



# Rethinking urban mobility

Luca Bertolini - University of Amsterdam

John Gutmann: 'The Artist Lives Dangerously' (1938)

‘Why Aren’t Urban Planners Ready for  
Driverless Cars?’ (Eric Jaffe)

‘Why Aren’t Driverless Cars Ready for  
Cities?’ (Luca Bertolini)

**'Drukte'** = *bustle*

'noisy, energetic, and often obtrusive activity'

as in 'the hustle and bustle of the big city'  
(Merriam-Webster)

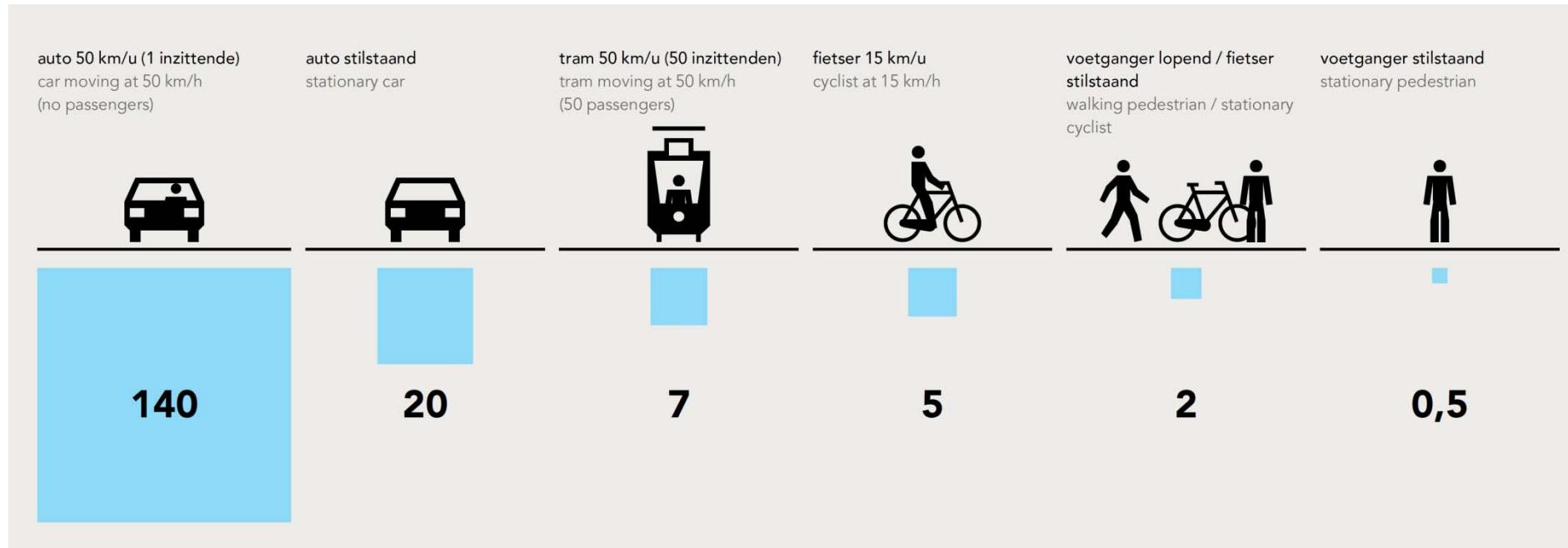
- ‘Tolerance limit to bustle exceeded for many in Amsterdam’
- ‘Center residents alienated from their own neighborhood’
- ‘Cars get increasingly stuck in and around Amsterdam’
- ‘Many find cycling through the city stressful’
- ‘Pedestrian will not let being befooled’

(Het Parool)

- Cities *are* about ‘bustle’, because they are about the **concentration** of people and activities

- Which urban mobility can alleviate the negative effects of ‘bustle’ (congestion, stress, alienation, ...), while realizing the positive ones (diversity, exchange, ...)?

- Alleviating the negative effects = **using space efficiently**



Space consumption in m<sup>2</sup> per person, by transport means  
(PlanAmsterdam, Victoria Transportation Institute)

- Realizing the positive effects = **enabling human interaction**

# A natural experiment: Hugo de Grootkade, on a (sunny, warm) weekend



# A natural experiment: Hugo de Grootkade, as 'living street', summer 2016

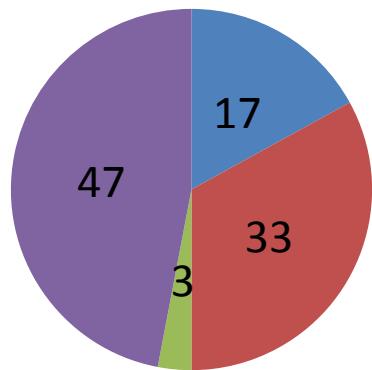


- The ensuing modal hierarchy:
  1. Walking
  2. Cycling
  3. Public transport
  4. Car/Truck

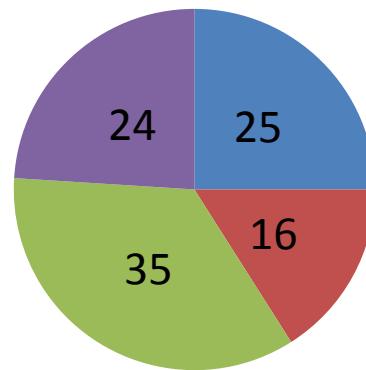
**Will technology change this hierarchy?  
[VOTE = 1. YES; 2. NO]**

