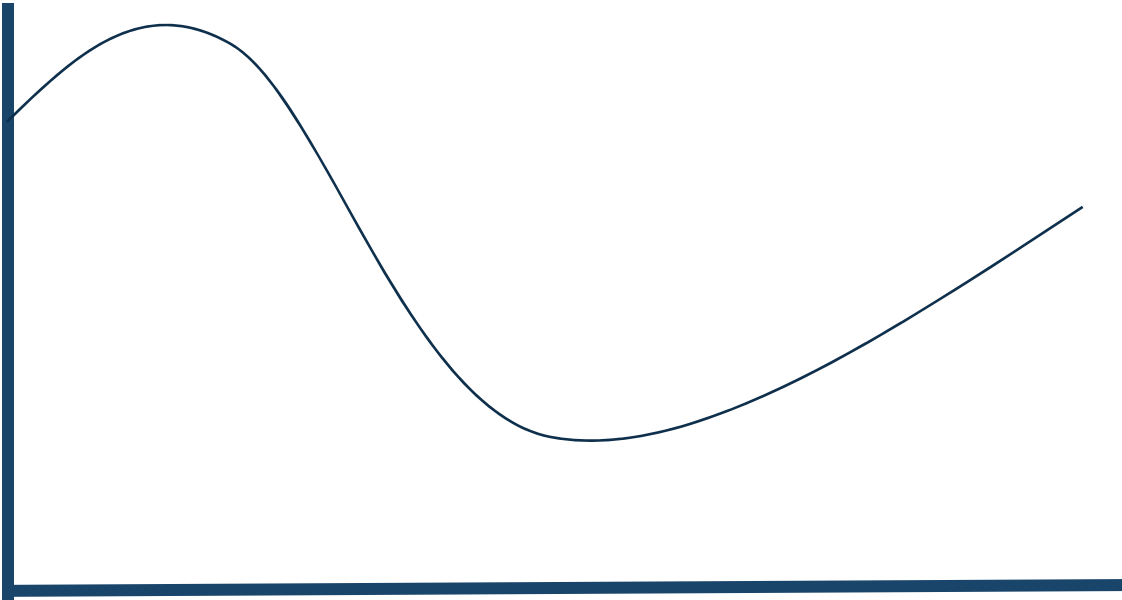




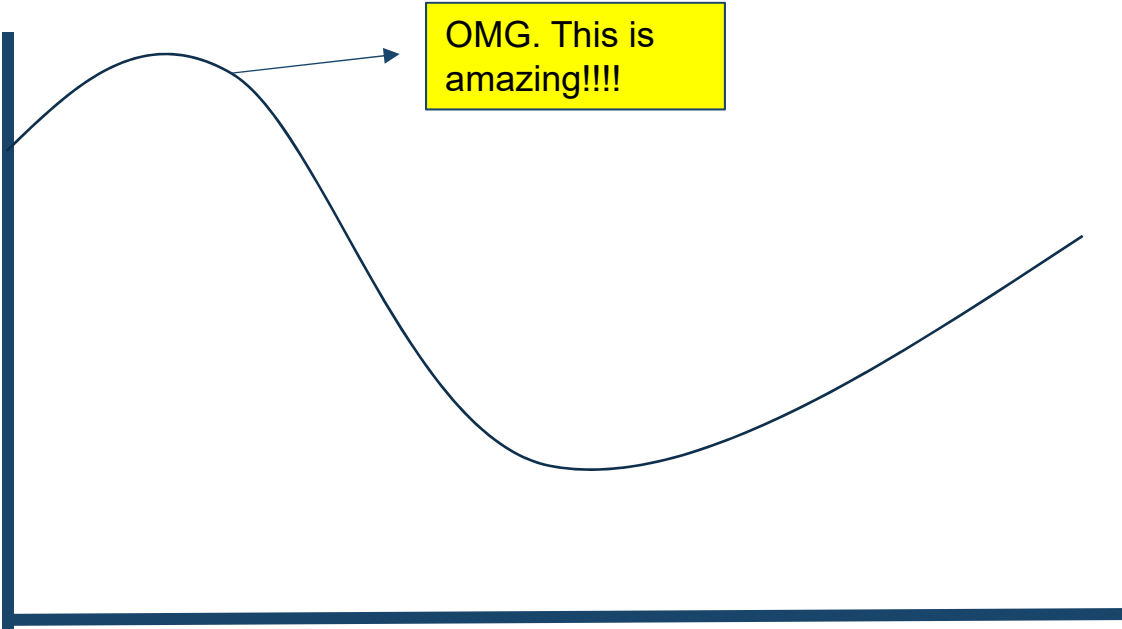
Getting confused at a higher level

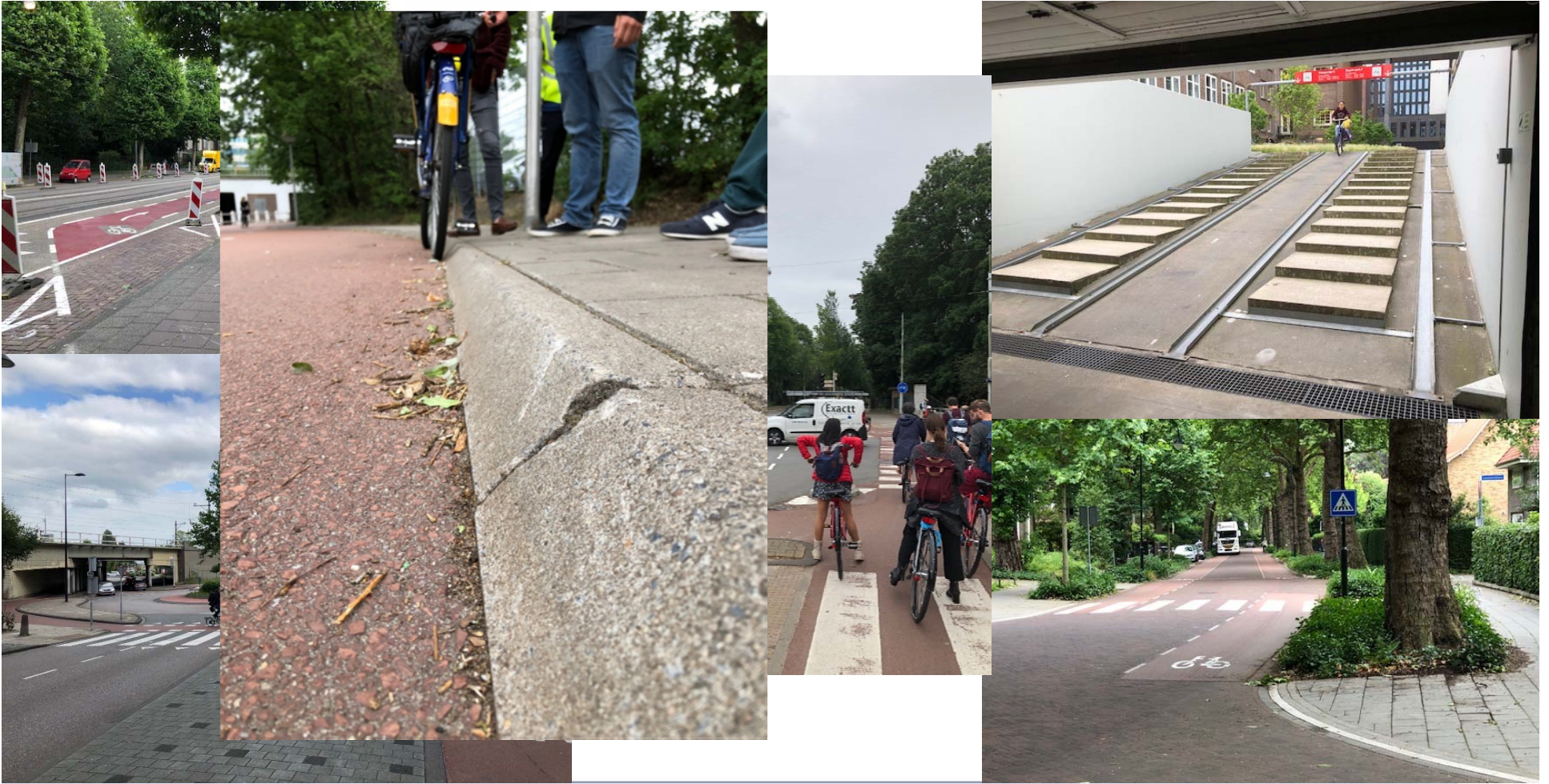
Urban mobility lessons from summer school
in the Netherlands

