Preferred citation style

Axhausen, K.W. (2007) Networked strangers in the neighbourhood: Empirical evidence from Switzerland and policy implications, presentation at the Department for Civil Engineering, Tokyo Institute of Technology, Tokyo, June 2007.

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Networked strangers in the neighbourhood: Empirical evidence from Switzerland and policy implications

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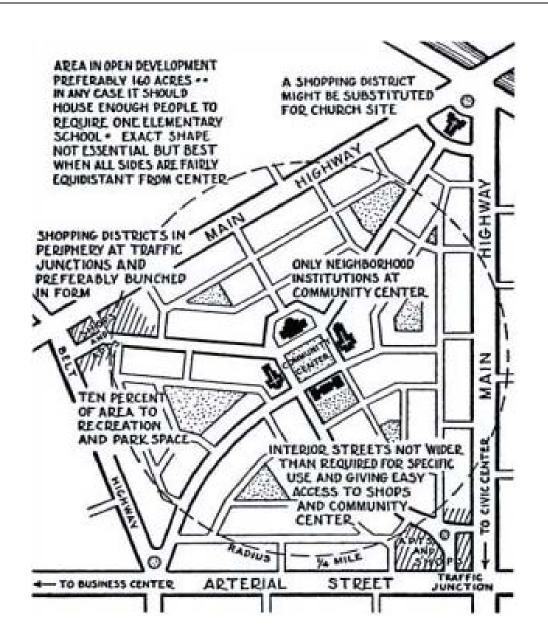




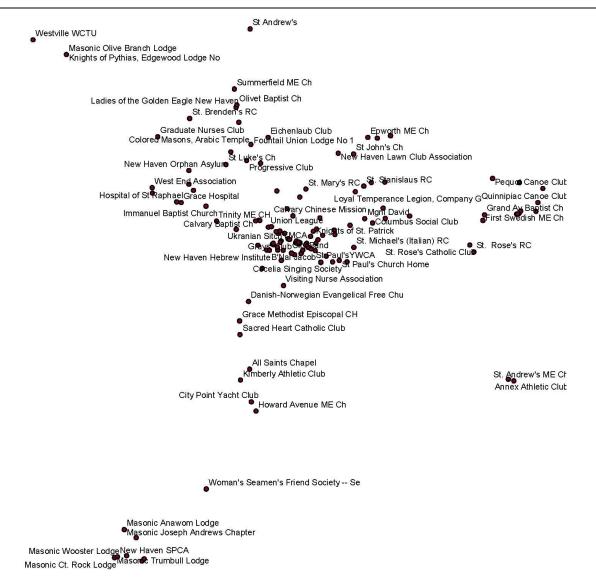
Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

June 2007

The planning fetish "neighbourhood", "community"