# Modal split in today's case-cities

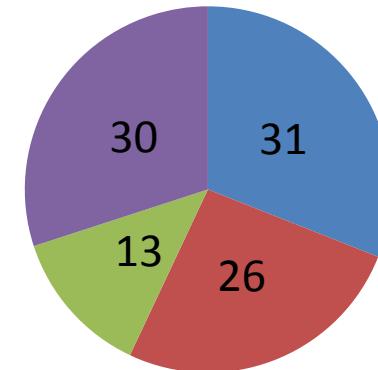
Paris



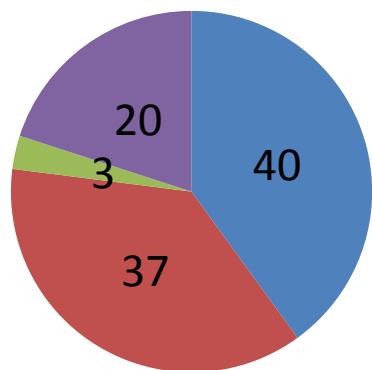
Amsterdam



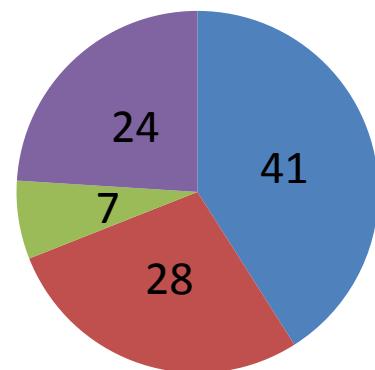
Berlin



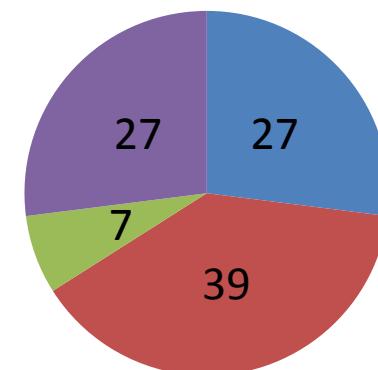
London



Gothenburg



Wien



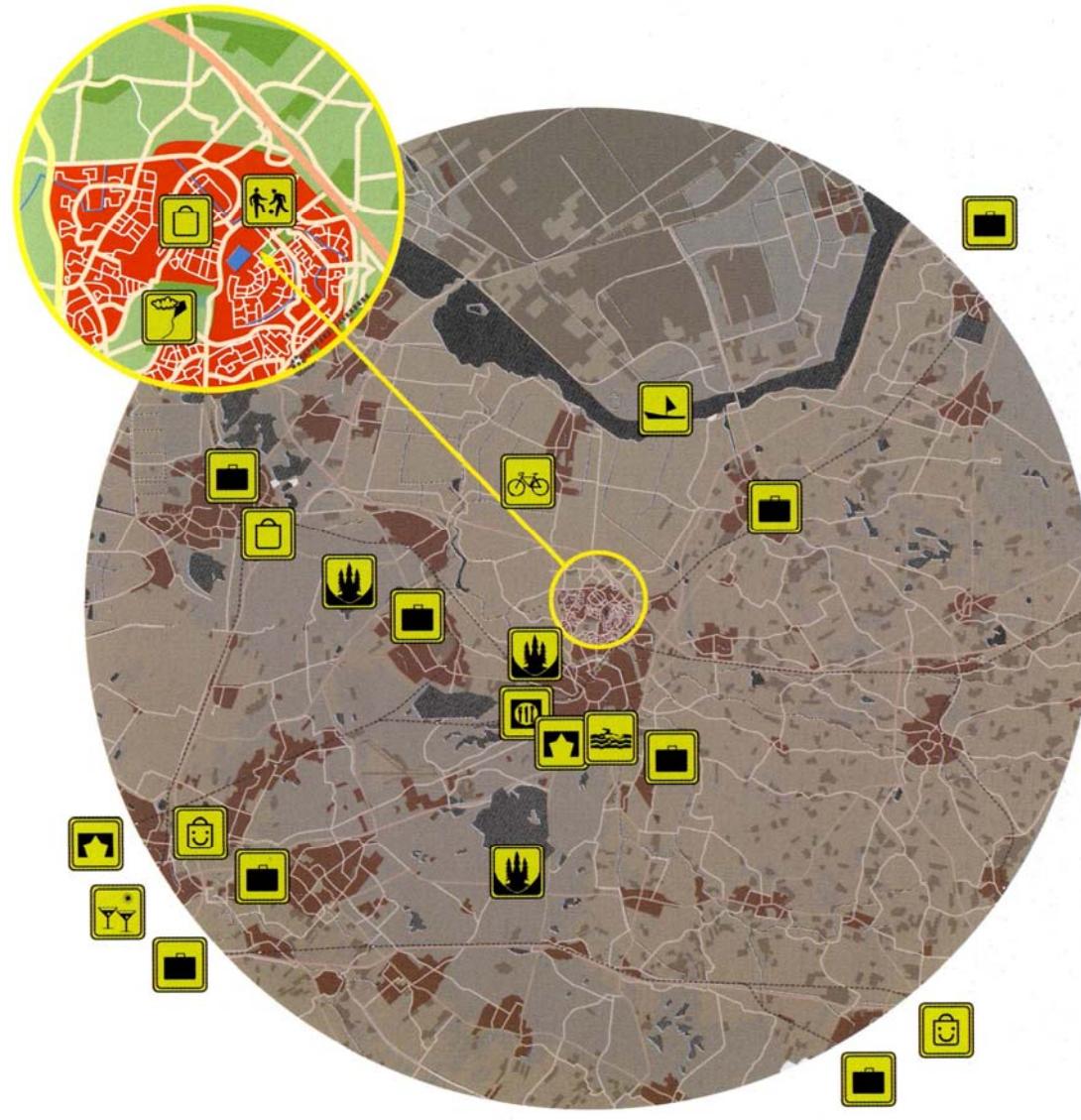
■ Car ■ PT ■ Bike ■ Walk

(EPOMM, OIS)

How to change?

