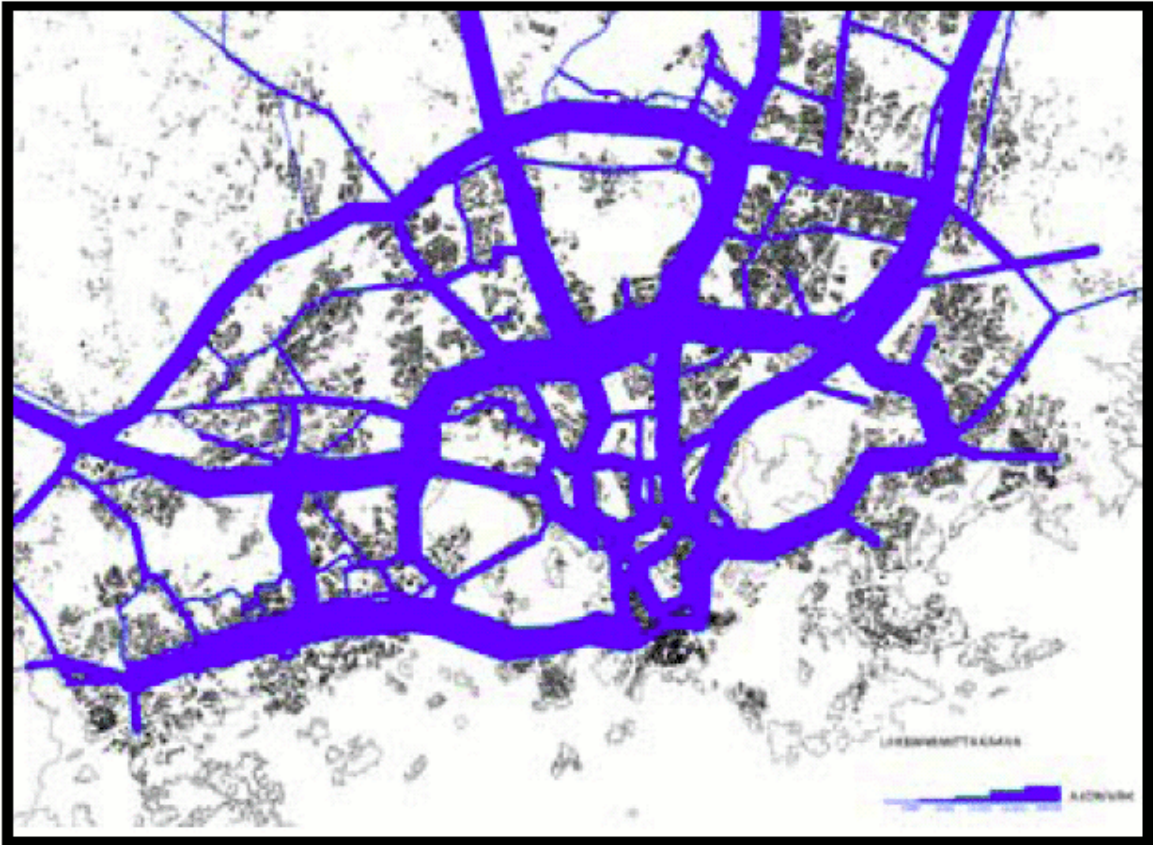
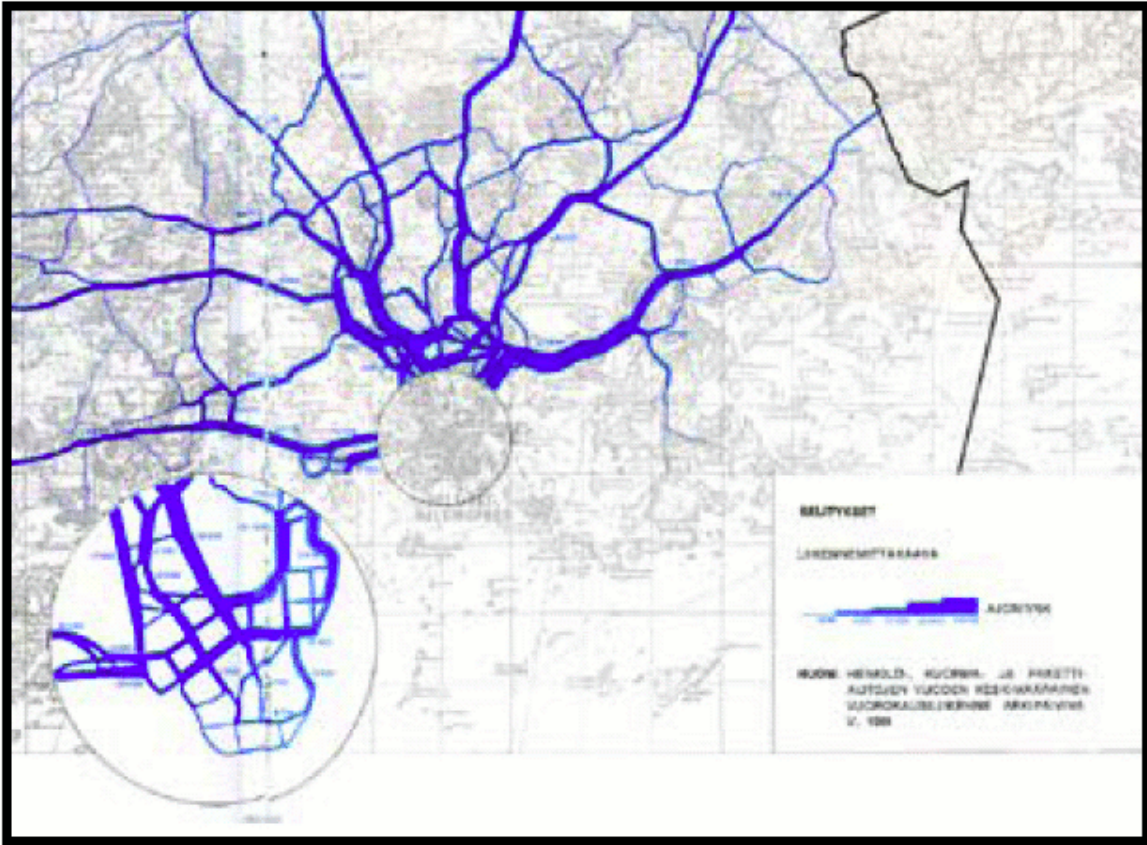


