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Social network geographies and travel

KW Axhausen

IVT
ETH
Zürich

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Institut für Verkehrsplanung und Transportsysteme
Institute for Transport Planning and Systems

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

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Part 1: Starting point

A shrinking world
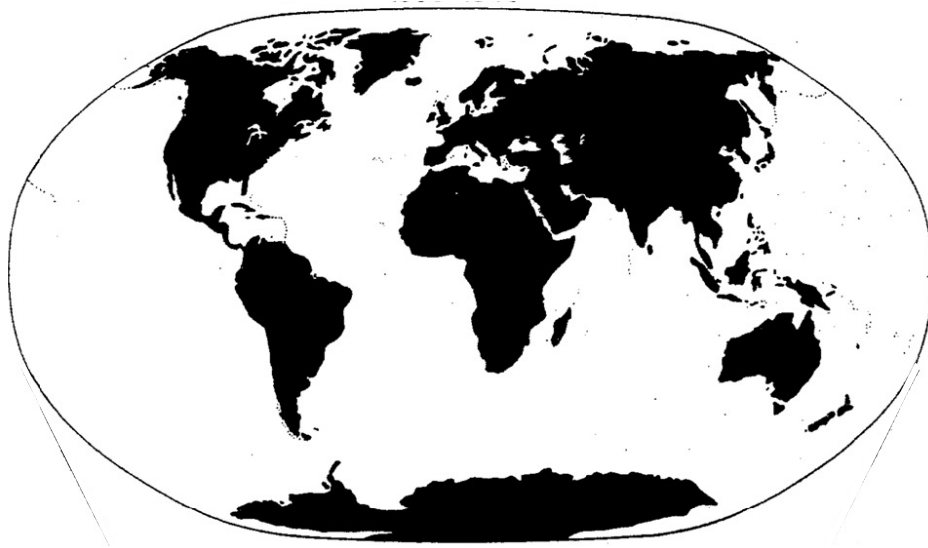
Coach and sailing boat until 1840
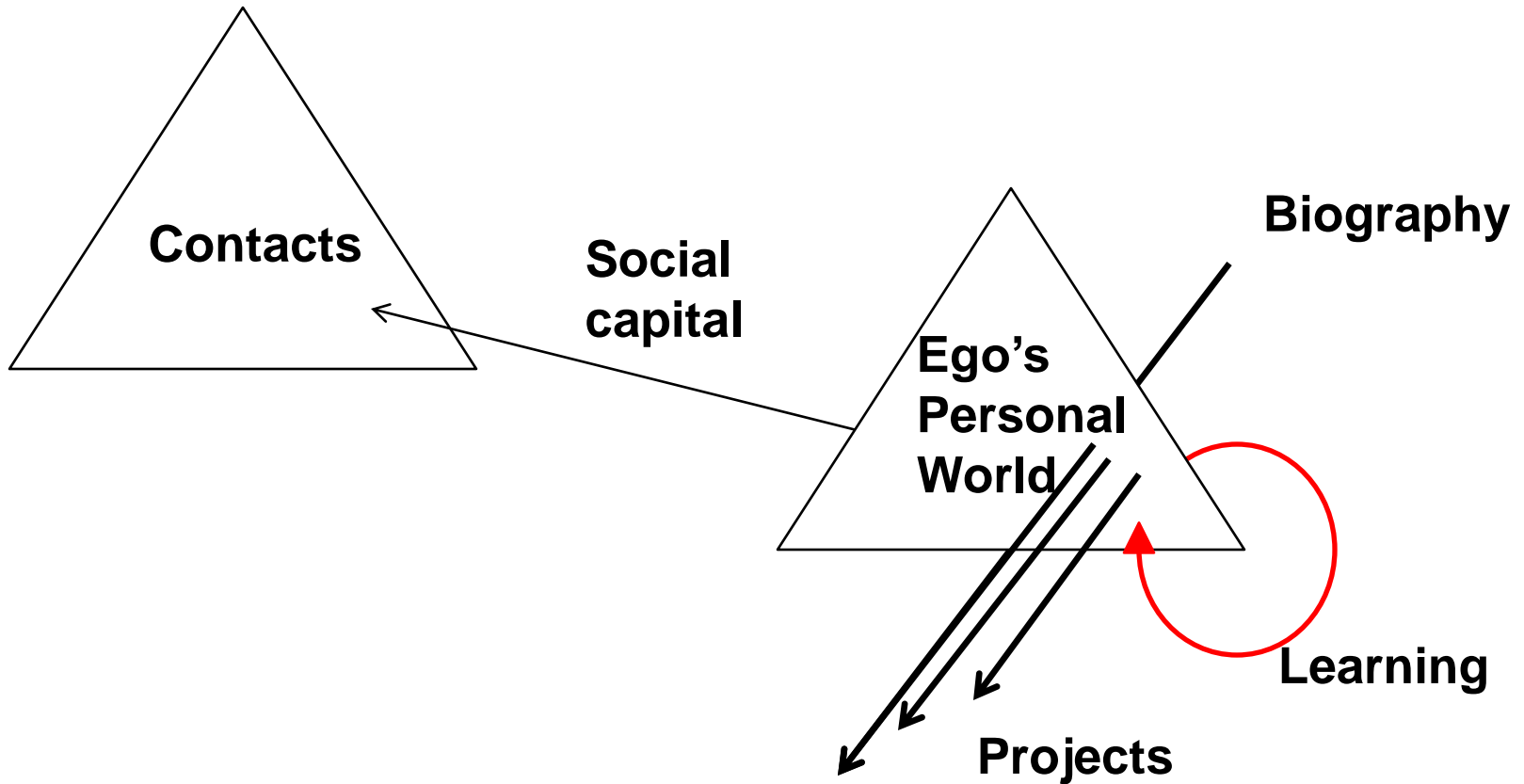
Steam ship and locomotive, 1840 - 1930
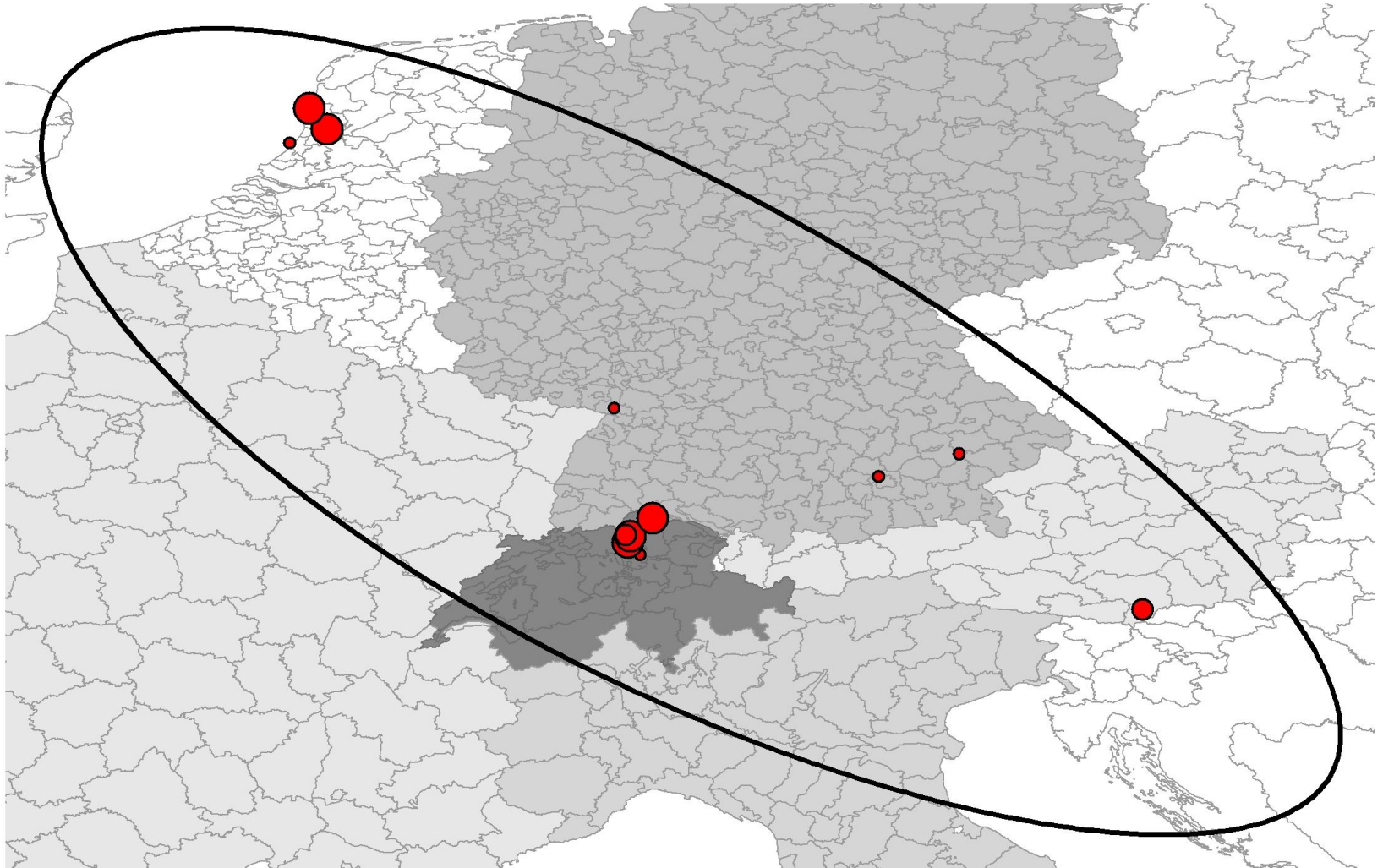
Propeller aircraft, 1930-1950