Excitement graph

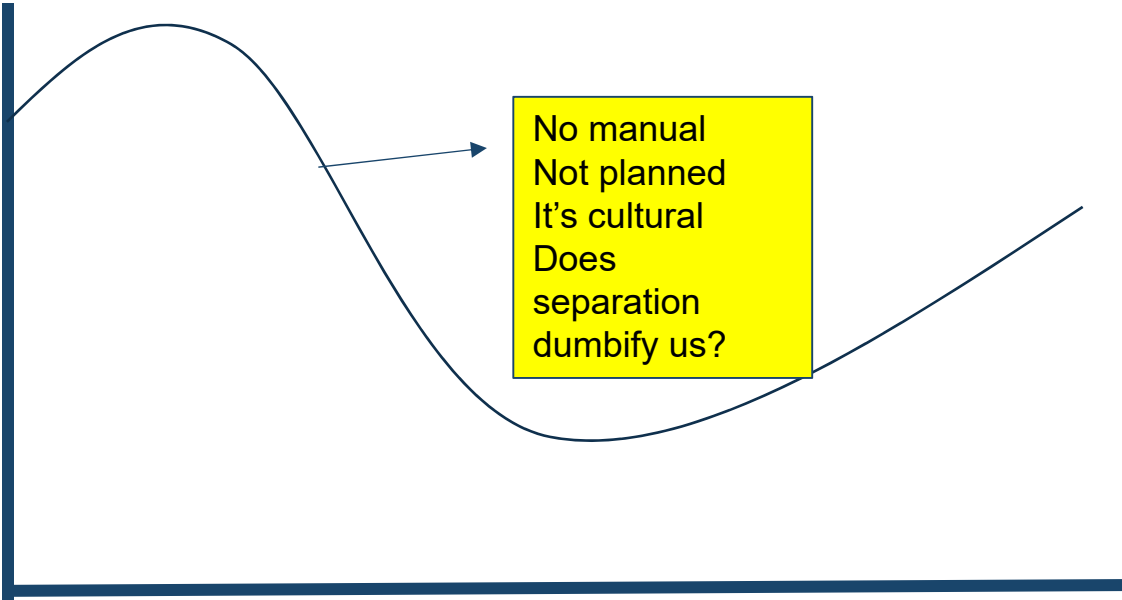


Excitement graph





Excitement graph









HUIZEN TE KOOP
234.163

 ECONOMISCHE GROEI IN
FILIPPIJNEN +5.20%

 BENZINE LITERPRIJS

 EU
11

Zo populair is
Nederlands bier in
het buitenland

Historisch
Grachteng
NIMBY's kl
een keer te

Ja en vooral nee

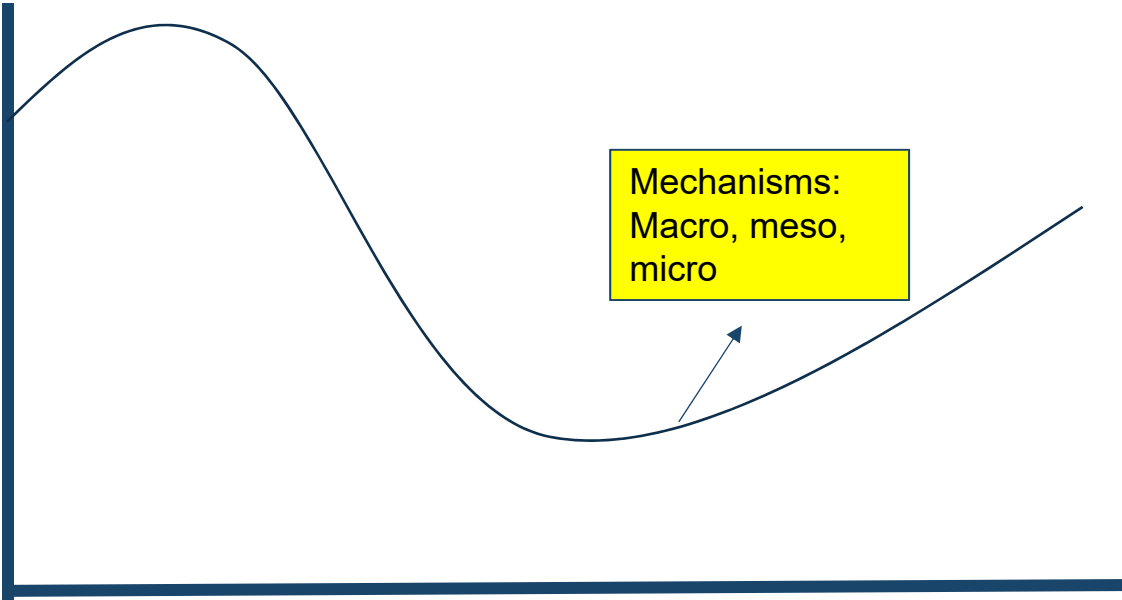
Bakfietsmoeders zijn de satan

Groot alarm in Het Parool ([Blendle](#)). Hip en hoogopgeleid neemt de stad over, kopt de stadskrant. Yup, bakfietsmoeder en hipster zijn het symbool van het kwaad. Het probleem: bepaalde pauperwijken in de hoofdstad knappen op en dat zou mensen die niet succesvol zijn de stad uit jagen. Een dergelijk proces staat onder maakbaaresamenlevingsfans bekend als 'gentrificatie'. En gentrificatie is slecht, want de charme van grote steden zouden de rafelranden van de stad moeten zijn, omdat daar 'interessante ontwikkelingen in alle vrijheid kunnen worden opgestart'. Dus heeft een stad 'rafelwijken' nodig, met een goedkope supermarkt en goedkope drogist en zonder 'taartenarchitect' en 'mineraalwaterspecialist'. Mwah. Het artikel maakt een totale karikatuur van Amsterdamse achterstandswijken waar toevallig een duur koffietentje en upmarket banketbakkerij is gevestigd. Wie door die wijken loopt weet beter en ziet vooral de dingen die zouden moeten worden gedaan om de buurt een stuk leefbaarder te maken. Verder is niet zoveel mis met 'gentrificatie', wijst recent onderzoek uit, en is er [niet zo gek veel bewijs](#) voor dat de oorspronkelijke buurtbewoners door dat fenomeen erop achteruit gaan of zelfs maar overwegen de wijk te verlaten. Ja, bakfietsmoeders vinden wij ook stom, maar het probleem voor Amsterdam is niet gentrificatie, maar eerder een gebrek daaraan.