Tulevaisuuden „Suur-Helsinki”.
Väestön sijoittautumismahdollisuudet ovat koko-
naan muttuneet, väestötiheys moninkertaisesti
väljempi.

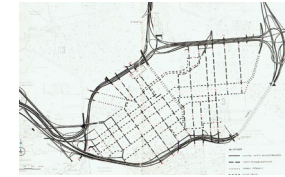
SMITH & POLVINEN 1968



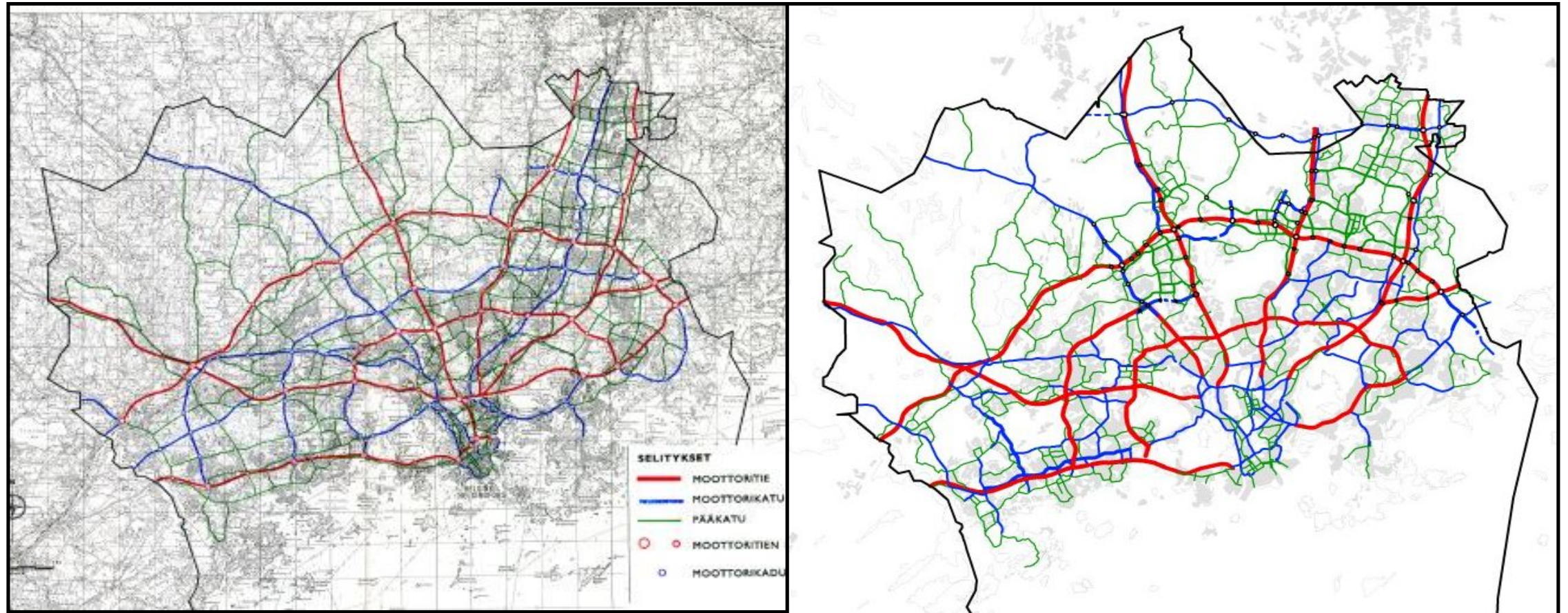
Before (1968) – After (2005)