Jets, from 1950

How to understand the traveller ?

Contacts

Social capital

Biography

Ego's Personal World

Learning

Projects

Example of a social network geography

Travel and social networks

Maintenance of the network requires:

- Face to face contacts
- Balanced by other forms of contacts

- Travel ~ Physical spread of the contacts

- Trade-off between loosing contacts and "social" capital and investing in new contacts closer to home

Part 2: Empirical work

Items to capture the social network geographies

- Name generators
  - Core network
  - Leisure "partners"

- Name interpreters

  - Type and length of contact
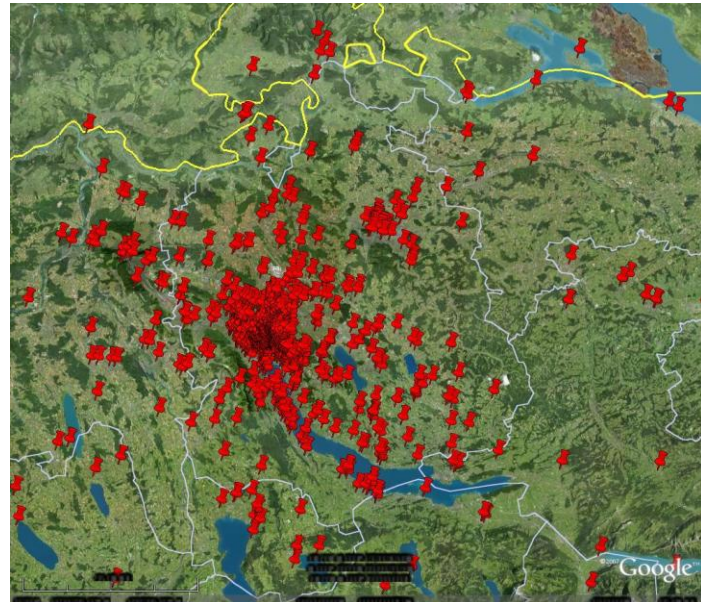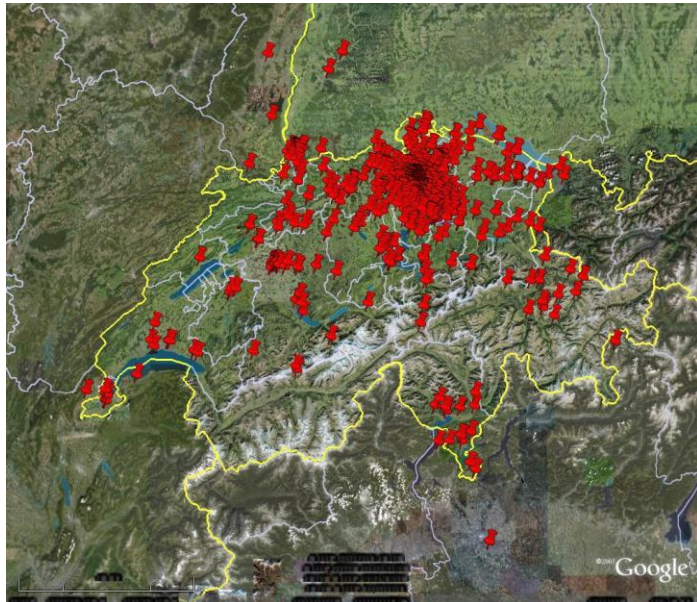 - Frequency by mode of contact
  - Home location