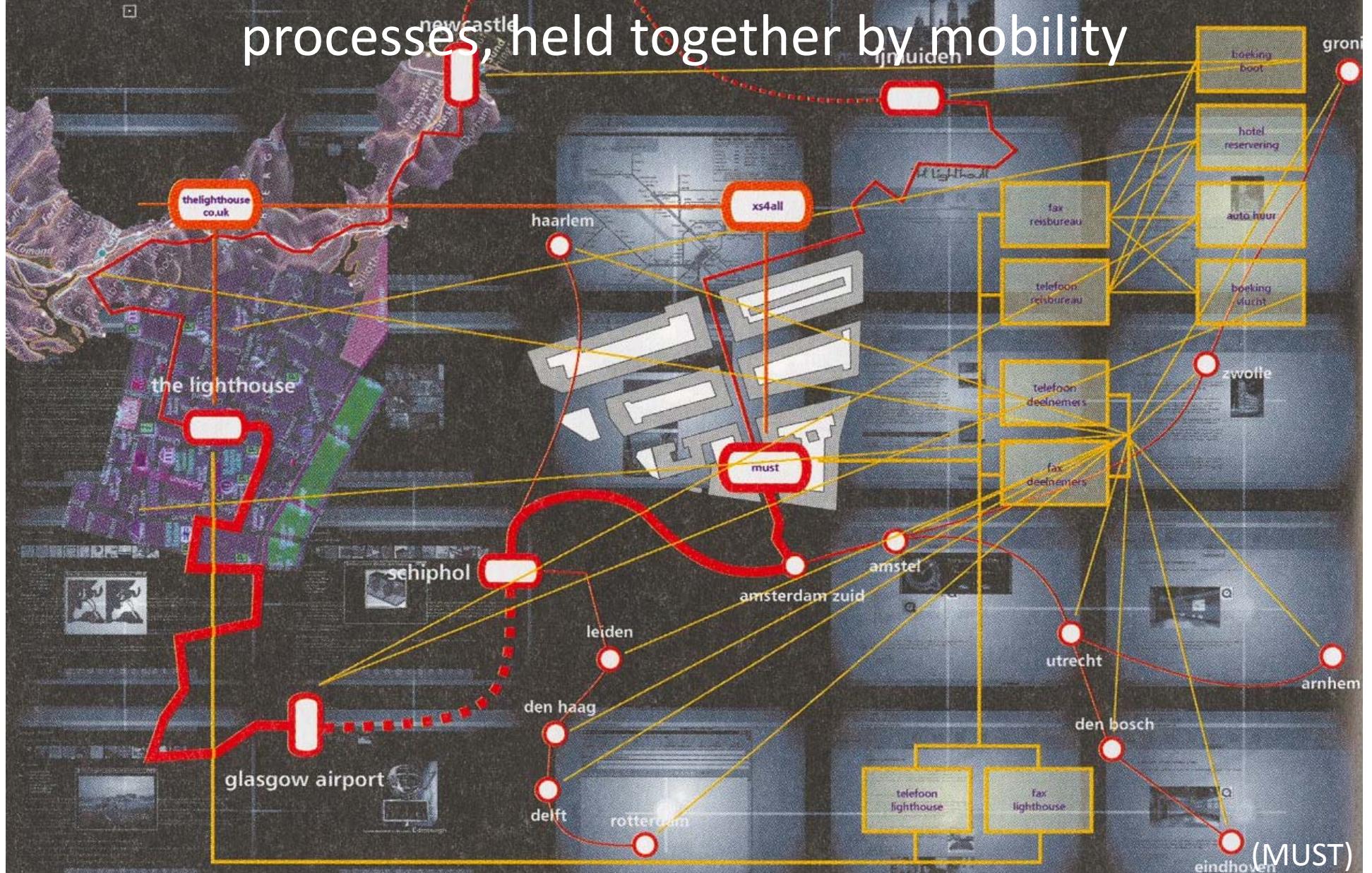
# Intermezzo: mobile societies, borderless cities