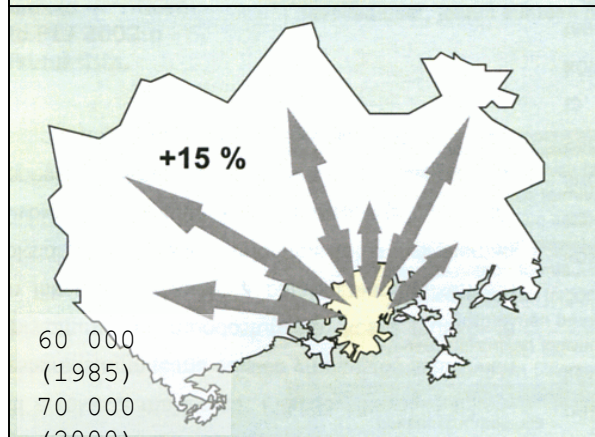
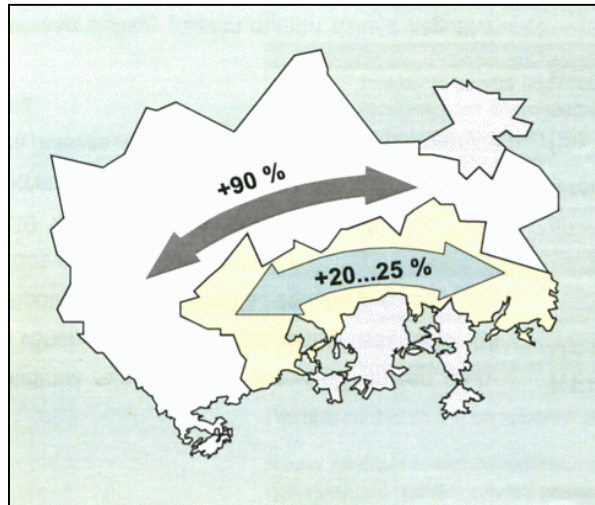
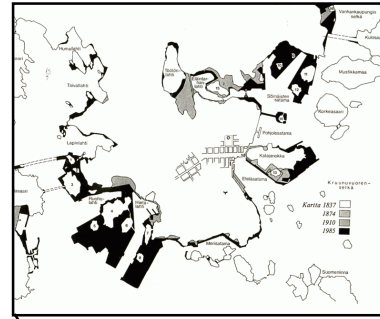
Find five differences?