J. van Kuppeveld | 14-02-15 | 18:37 | 29 reacties | [f](#) [1](#) [t](#) [19](#)



Excitement graph

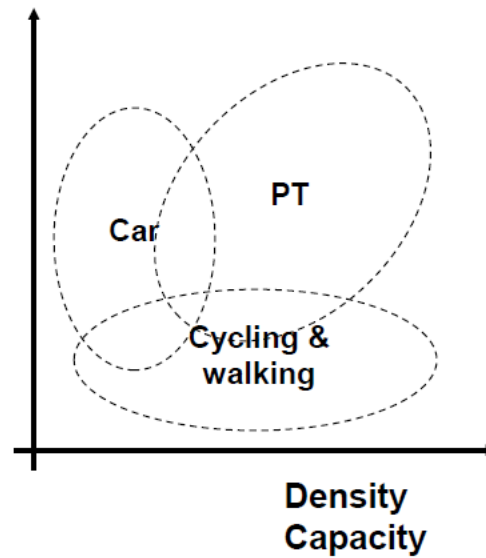


Land use

Acceptable travel time



Distance
Speed

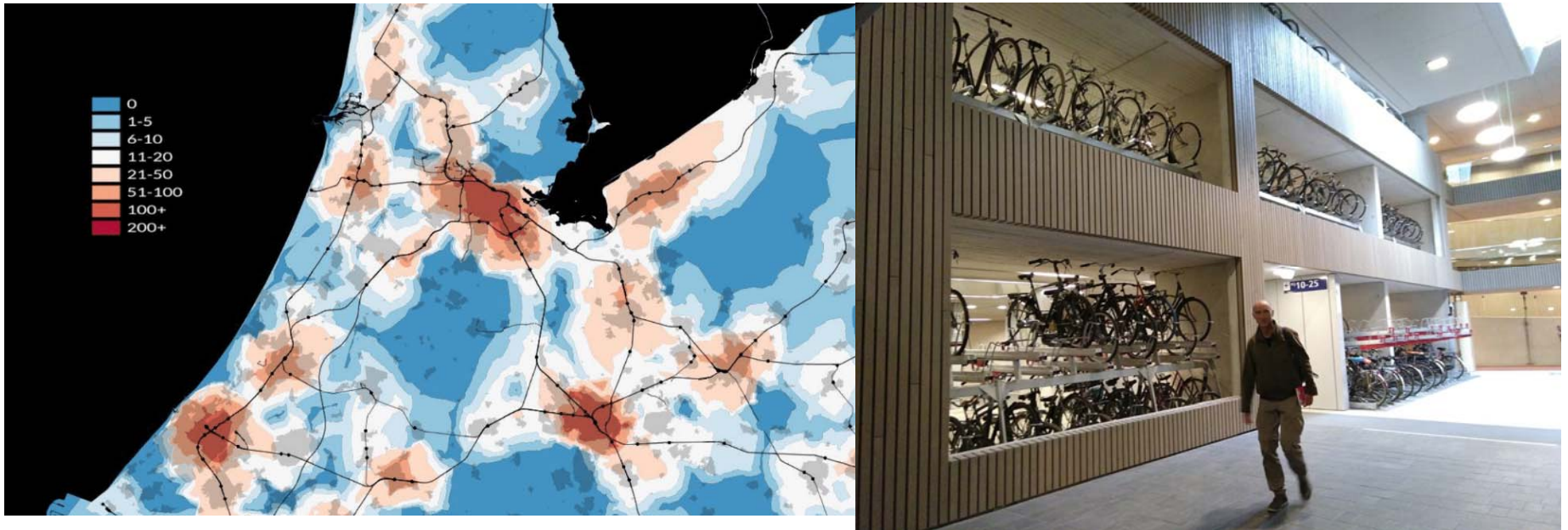


Mutual support



(Bertolini & le Clercq, 2003)

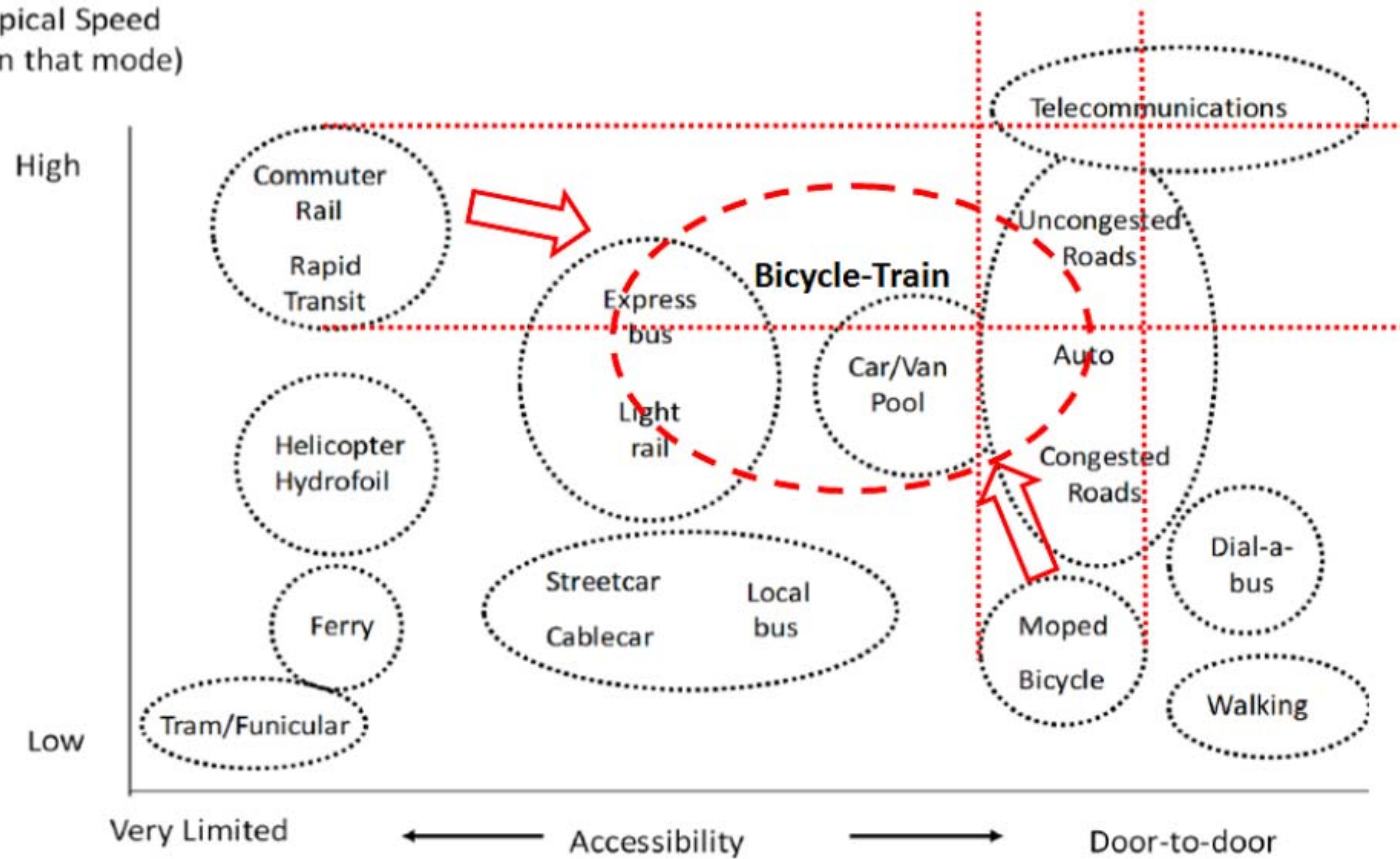
Introducing.....the bicycle train.



Number of departing trains within 20 mins of cycling (5km)

Source: Verdus 2015, www.fietscommunity.nl/projecten/bicycle-train-combination

Typical Speed
(on that mode)