# A mobile society: dispersed activity places, held together by mobility

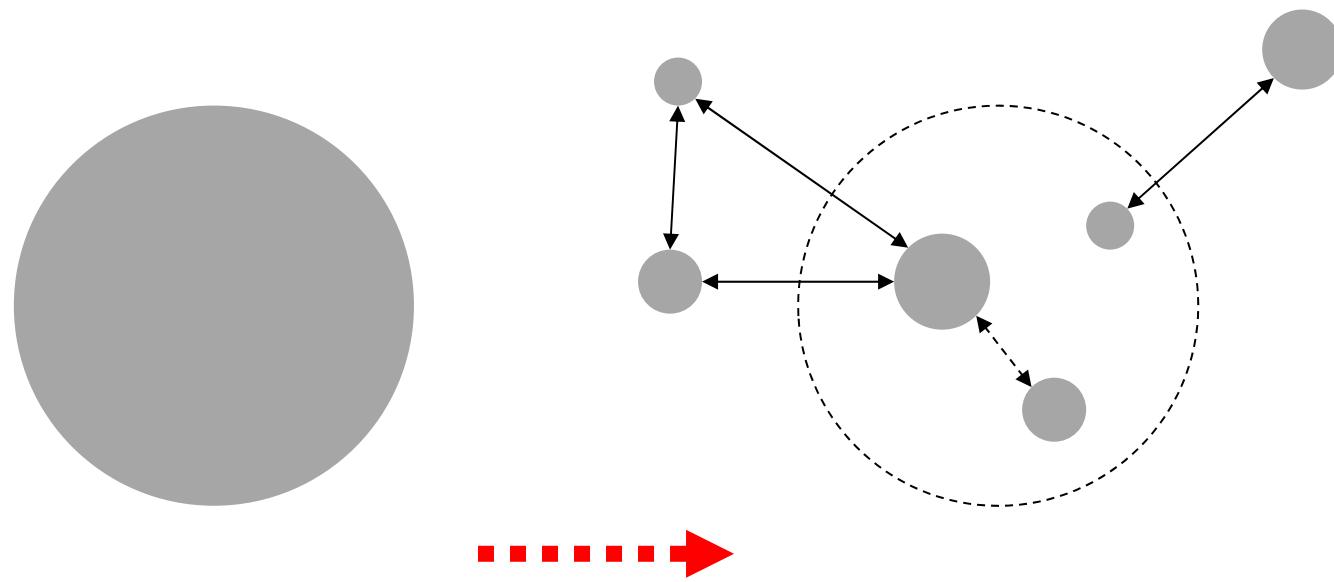


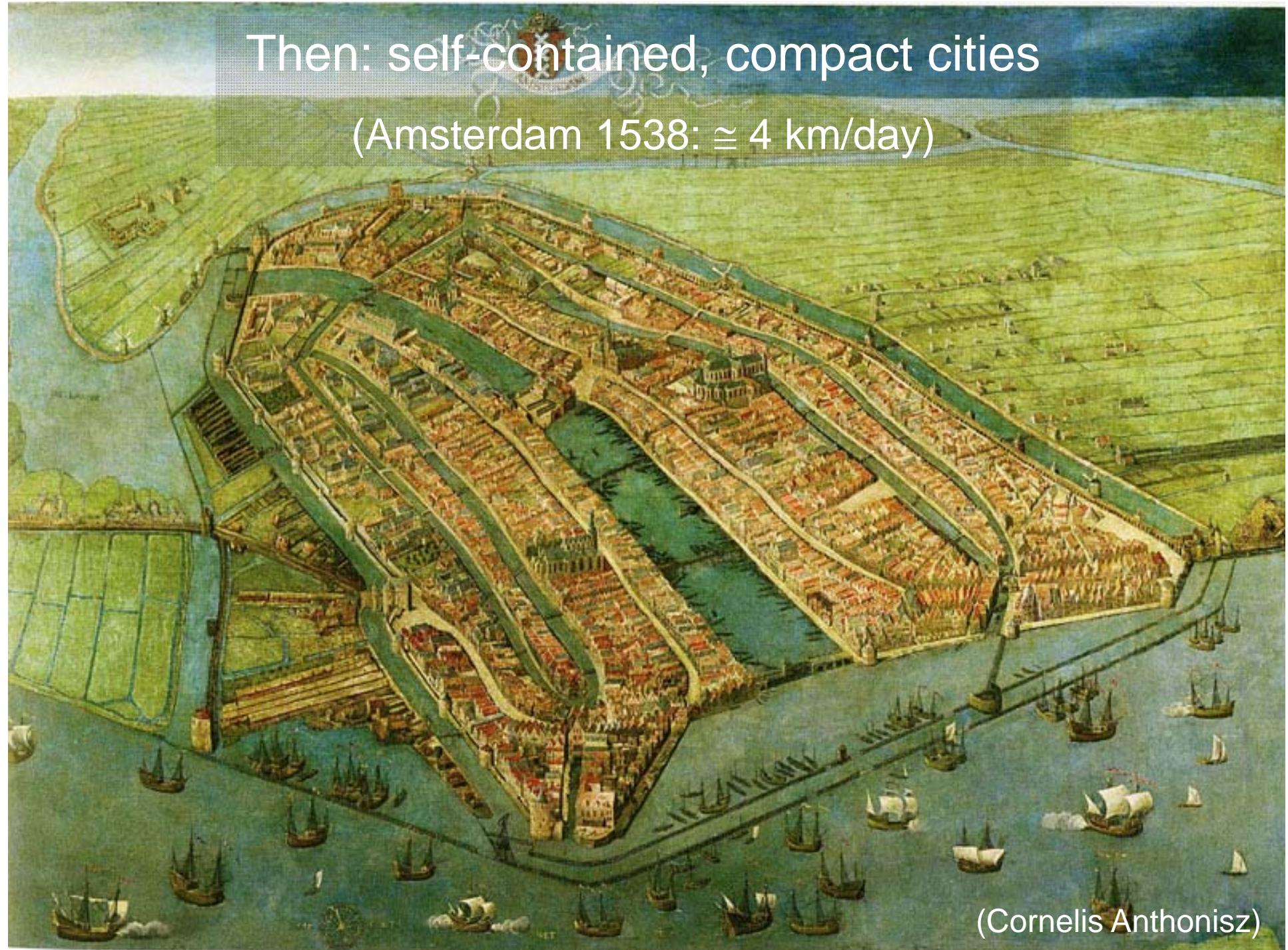
(MUST)