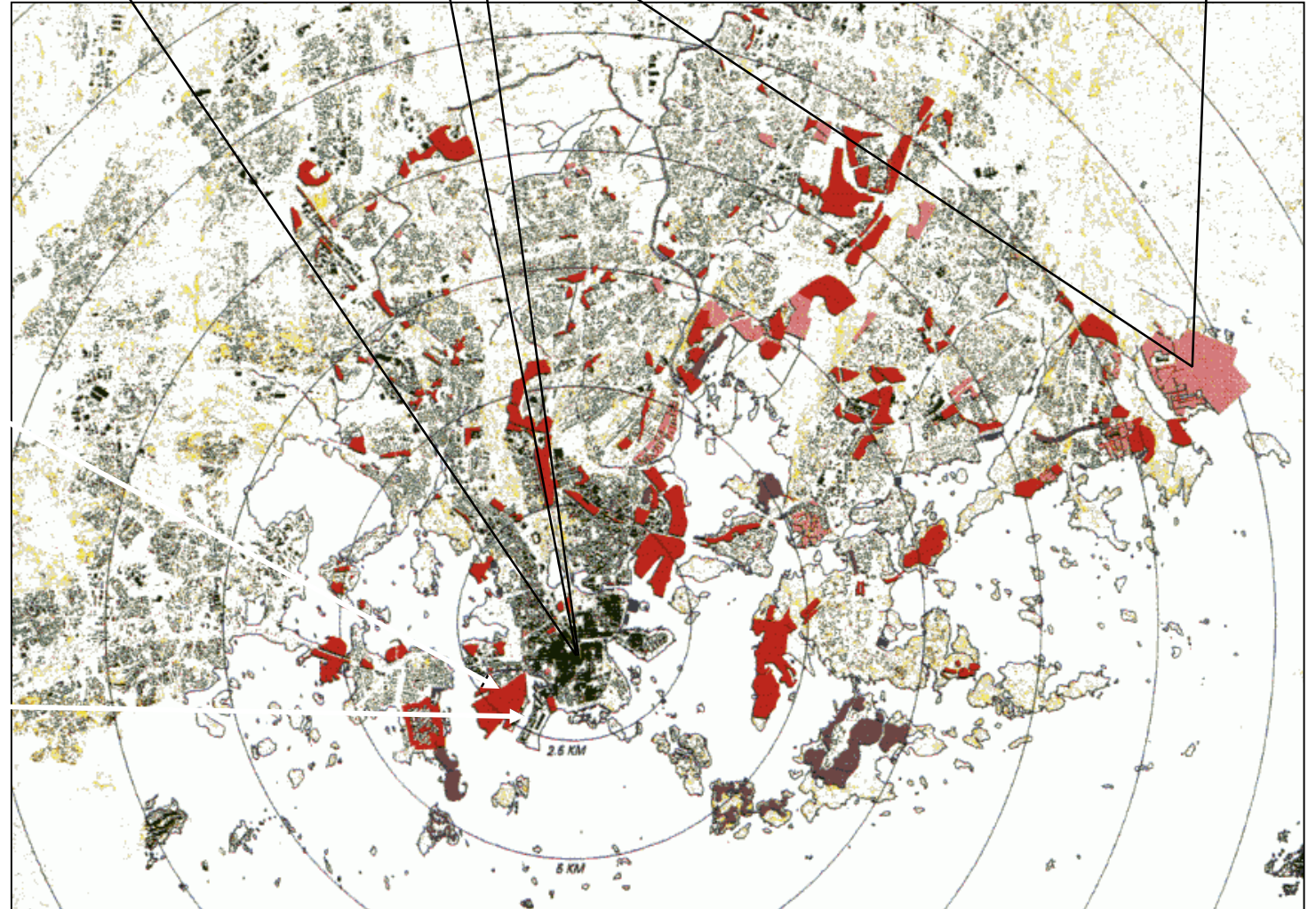
Smith&Polvinen (1968) vs. Greater Helsinki general plans (2005)