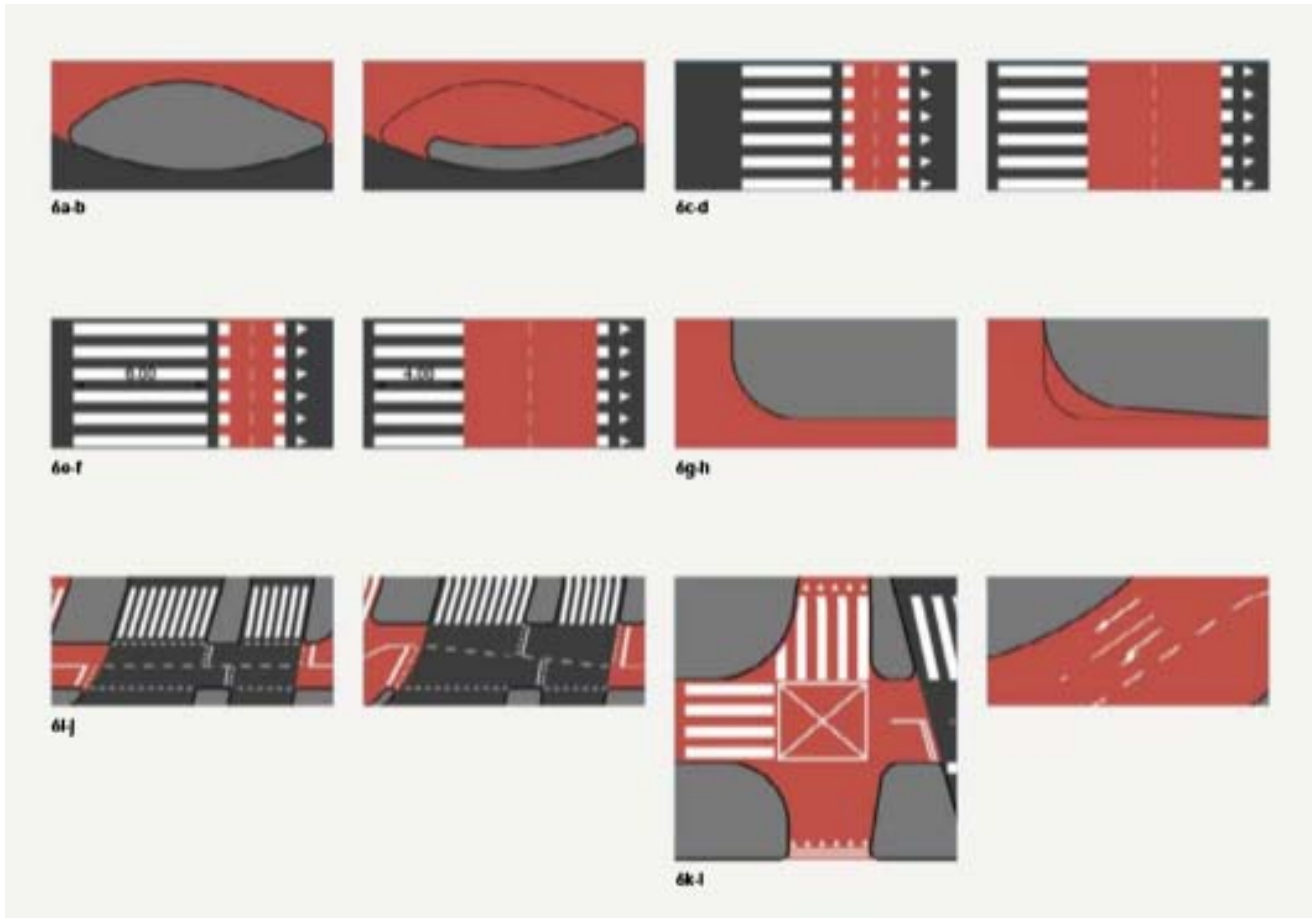




30 km/uur

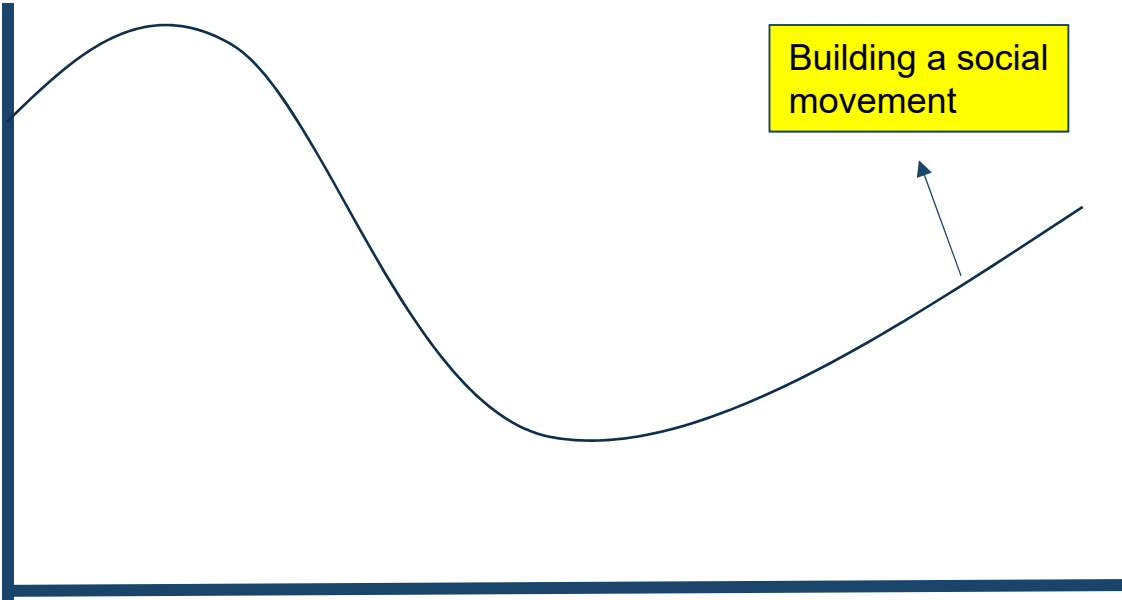


50 km/uur



Source: Plan
Amsterdam, Feb
2018, City of
Amsterdam

Excitement graph



Lesson 1: Optimise the human, marginalise the machine

From conflict to
social friction



NZ examples of mature negotiation skills



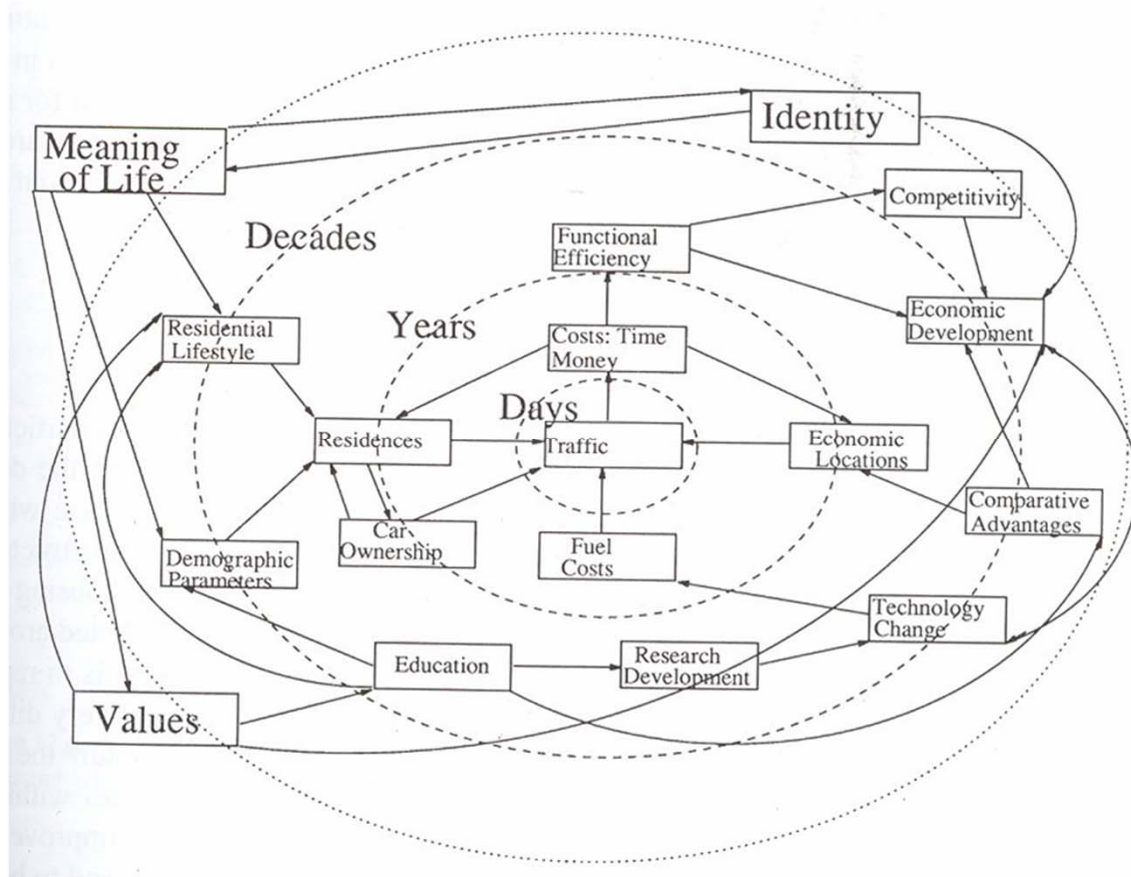
**“If driverless cars
are the answer, what
was the question?”**



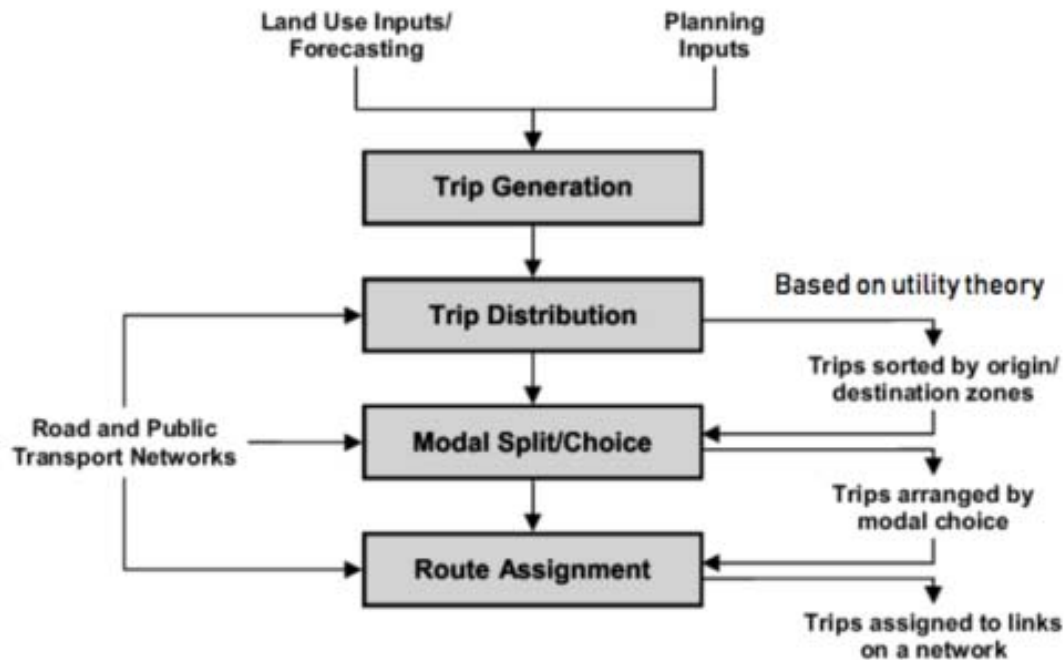
Lesson 2: All models are wrong, however, some are useful, George Box, 1978