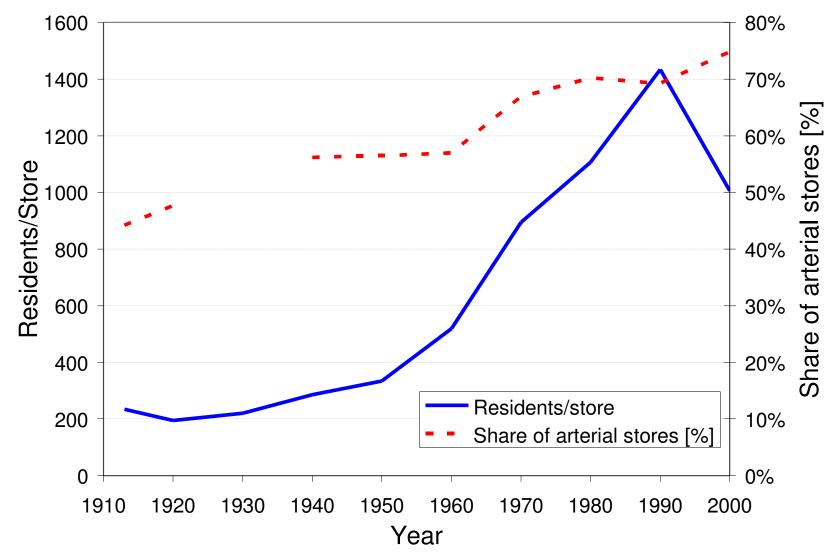


New Haven: 1913 density of churches and similar



Rae, 2003

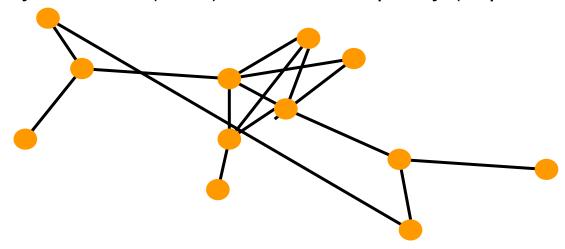
New Haven: Residents per retail store



Definition of social network

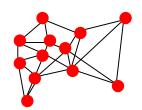
The topology of a social network describes

- Which person/firm (node) is linked to which other persons/firms
- By contacts (links) of a certain quality (impedance or cost)

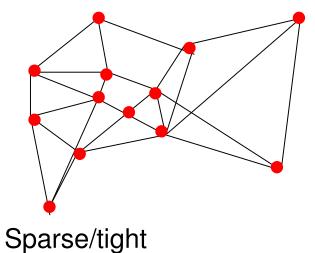


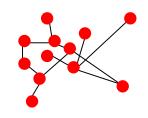
Closeness ~ 1/Impedance

Speaking about spatial density and social connectivity

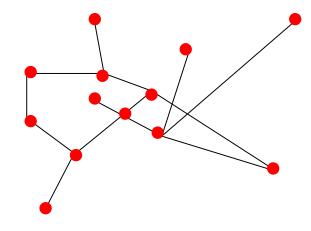


Dense/tight





Dense/loose



Sparse/loose

Reasons for dense/tight networks

Cost of contact:

- Generalised costs of travel
- Generalised costs of communication

Employee centralising technologies of production

Enforced community:

- Joint and devolved local tax responsibility
- (Past) attendance obligations to locally-based groups (e.g. church, school, military)
- (Official) neighbourhood committees

Social captial ... and social networks

Many approaches:

- Gains from a position at a structural whole of the total social network
- Gains from ascribed solidarities (generalised trust)
- Gains from joint experience and skill

Definition of (personal) social capital

Stock of joint abilities, shared histories, understandings and commitments enabling the

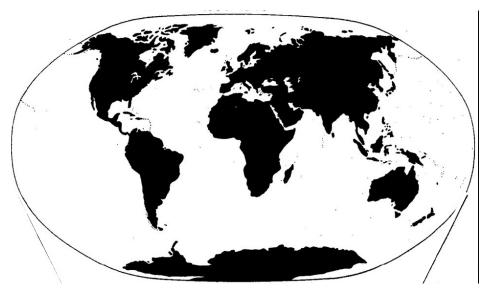
skilled performance

of joint activity, even at a distance

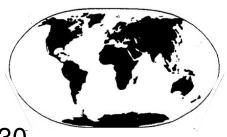
Assumptions

- The return on the social capital is above the average hedonic and/or monetary gain from joint activity
- Social capital needs refreshment through joint activity, in particular face-to-face meetings
- People do disinvest or invest
- One can draw on it in terms of "favours"
- Social capital does not imply trust
 (Trust: Confidence that a third party will keep my interest in mind and selflessly act on it)
- Social capital does not necessarily imply the spatial neighbourhood of the persons involved