Comparison of the instrument

Variable	East York	NCCS	GSS	IVT
Instrument				
Name-generator	1 prompt (feel close to)	11 prompts	1 prompt (discuss important matters)	4 prompts
Generator limitation	6	No limitation	5	No limitation
Ego-centric network				
Size ($\emptyset$)	4.70	18.48	3.01	12.35
Share of relatives ($\emptyset$)	0.50	0.44	0.61	0.31
Share of weak ties ($\emptyset$)	0.18	0.32	0.23	0.48
Duration ($\emptyset$)	>10 for 57%	16	-	20.6
Contact freq. per year ($\emptyset$)	150.4	-	194.6	59.0

Number of contacts reported
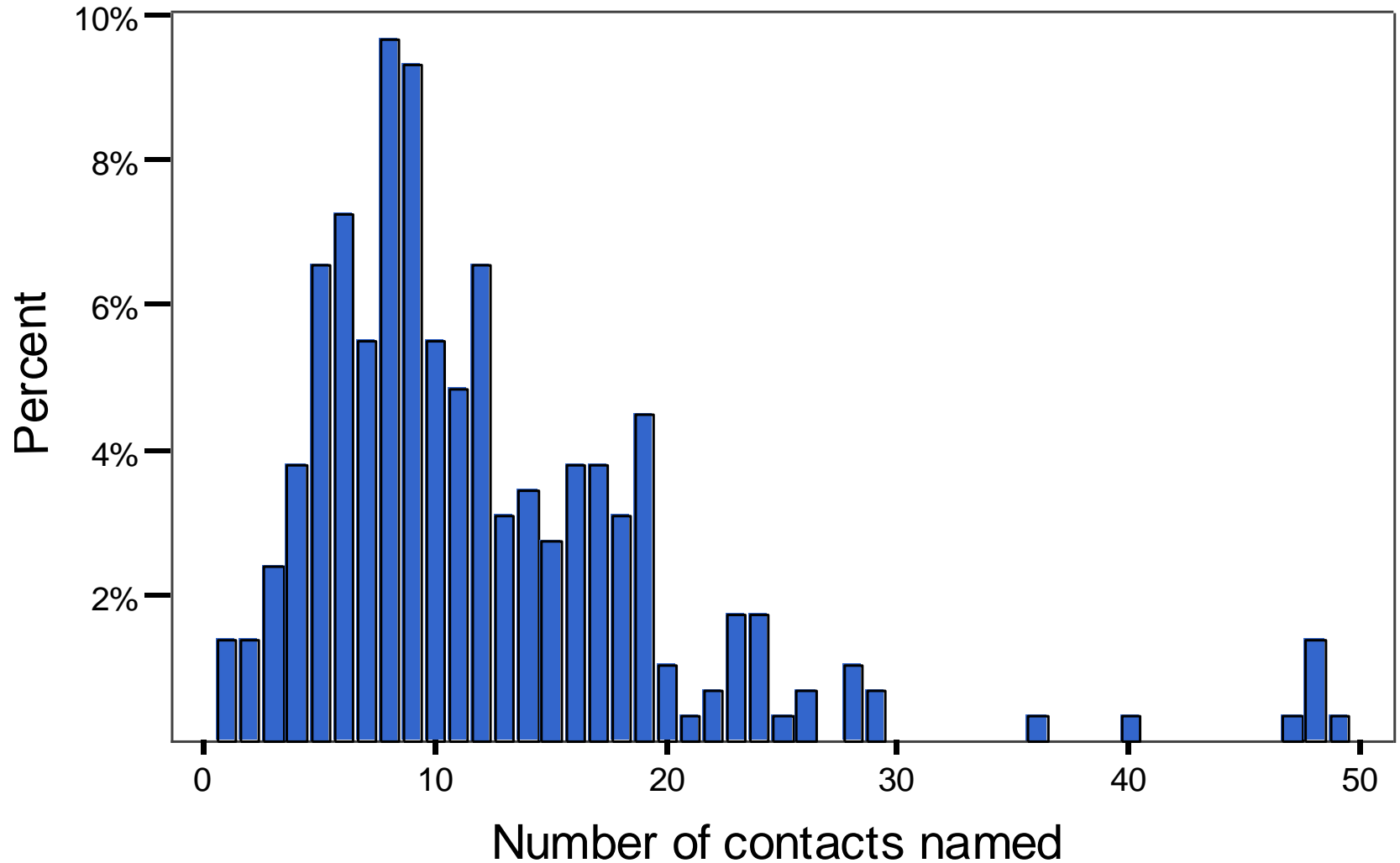
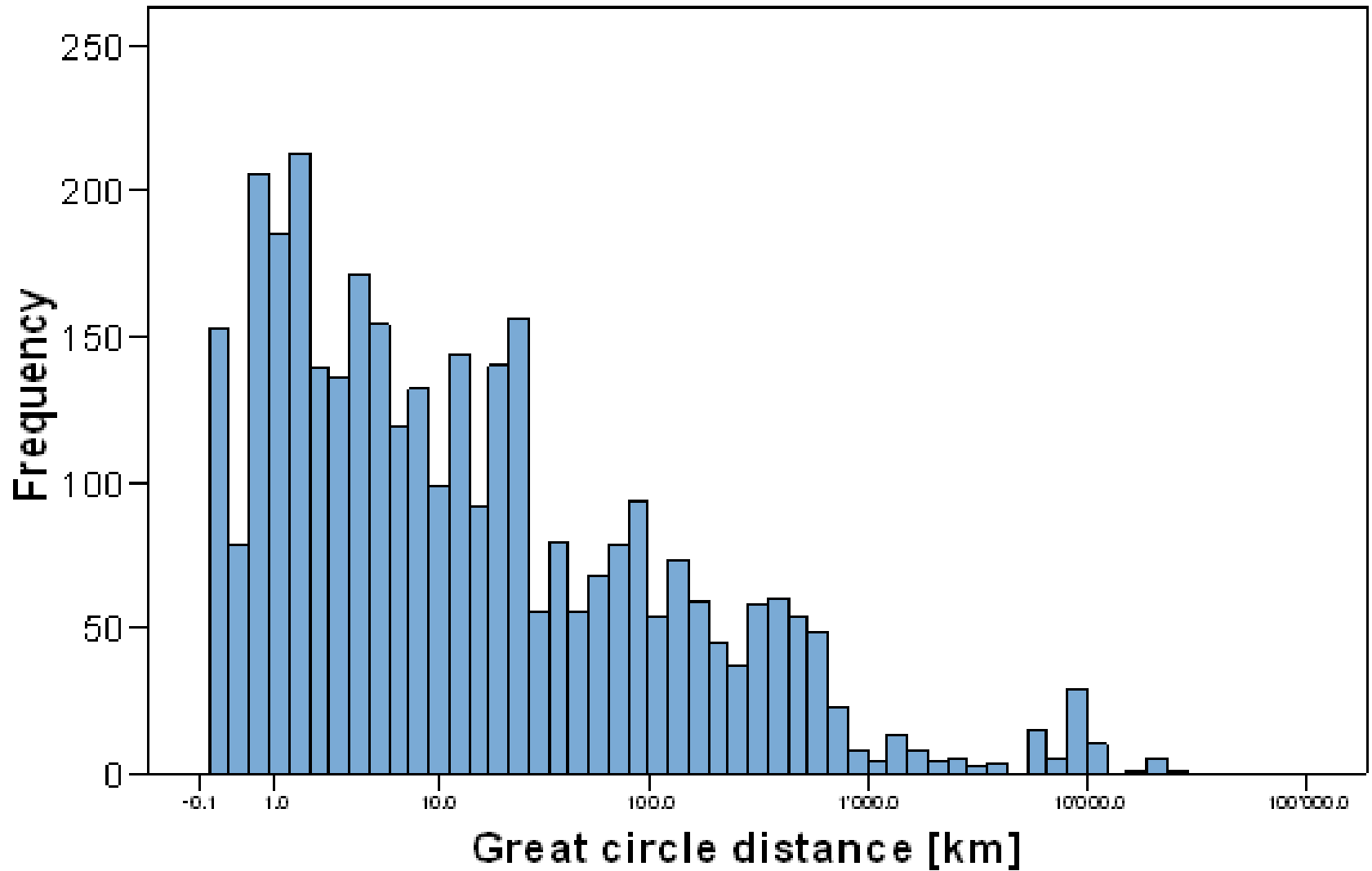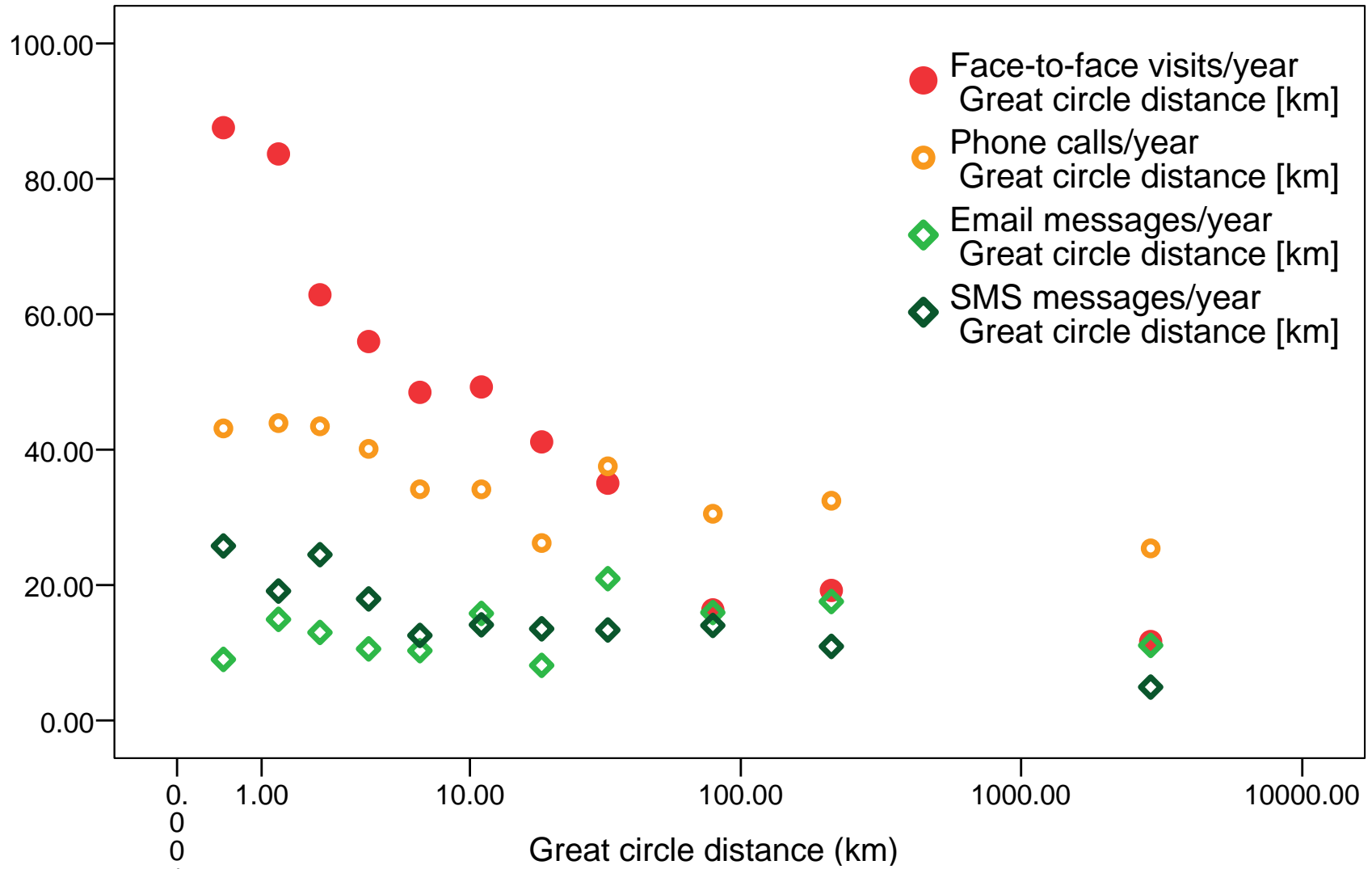# Geocoded home locations