Reframed: Time travel savings to meaningful mobility

(Allen, 1997)



4 step model



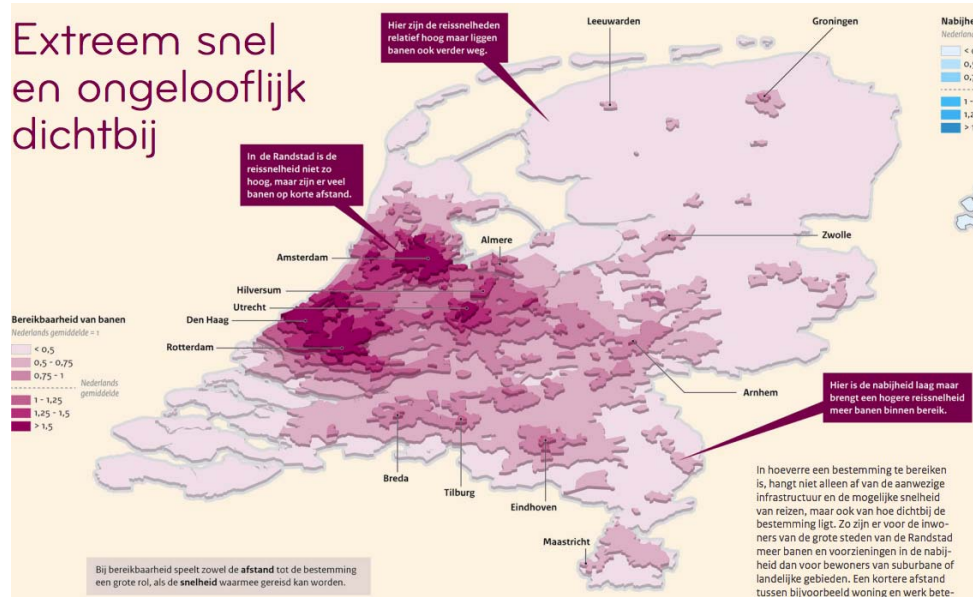
System Purpose:
mobility

System performance: Travel time savings

System feedback: Rational Utility Maximisers

System purpose: mobility?

Extreem snel en ongelooflijk dichtbij

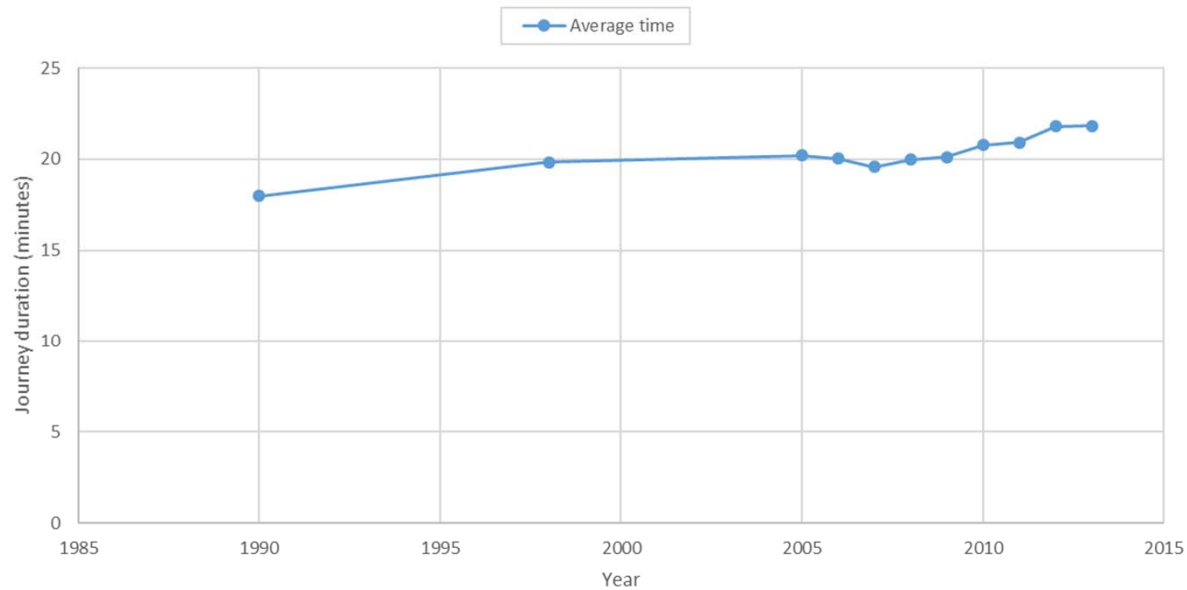


System purpose:

- **Public space?**
- **Health?**
- **Happiness?**



Journey to work duration time series



Notes:

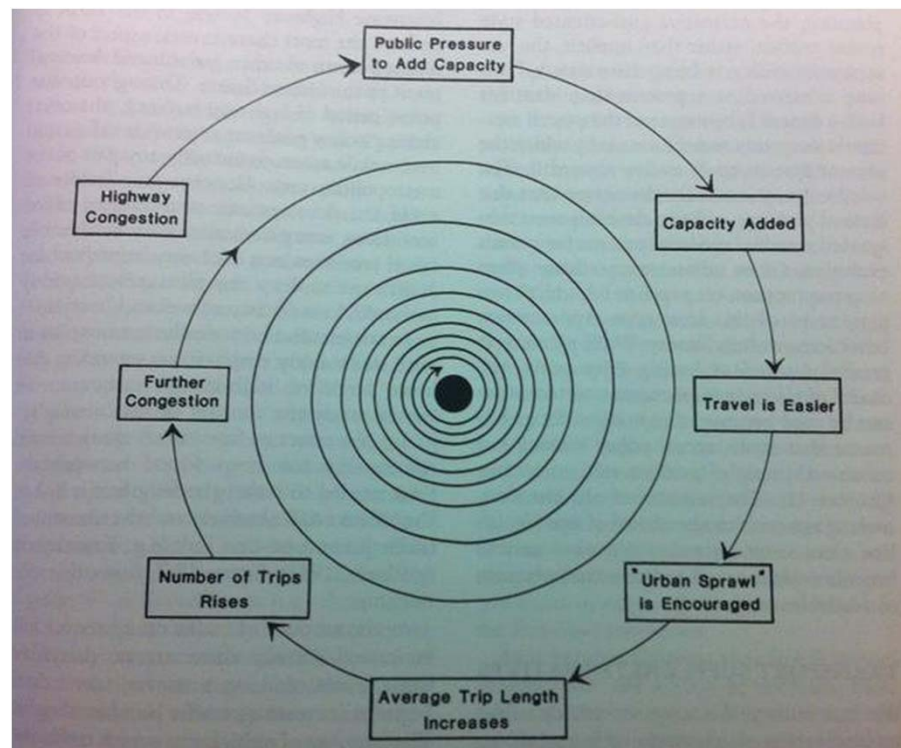
Data from New Zealand Household Travel Survey

After 2004 data points are based on the average of 3 years of data per point.