# A mobile society: multi-sited production processes, held together by mobility



# Cities: from self-contained and compact to borderless and networked





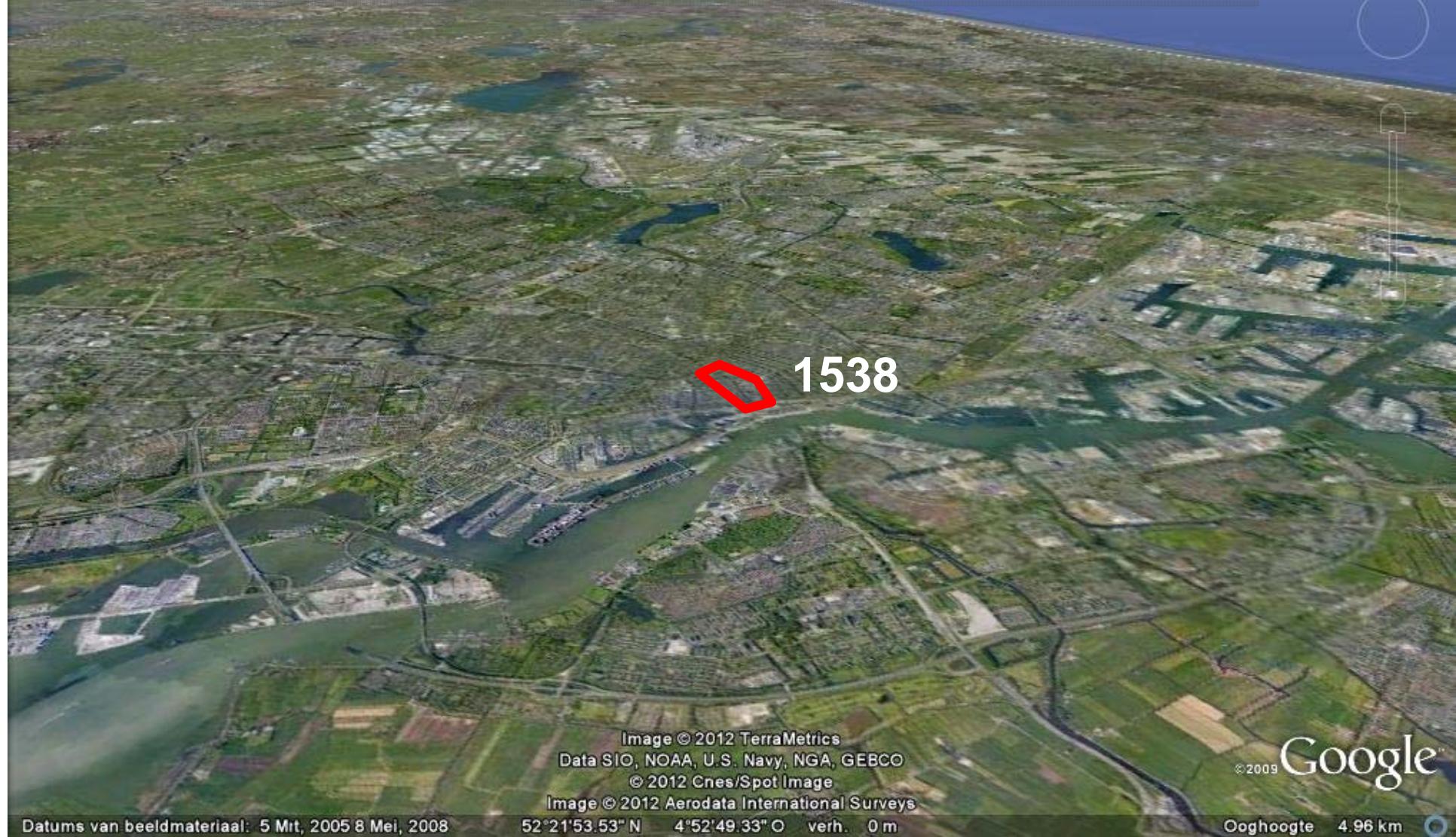
Then: self-contained, compact cities

(Amsterdam 1538:  $\approx 4$  km/day)

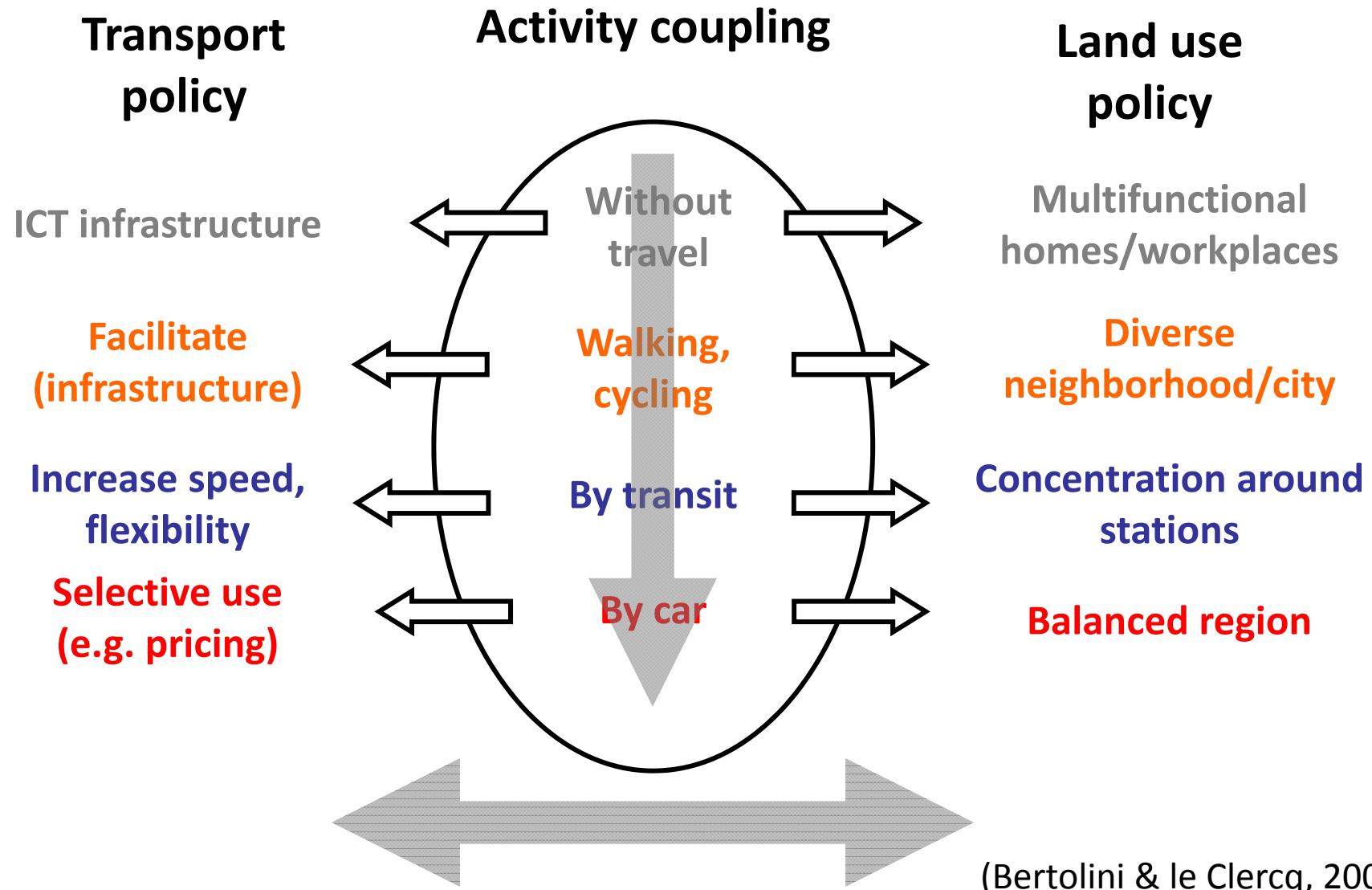
(Cornelis Anthonisz)