Distances between home locations

Interactions by mode and distance between homes

Frequency of contact: Modelling framework

ML – SEM (with MPlus 5) to:

- Allow for the trade-offs between the modes
- Allow to the exogenous variables, especially distance

- Account for the panel nature of data (alteri)
- Account for the multi-level nature of the data (alter – ego)

Frequency of contacts: Within-level

Endogenous	Face-to-face	Phone	EMail	SMS
Face – to face	-			
Phone	**0.38**	-		
Email	**0.15**	**0.30**	-	
SMS	0.20	**0.37**	**0.20**	-
Exogenous				
Duration of contact	-0.00	0.00	**-0.01**	**-0.00**
Work mate	**-0.14**	**-0.10**	0.08	0.02
Relative	-0.07	**0.16**	-0.02	0.05
Lives within 2.5km	**0.28**	0.12	0.08	**0.15**
ln(distance)	**-0.11**	**-0.04**	-0.00	**-0.03**
R^2	0.13	0.03	0.01	0.02

Frequency of contact: Between-level

Endogenous variables	Face-to-face	Phone	EMail	SMS
Face – to face				
Phone	0.14			
Email	**0.34**	**0.38**		
SMS	**0.46**	**0.53**	**0.33**	
Exogenous variables				
Number of moves	**0.09**	**0.06**	-0.02	-0.04
Highschool diploma	0.47	0.58	**1.25**	0.28
≤ 1999 sFr/month	0.27	-0.11	**-0.46**	0.09
≥ 6001 sFr/month	**0.91**	-0.16	**-0.31**	0.02
Car always available	**0.40**	0.07	0.06	-0.03
National season	**-0.49**	-0.11	-0.05	-0.07
≥ 60 years	**-0.44**	0.27	**-0.31**	**-0.51**

Frequency of contact: Within-level; by type of alter

Exogenous variables	Face-to-face	Phone	EMail	SMS
Workmates (906 for 224 egos)				
Duration of contact	**-0.01**	-0.00	**-0.01**	**-0.01**
Lives within 2.5km	-0.01	0.09	-0.09	**0.33**
ln(distance)	**-0.10**	-0.03	-0.00	-0.01
Friends (1374 for 247 egos)				
Duration of contact	-0.00	**0.01**	-0.00	0.00
Lives within 2.5km	**0.26**	0.01	0.13	0.05
ln(distance)	**-0.10**	**-0.04**	**0.06**	-0.03
Relatives (883 for 229 egos)				
Duration of contact	**-0.01**	0.00	**-0.00**	**-0.00**
Lives within 2.5km	**0.49**	0.17	**-0.21**	-0.01
ln(distance)	**-0.13**	-0.02	**-0.04**	-0.04

What next ?

- Effects of network topology

- Explicit accounting of monetary costs

- Accounting for the overall time-budget constraint

- Accounting for technological efficiency gains

- Monitoring the dynamics

Hypotheses