Trend in travel time: World



Coach and sailing boat until 1840



Steam ship and locomotive, 1840 - 1930

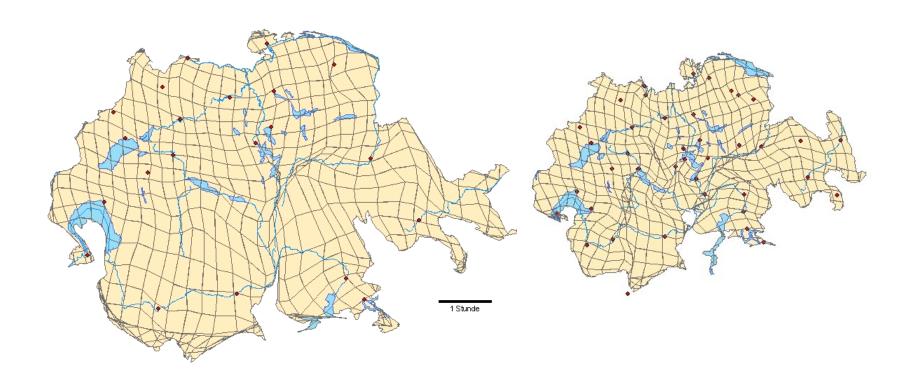
Propeller aircraft, 1930-1950



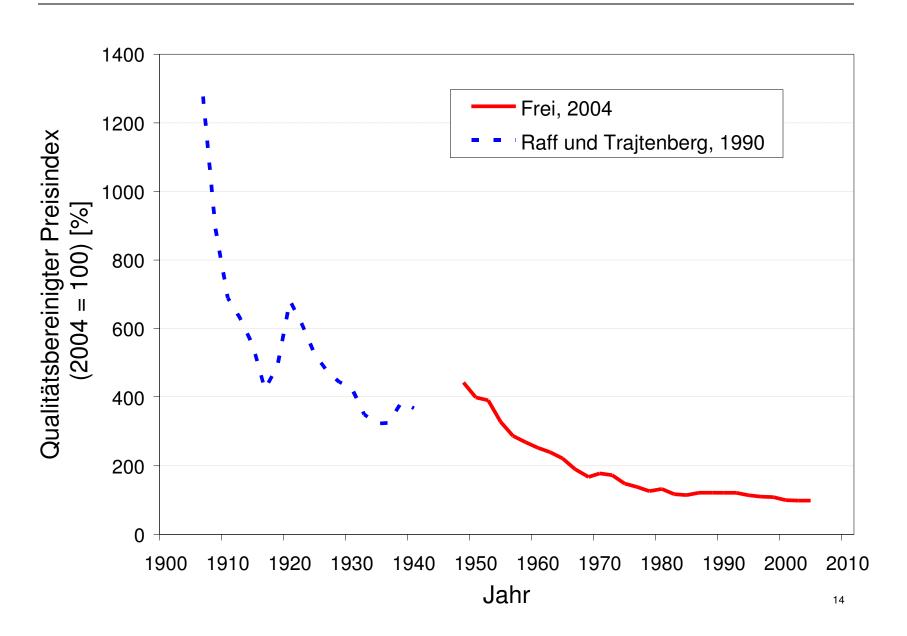
Jets, from 1950



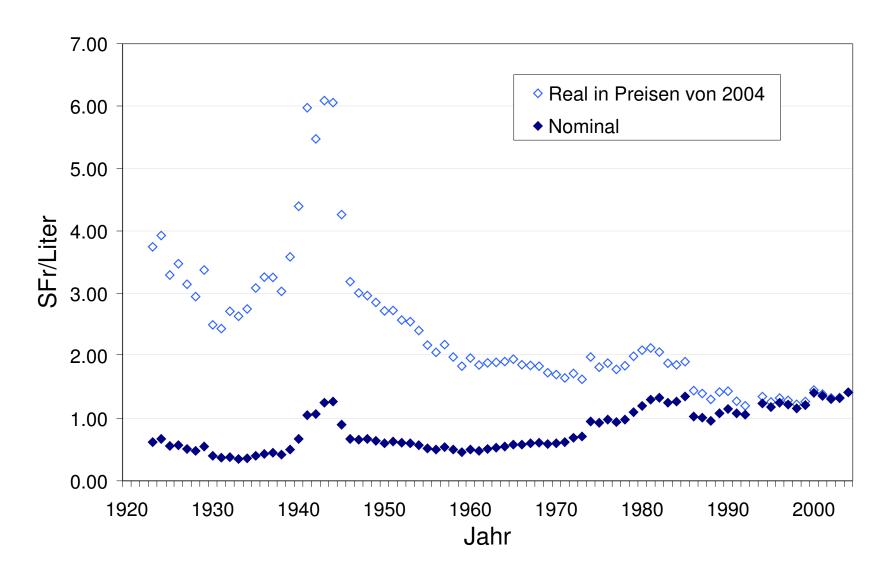
Trend in travel times: Switzerland (1950 and 2000)