GENERAL PLANS 1992



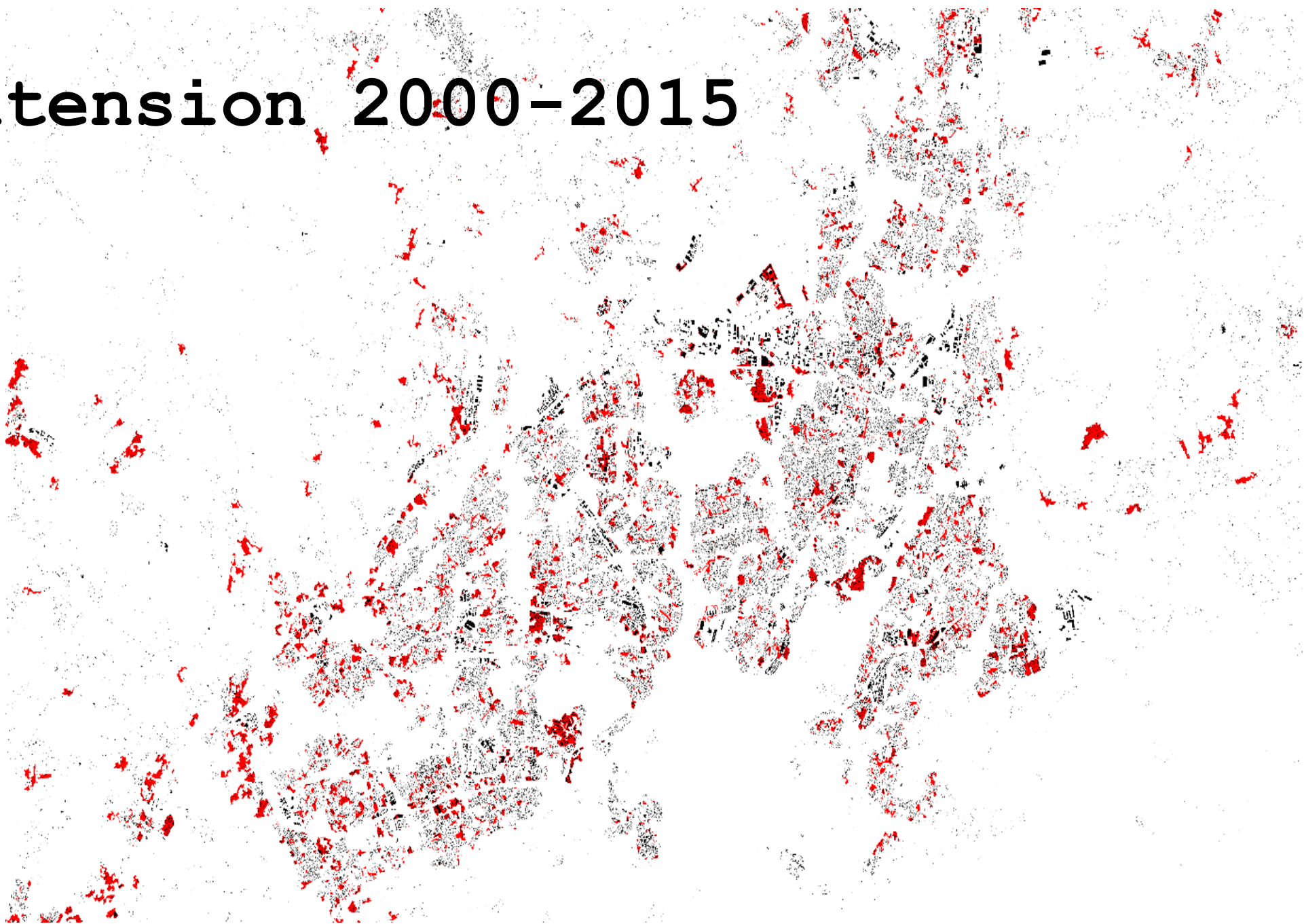
60 000
(1985)
70 000
(2000)
72 000



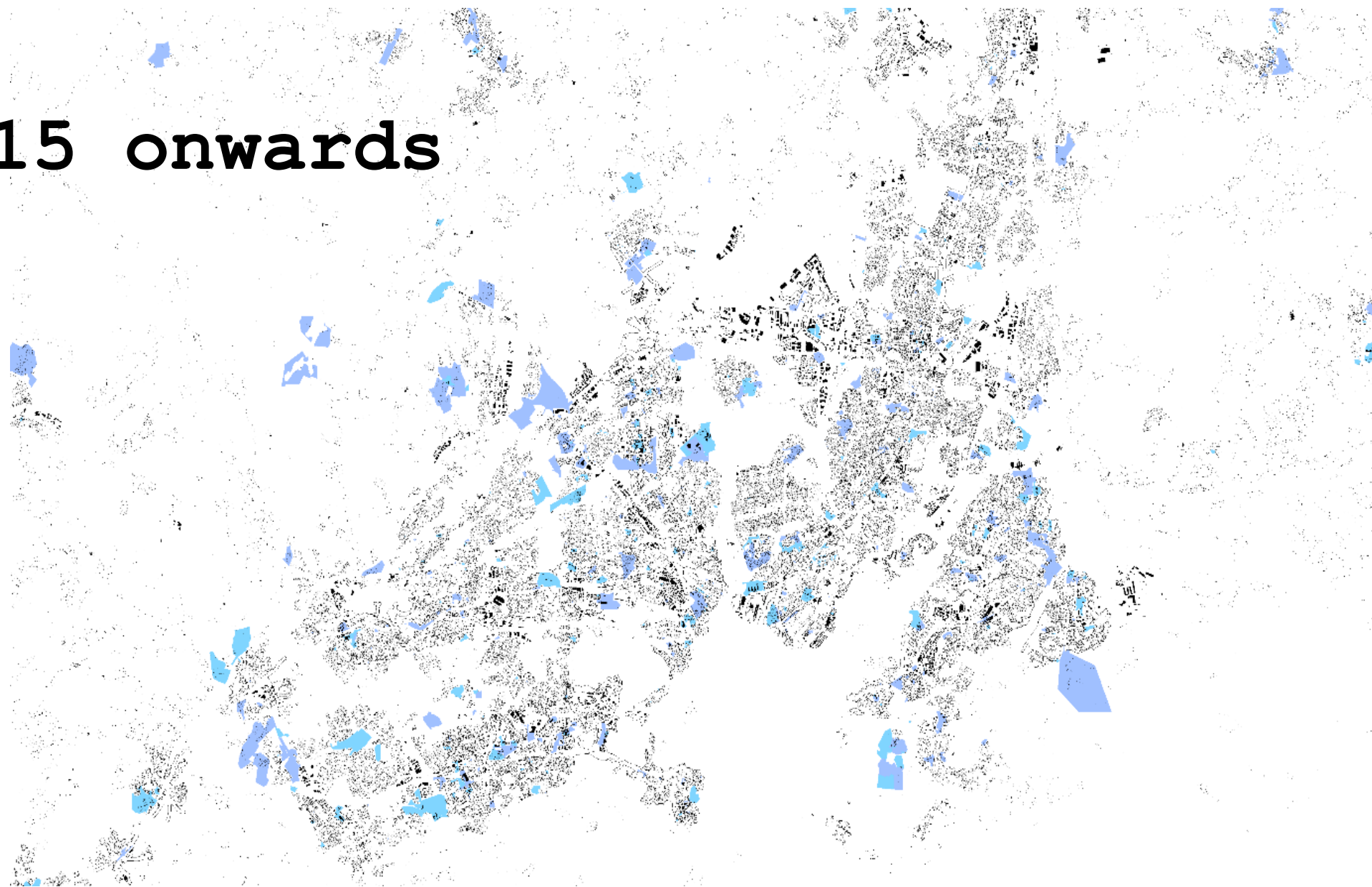
Periurbanization



Extension 2000-2015



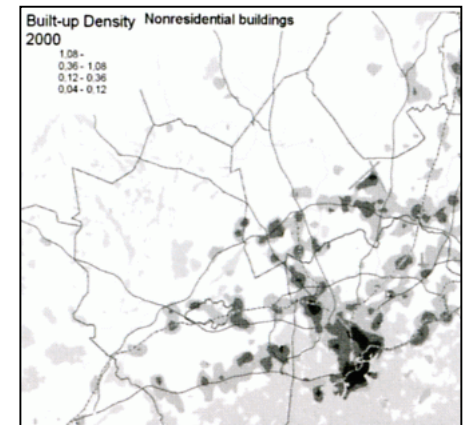