Now: borderless, networked cities

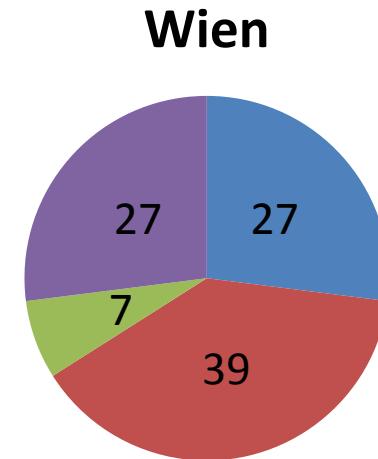
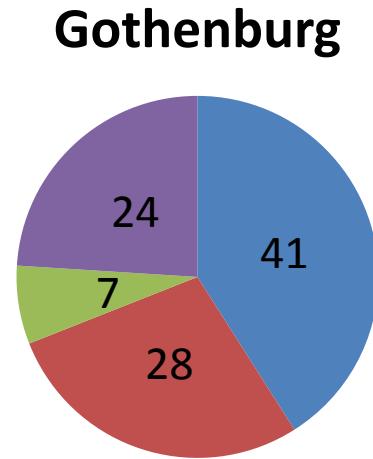
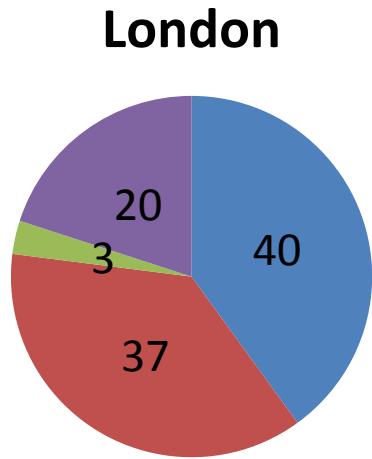
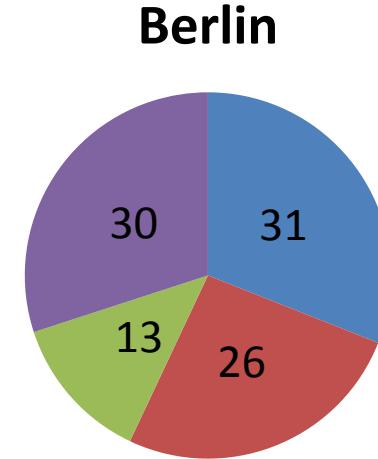
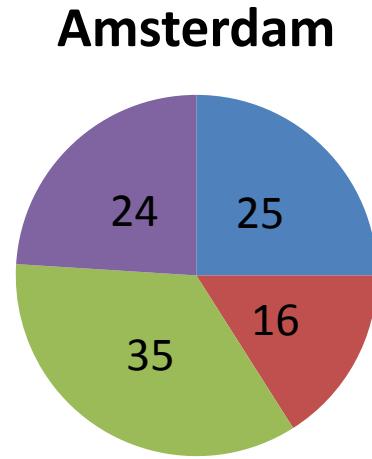
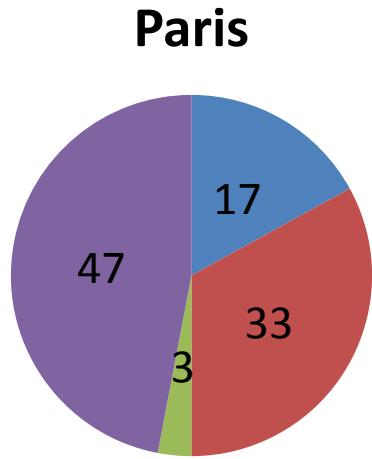
(Amsterdam today:  $\approx 35$  km/day)