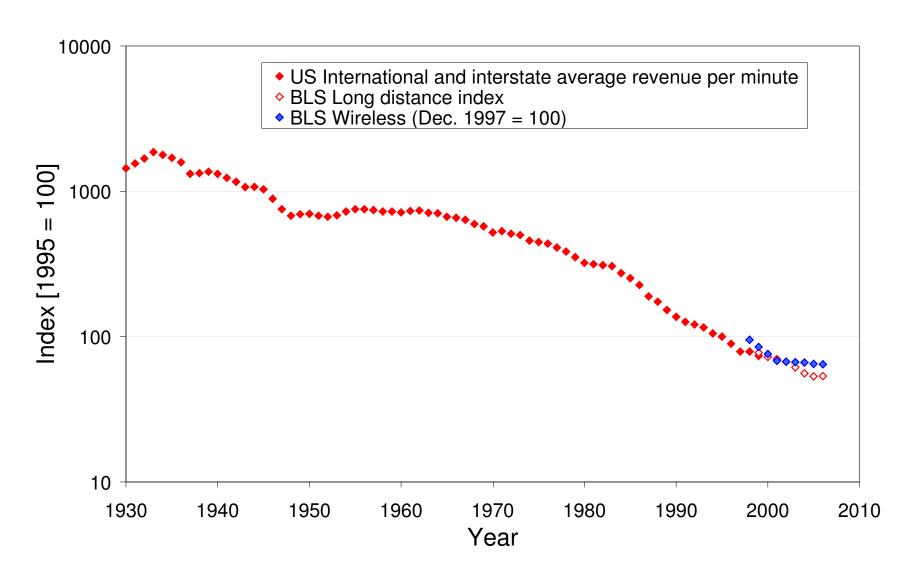
Trend of the quality-adjusted price of Swiss cars



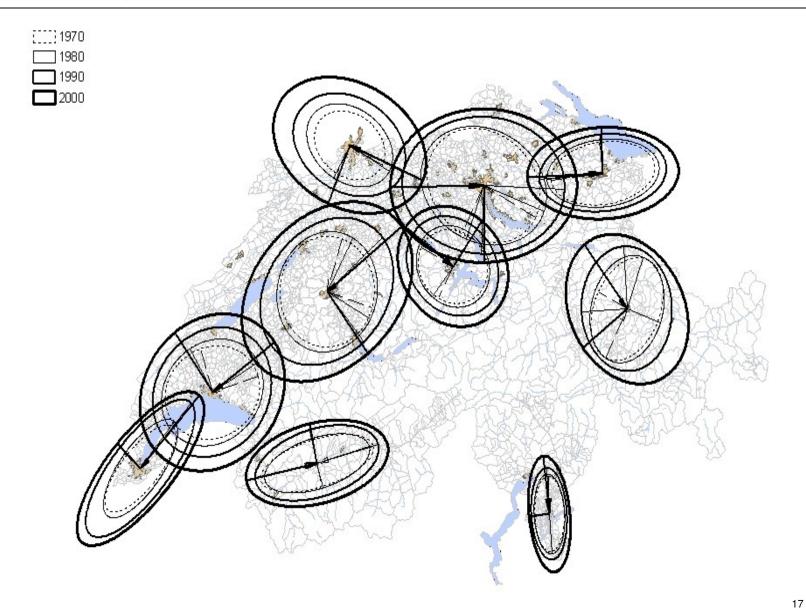
Trend of the gasoline price in Switzerland