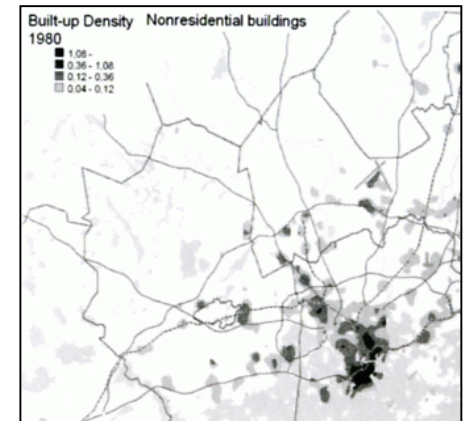
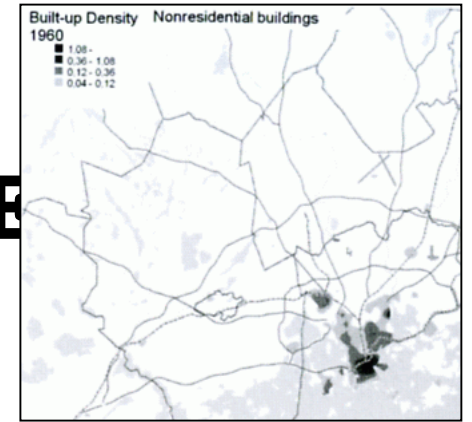
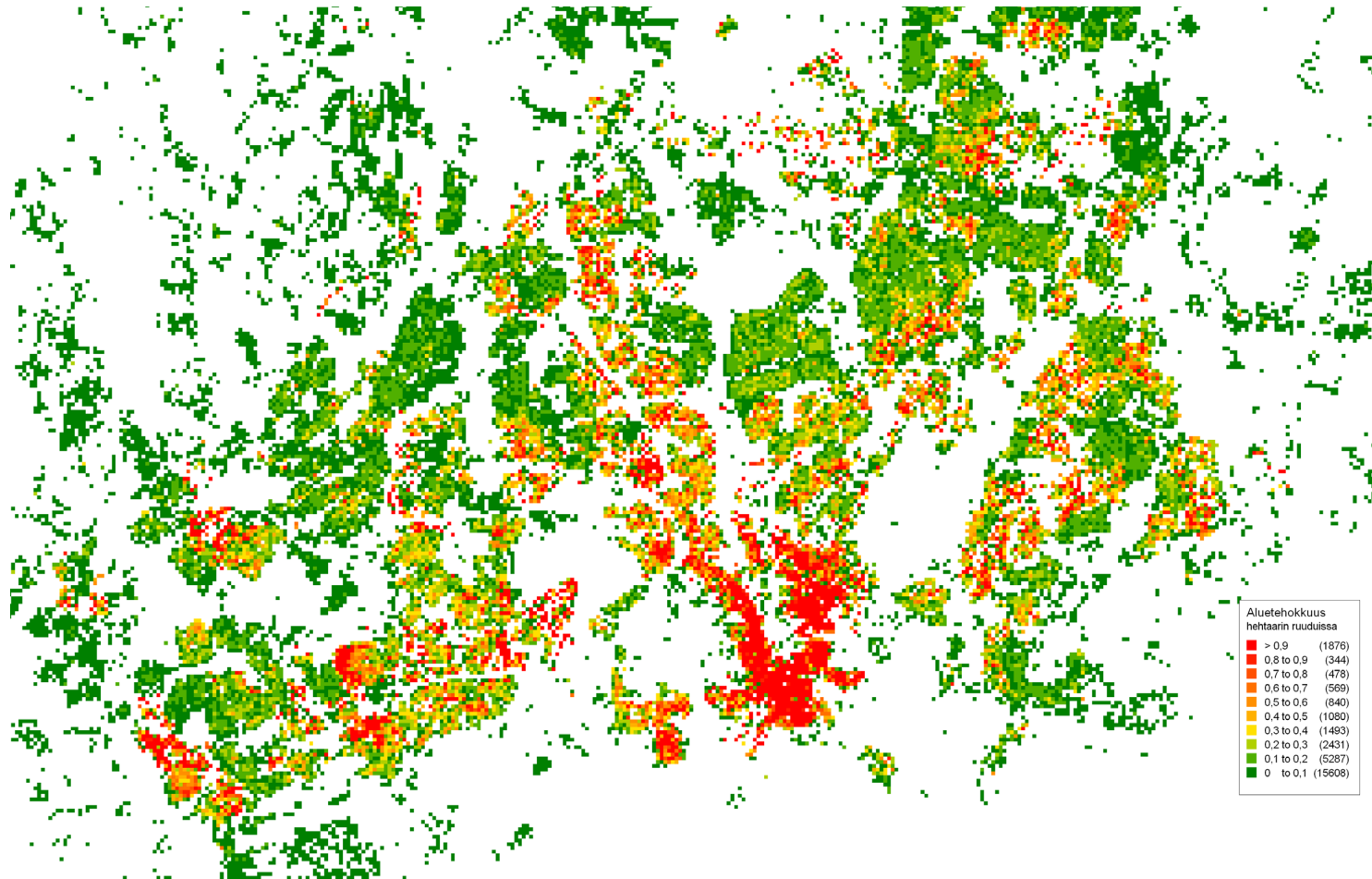
2015 onwards



The image features a black silhouette of a city skyline at the top, with various building shapes of different heights. Below the skyline is a dense forest of evergreen trees, also in silhouette. The background is white. The text 'REMARKS ON DENSITY AND CHANGE' is centered horizontally across the middle of the image, overlaid on the dark background.