# Shaping conditions for a different modal split



# Learning about conditions for walking, cycling and PT

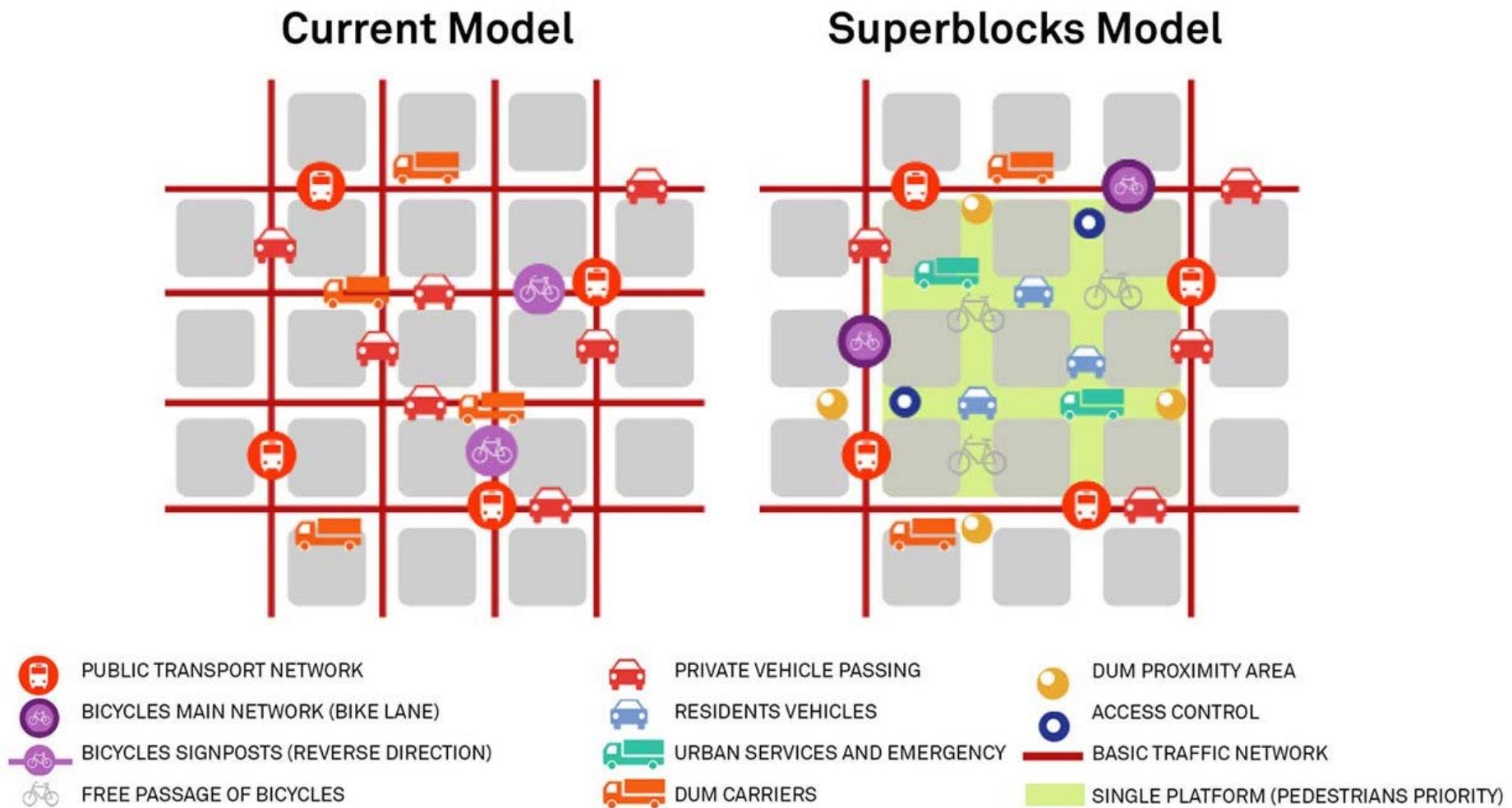


■ Car ■ PT ■ Bike ■ Walk

(EPOMM, OIS)

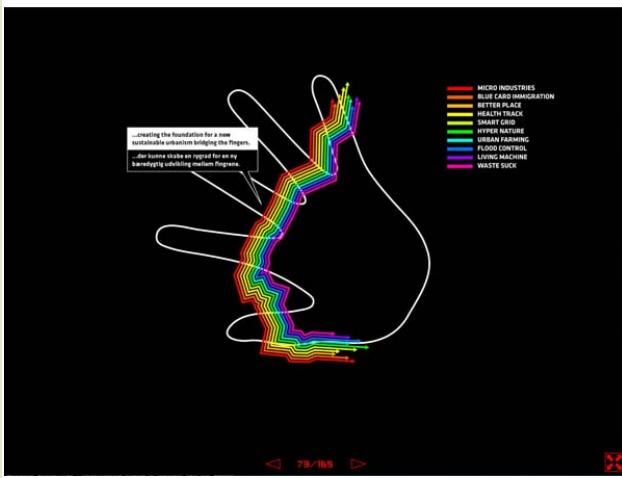
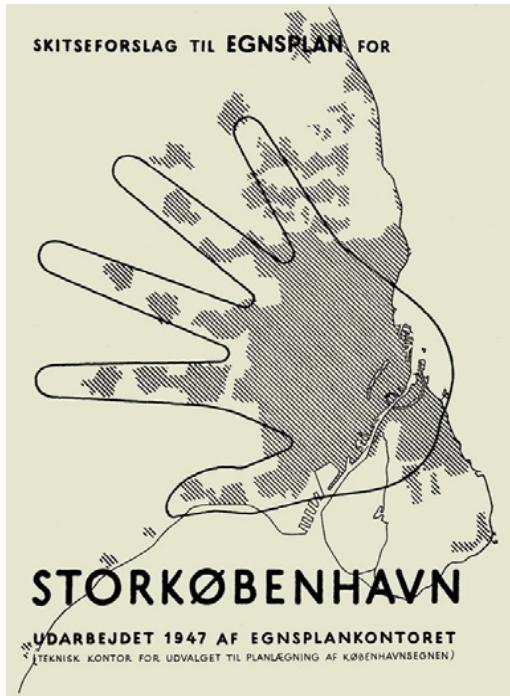
Shaping conditions for walking and cycling: a different street hierarchy

# Barcelona: ‘superblocks’



Shaping conditions for public transport  
use: ‘transit oriented development’