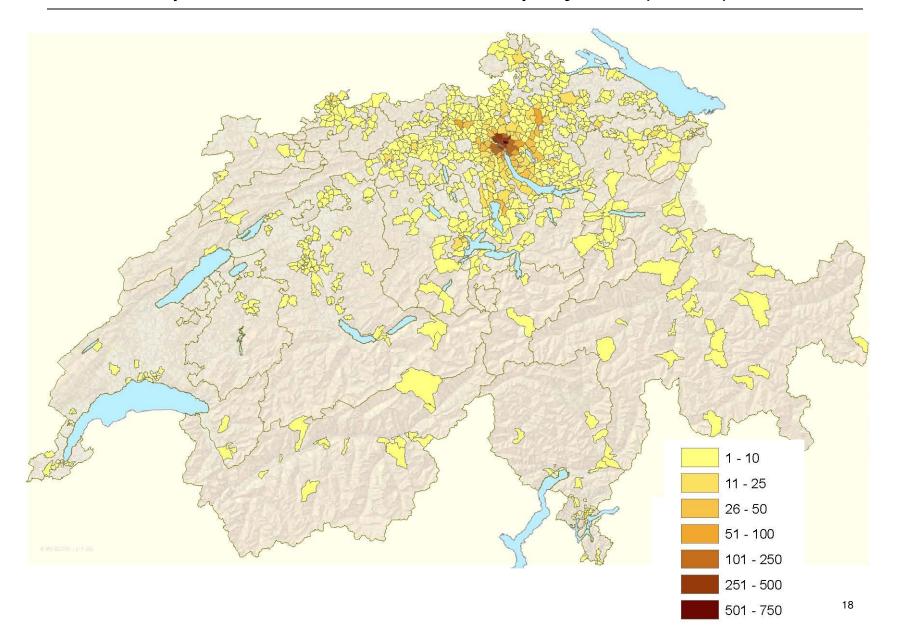
Trend of the price of US long-distance calls



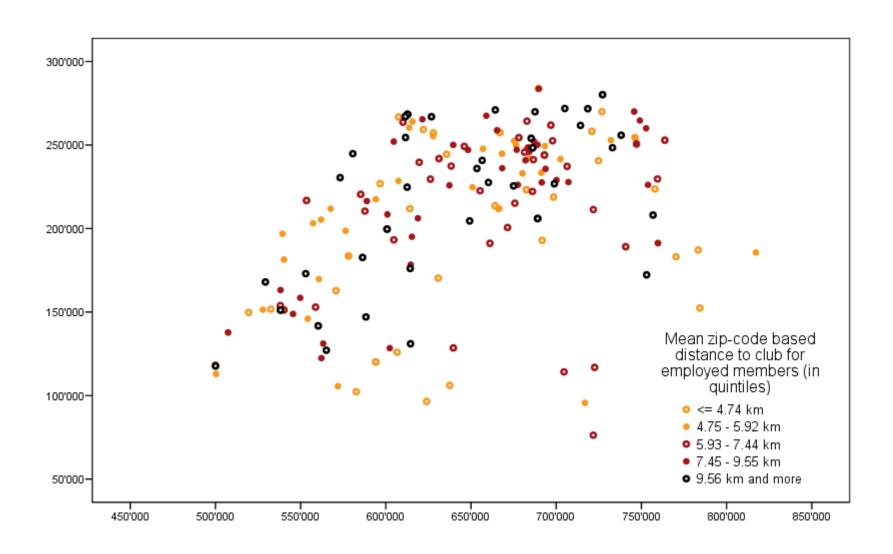
Current patterns: Swiss in-commuting catchment areas