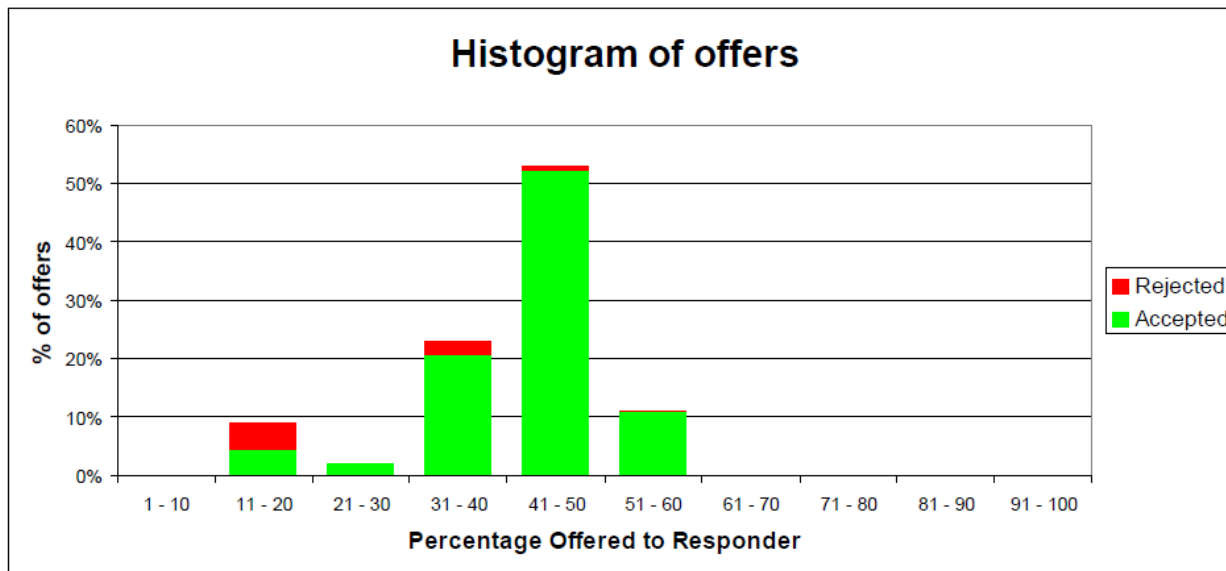
Travel is for full-time workers (aged 16 and over) travel to main job from home (without intermediate stops other than change mode), for journeys commencing between 6am and 9.30am

**System
Performance: Travel
time savings?**

What's in and what's out of a model?



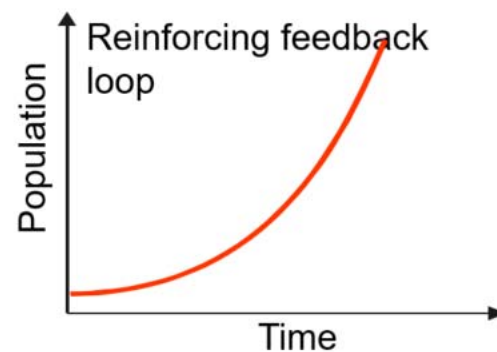
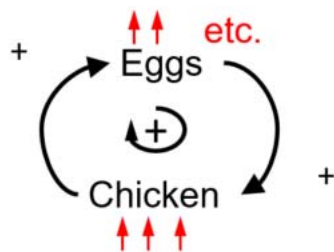
Empirical Results (Forsythe et al, 1994)*



**System Feedback:
Rational Utility
Maximisers?**

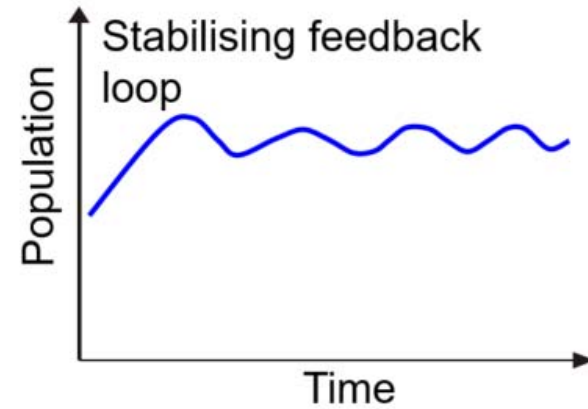
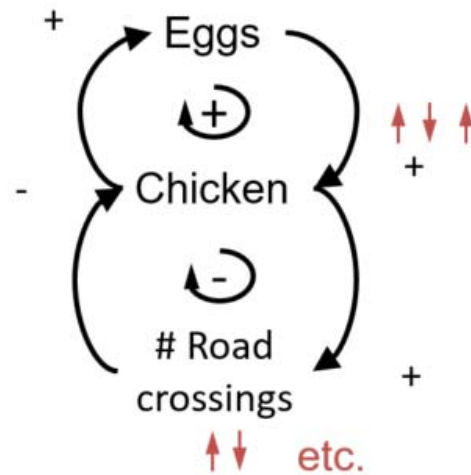
An alternative approach - system dynamics models

- A simple example:

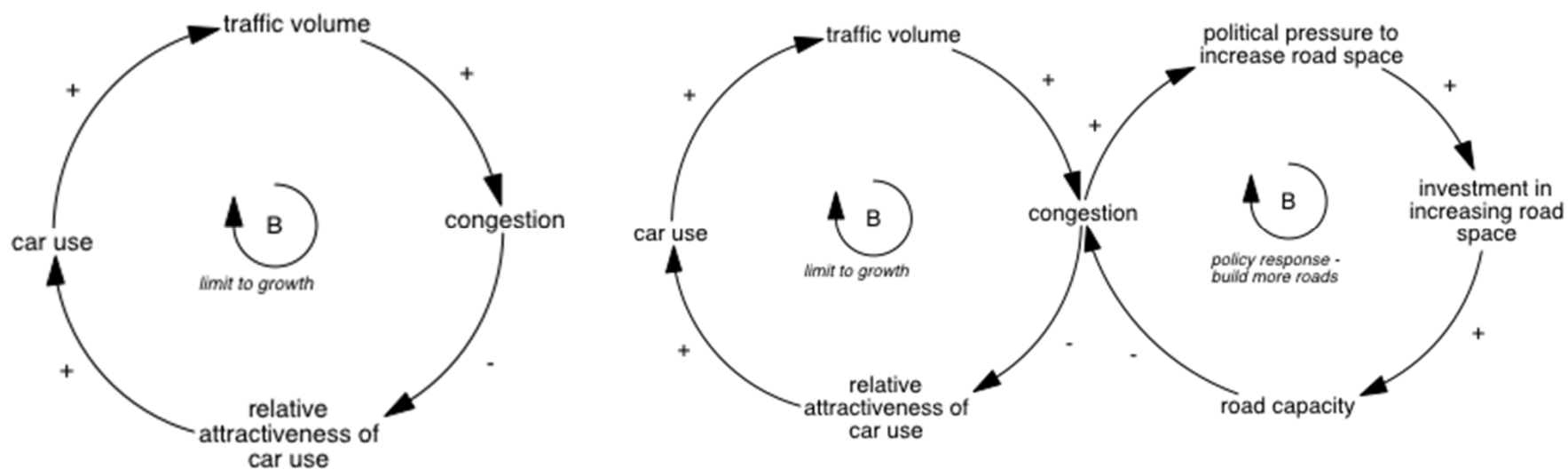


An alternative approach - system dynamics models

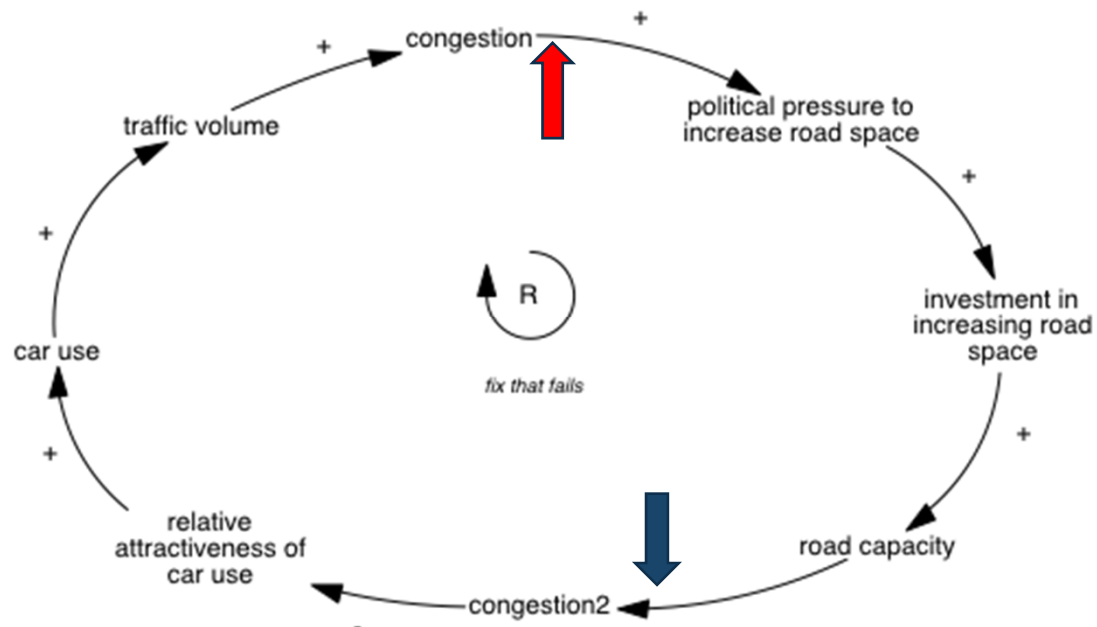
- A simple example:



Congestion relief by new road infrastructure



Congestion relief by new road infrastructure



Credit: Alex MacMillan

Lesson 3: Safety is cultural but slower speeds don't need to be

Reframed: Slow speeds to speed democracy



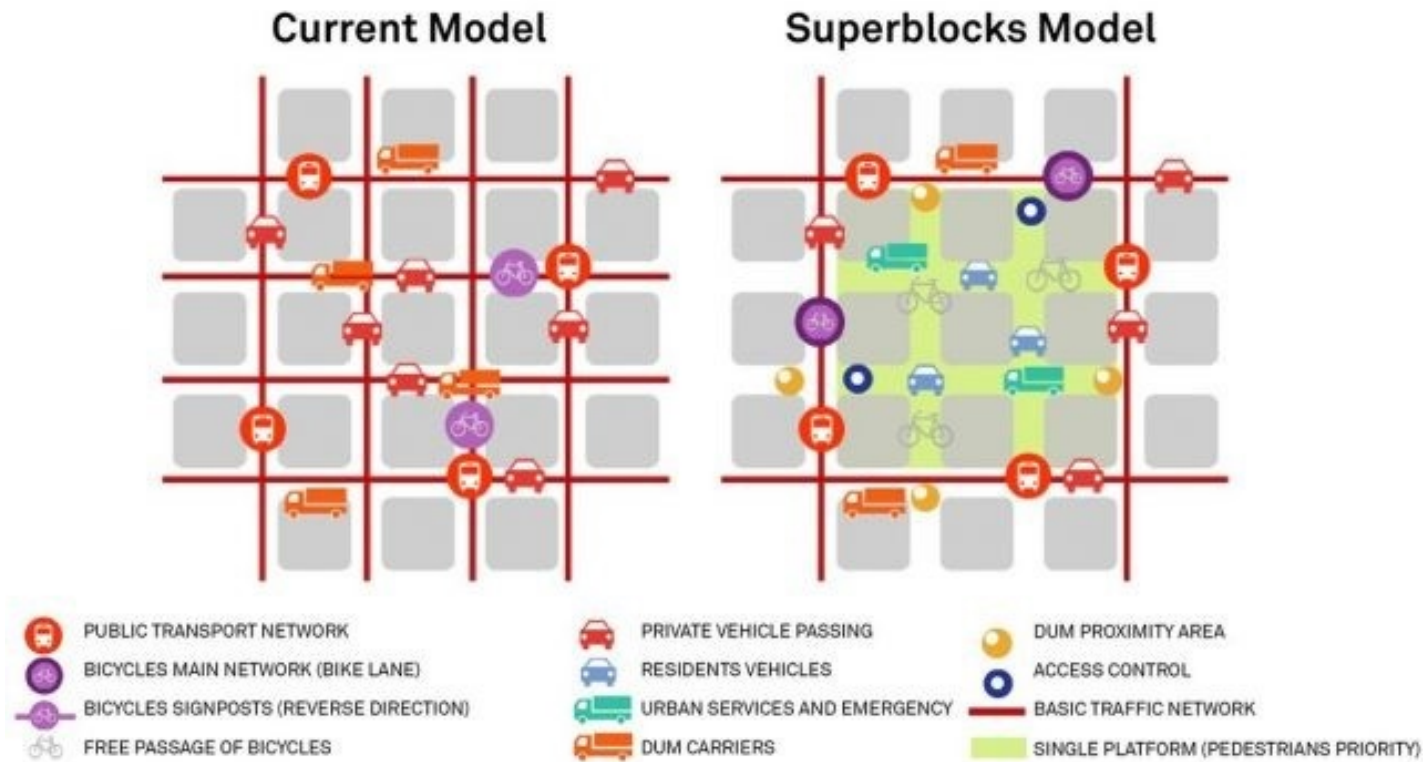
What's safe?