REMARKS ON DENSITY AND CHANGE

CHANGE IN NON-RESIDENTIAL USE



FACTS ON SIZE AND DENSITY





KAUP
UNKI
AKAT
EMIA

URBAN STUDIES & PLANNING

UJSP

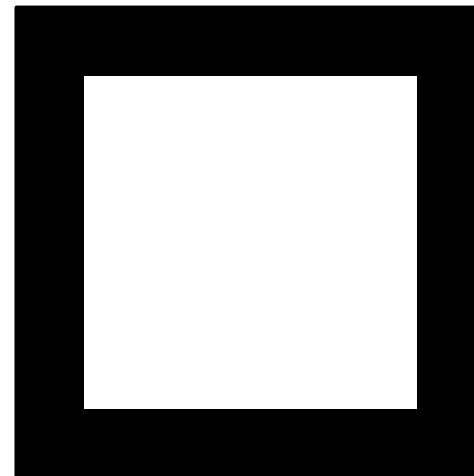
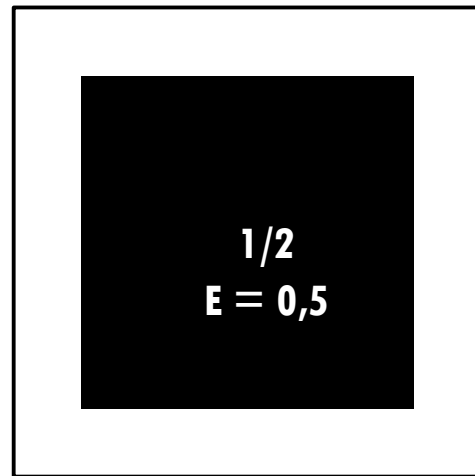
Exercise

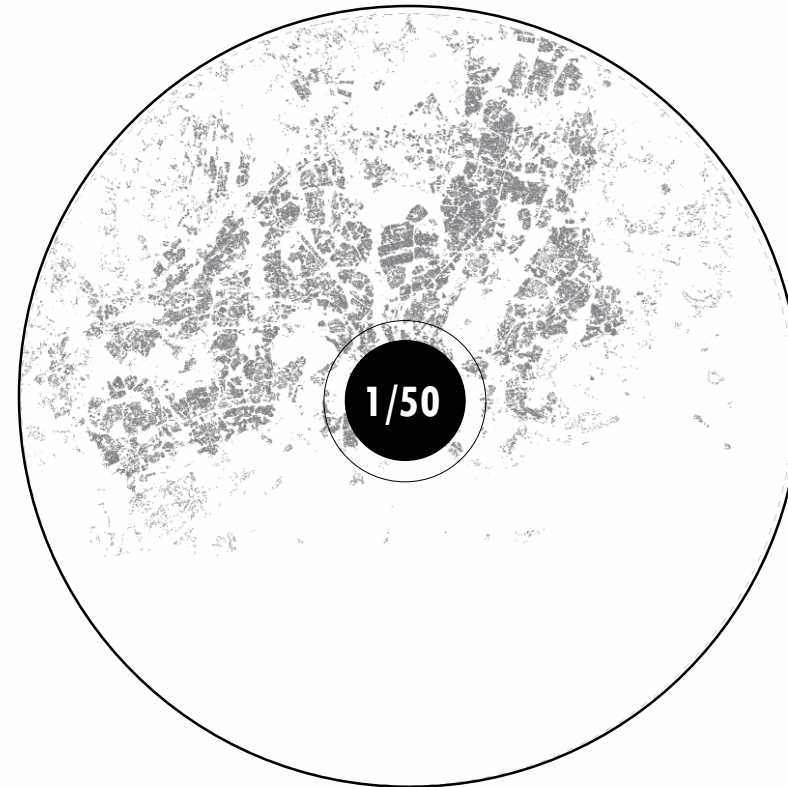
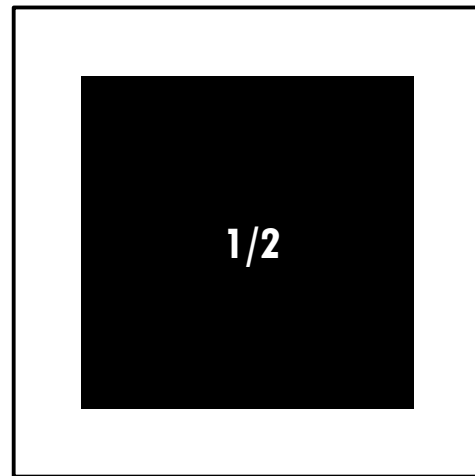
Density explained

----- 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!**





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

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

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 still 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.