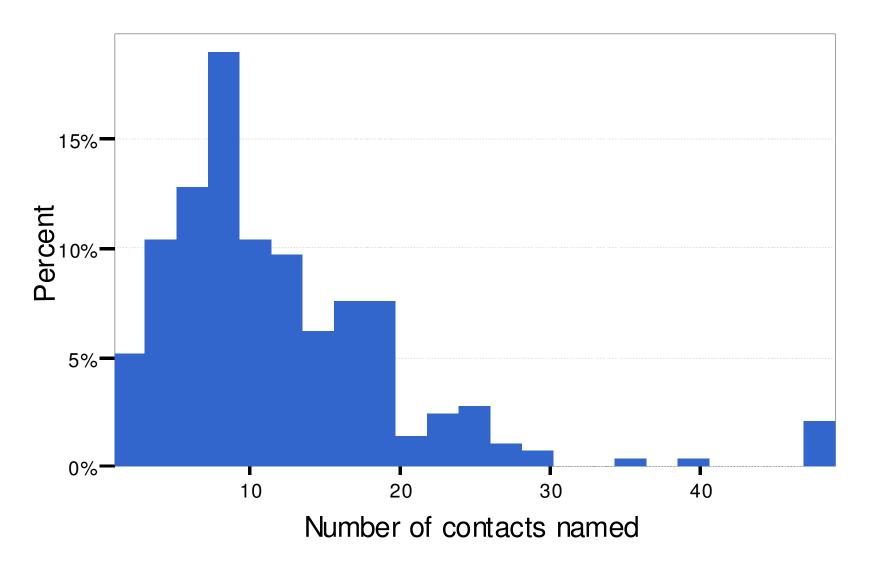
Current patterns: ETH Zürich employees (2006)



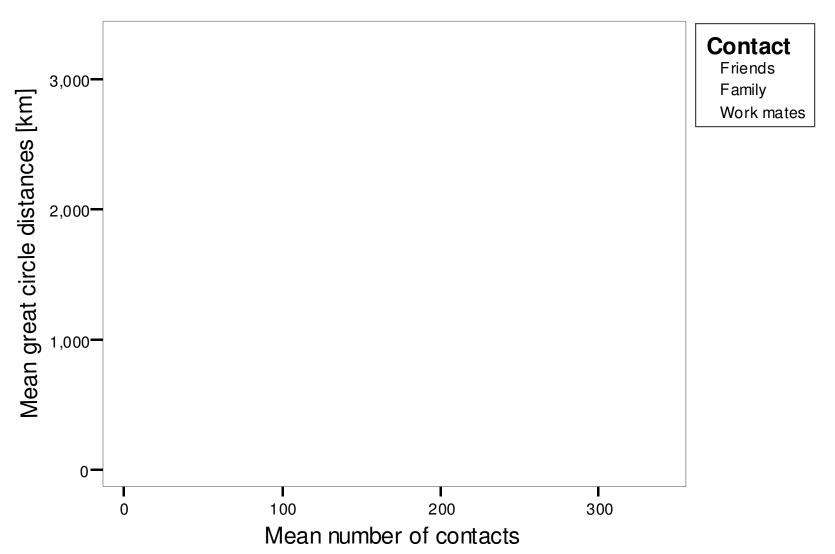
Current patterns: Weekly meeting of service clubs



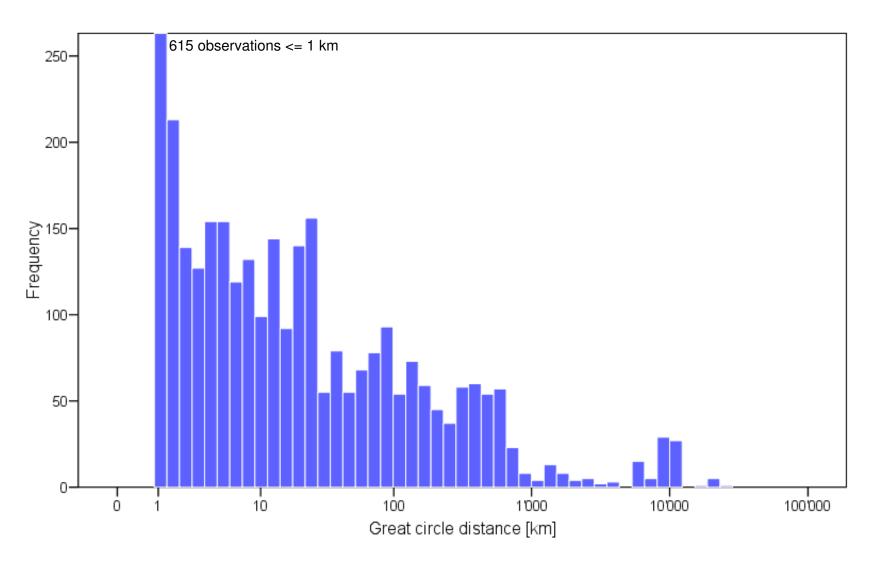
Number of contacts reported (289 Zürcher)