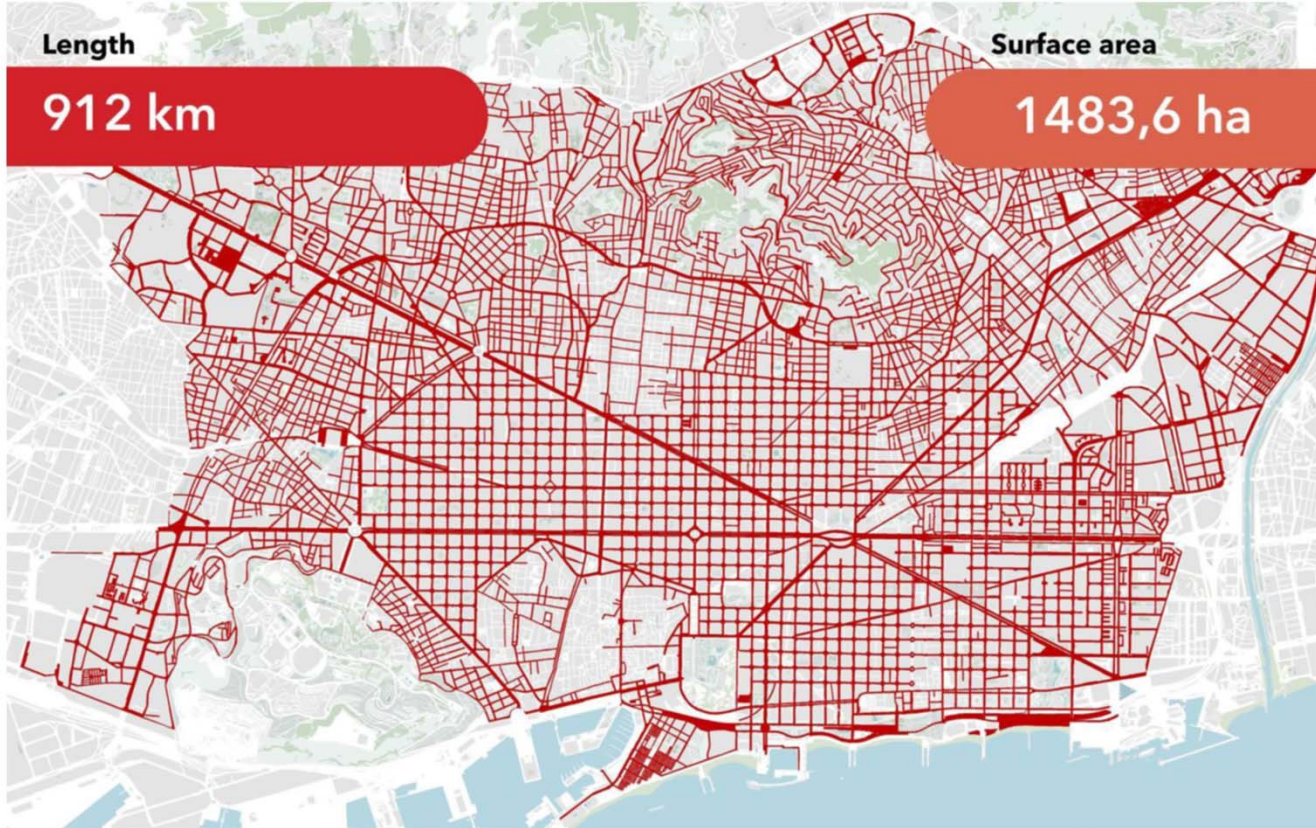


Vancouver All Ages and Abilities (AAA) Cycling Network



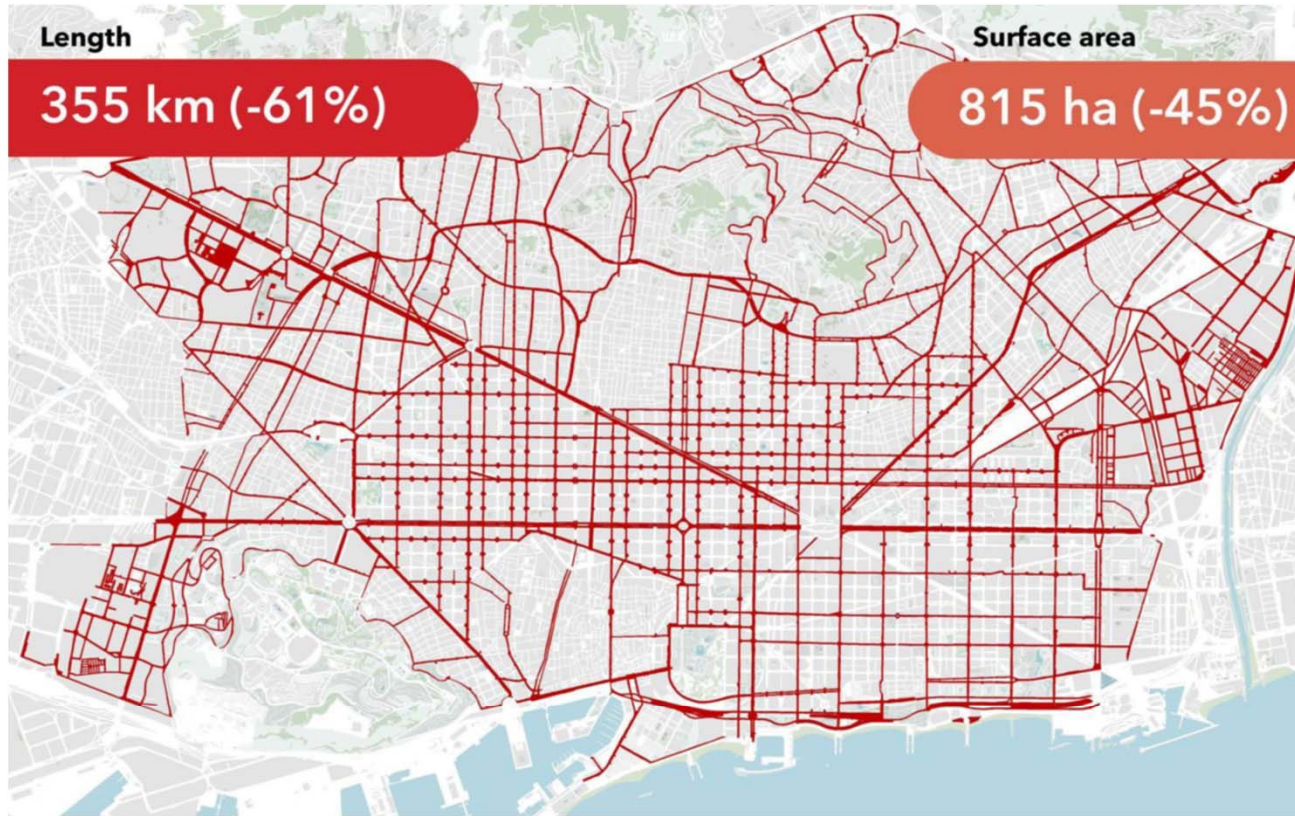
Barcelona 'superblocks'





Barcelona road network (streets and sidewalks)
CURRENT SITUATION





Barcelona road network (streets and sidewalks)
FUTURE SCENARIO WITH NEW SUPERBLOCKS





Lesson 4: Taming a hostile media

Reframed: From media beat up to becoming a reliable source of constructive news

- Define your opposition
- Sympathetic journalists
- Alternative network of reliable info
- Expand project appeal
- Reliable source of news
- Control your image
- **Be kind**
- **Imagine the story in pictures**
- **If there's no opposition, you're not changing anything**

Lesson 5: There is no recipe

Reframed: From technical problems to adaptive change



~~RAACISM~~



Bicycle Mayor programme

BYCS
@BYCS_org

Follow

Lotta Crok is first Junior Bicycle Mayor in the world! Congratulations Lotta! She will be working together with @KatelijneBoerma (Bicycle Mayor of Amsterdam) to make #cycling through Amsterdam even #safer, #better and more #fun for kids. More info coming: bycs.org



1:58 AM - 25 Jun 2018

3 Retweets 12 Likes



3 12



Multi-level perspective theory

B. Nykvist, L. Whitmarsh / *Technological Forecasting & Social Change* 75 (2008) 1373–1387

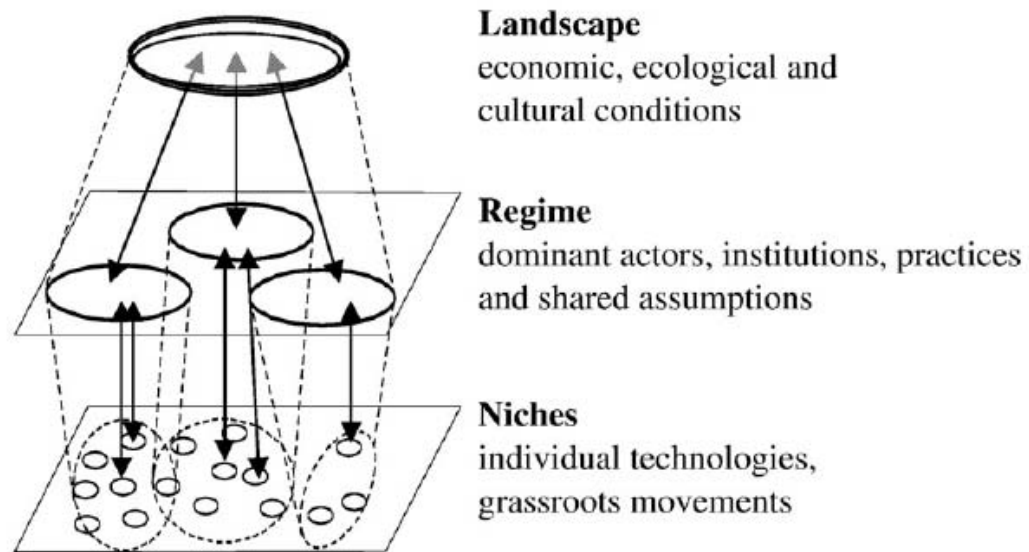
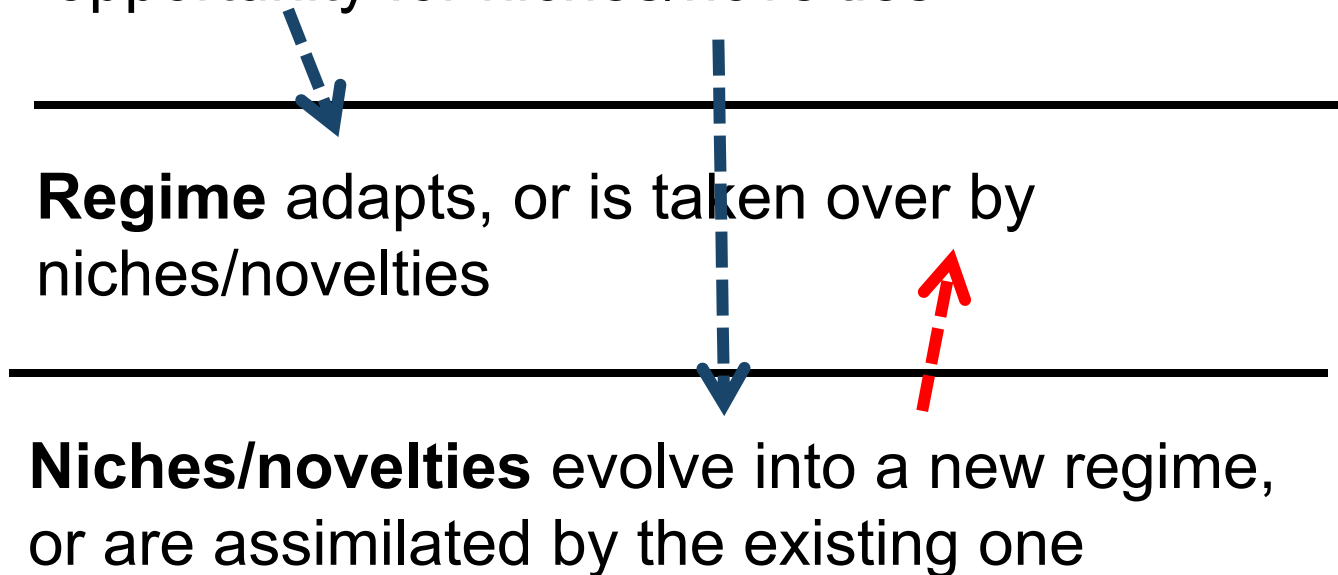


Fig. 1. The multi-level perspective (adopted from [99]).

Change in the **landscape** puts pressure on the regime, and creates a window of opportunity for niches/novelties



Bertolini, L, 2018

Go to [menti.com](https://www.menti.com)

Transition experiments – Final step in Transition Management process - Roorda et al, 2014

Short term actions through which alternative structures, culture and practices are explored:

- **Radical**
- **Challenge driven**
- **Feasible**
- **Strategic**
- **Communicating/mobilizing**

Thanks and acknowledgments

Engineering NZ,
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