# Copenhagen: ‘transit oriented development’ 1947-2078



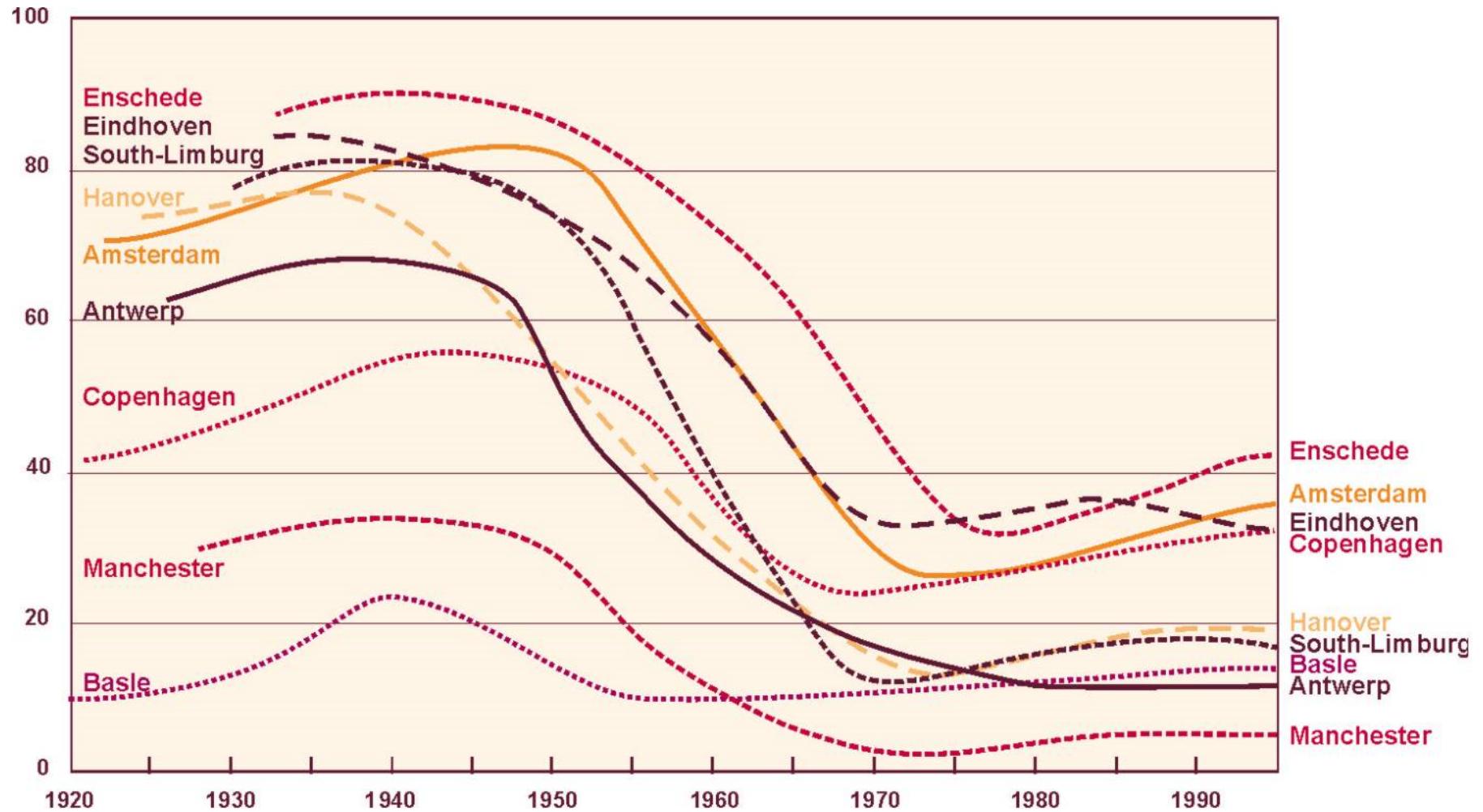
Shaping conditions for *selective* car  
use: the car as a service

# Bremen, Hamburg, Munich: ‘mobility stations’



**Is such a change possible?  
[VOTE = 1.YES; 2.NO]**

# Overcoming resistance to change-1: learning from the past



Share of cycling in all trips in selected European cities, 1920-1995  
(Bruheze & Veraart, 1999)

# Overcoming resistance to change-2: challenging the future

The Boring Company | Tunnels

# The future?



▶ ▶ 🔊 0:06 / 1:09





# The future?

(RUHR European Cultural Capital)

# Overcoming resistance to change-3: engaging with the present

# Gent: living streets

LEEFSTRAAT

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- [Home](#)
- [Over het experiment](#)
- [De Leefstraten](#)
- [Onze partners](#)
- [Publicaties](#)
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STEUN  
DIT INITIATIEF VIA  
**CROWDFUNDING**

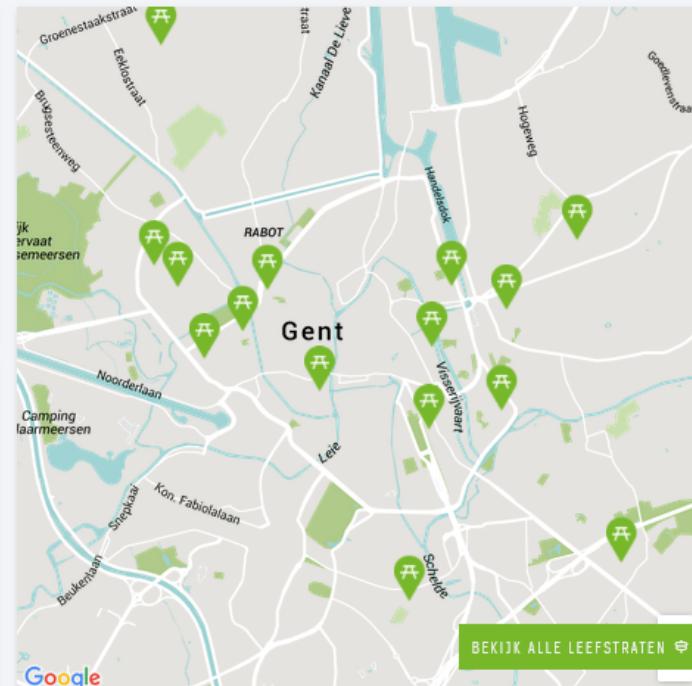
crowdfunding.GENT



SCHRIJF JE IN OP ONZE  
NIEUWSBRIEF

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**SCHRIJF IN**



<http://www.leefstraat.be/>



So, let's do it!