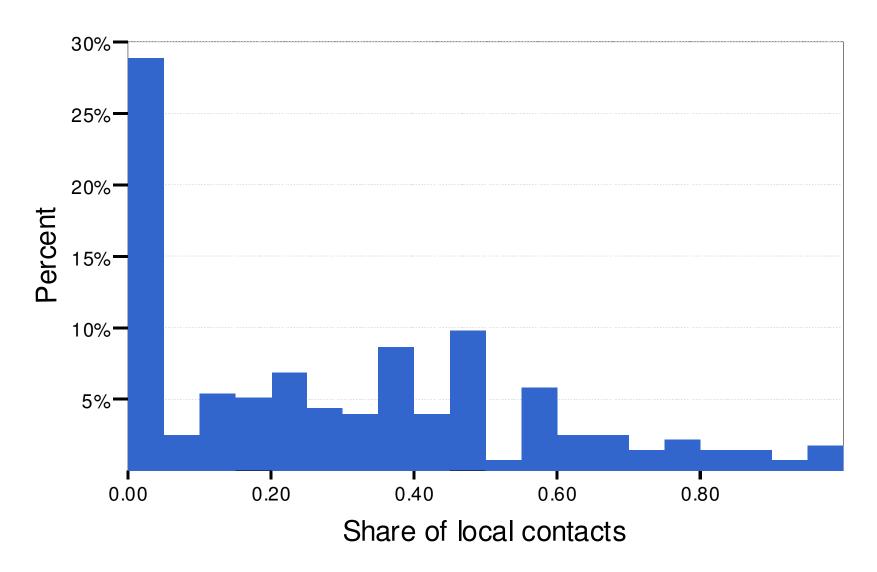
Current patterns: Distances and contact frequency



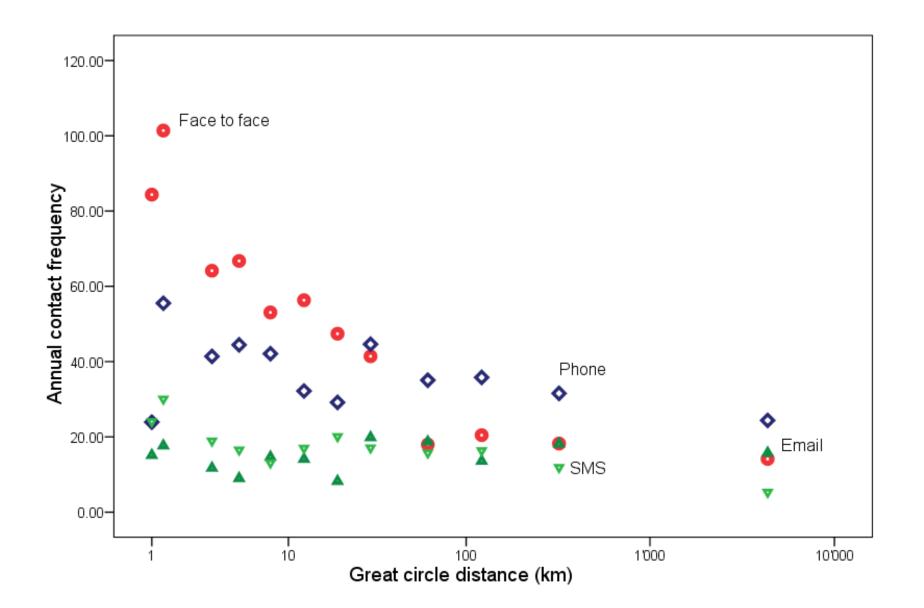
Current patterns: Distance to contacts



Current patterns: Share of contacts within 2.5 km



Current patterns: Modes of contact



Status

The networked actors have chosen:

- To mix local and non-local contacts
- Maintain face-to-face contacts across the whole distance range
- Other modes of contact complement/substitute
- Maintenance of the personal social capital needs "leisure" travel
- Current levels of social capital are tied to current cost structures

- Stronger selectivity of social contacts
- Higher "productivity" of the social contacts maintained
- Less need to risk "investment" on new contacts

- Local social action is more difficult to maintain or initiate
- Shift from a municipal to a regional understanding of "place"
- Recruitment biases for local (regional) policy makers

- Defines relatively high levels of skills and income to be perceived as being able to "keep up with Joneses"
- Increased chances of involuntary segregation ("social exclusion")
- Less efficient local labour markets, more efficient regional labour markets

Likely lack of knowledge of immediate neighbours

Likely perception of a lack of safety in the immediate environment

Lack of a basis for confidence about the immediate environment

Local anomie should c.p. result in:

- Investment in personal safety (car ownership, "gating", "fortification")
- Reliance on market-produced third-party safety provision (policy, private security services)
- Reliance on market-produced third-party service provision (home care, longer opening hours of stores)

Some transport/land use policies discussed

Encouragement of infill development/densification

Impact of social network geographies

None

Imposing full efficiency and zero-emission vehicles

Implications for social network geographies:

None

Support policies:

- More parking provision (for shared cars)
- Tax-supported accelerated depreciation of fuel stations

Revenue-neutral CO₂ taxation or rationing

Implications for social network geographies:

- Lowering mean distances between contacts
- Increase duration of face-to-face visits, especially for longdistance visits

Support policies with regards to social capital creation:

- Support of local social organisations (and of its infrastructure)
- Regulatory support of meeting places
- Holiday rules/frequency of long weekend

Revenue-neutral travel demand management

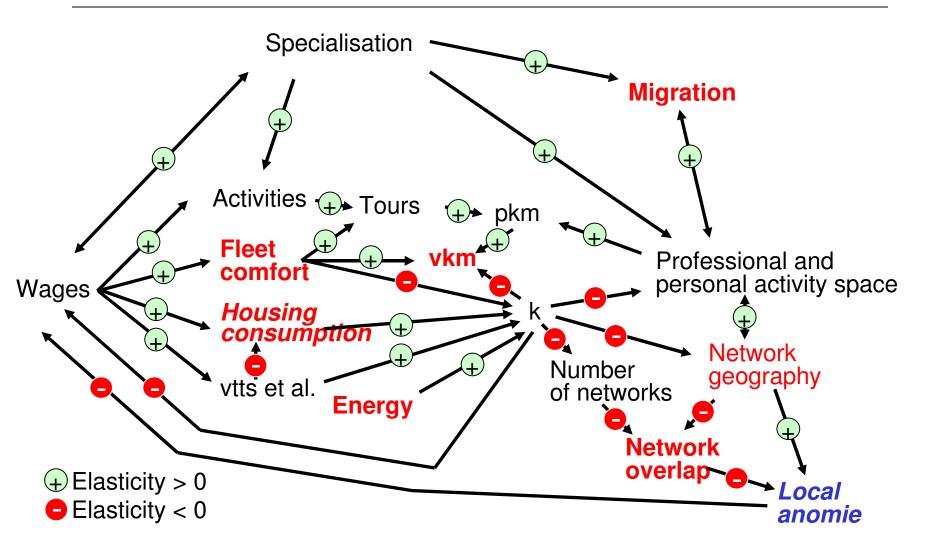
Impact on social network geographies:

- Slight increase in mean distances, as reliability improves
- Longer durations of visits

Support policies with regards to social capital creation:

None

An overview of the underlying hypotheses



Variables in red are associated with externalities

References and literature

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- Axhausen, K.W. (2006) Social factors in future travel: A qualitative assessment, *IEE Proceedings Intelligent Transport Systems* **153** (2) 156-166.
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