

Preferred citation style for this presentation

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A snowball around a random sample

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Initial project: Frei and Axhausen, 2006

Personal networks in Zurich city:

- Respondents' mobility biography
- Home location of social contacts
- Modes to stay in contact

Background and aims

Background:

- Integration of networks in agent-based models

Gaps:

- Topology of full(er) networks
- Spatial distribution of full(er) networks

Data needed:

- Snowball sample of randomly selected social networks
- Diary data of everyday life

Contents: Social networks

- Ego's characteristics
- Name generator
 - Leisure contacts
 - Emotionally important contacts
- Name interpreter
 - Social and spatial context of initial meeting
 - Age, sex, education
 - Modes and frequency of contact
- Clique-based sociogram

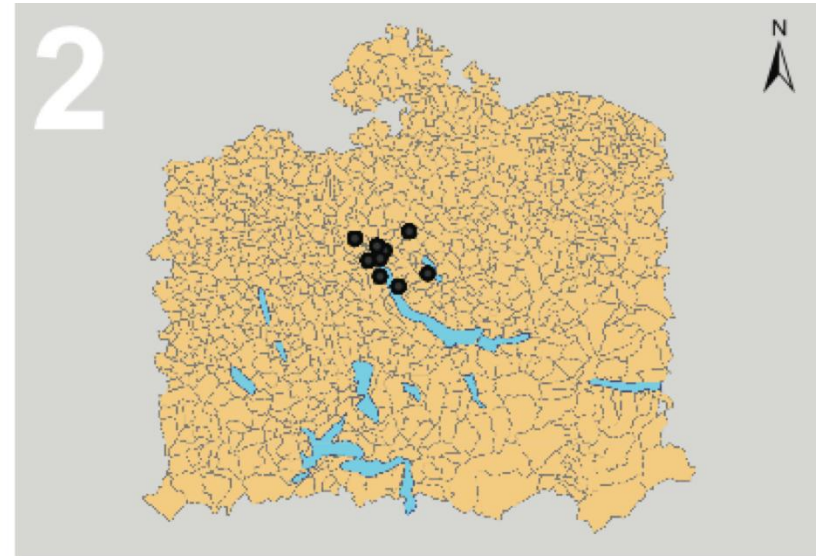
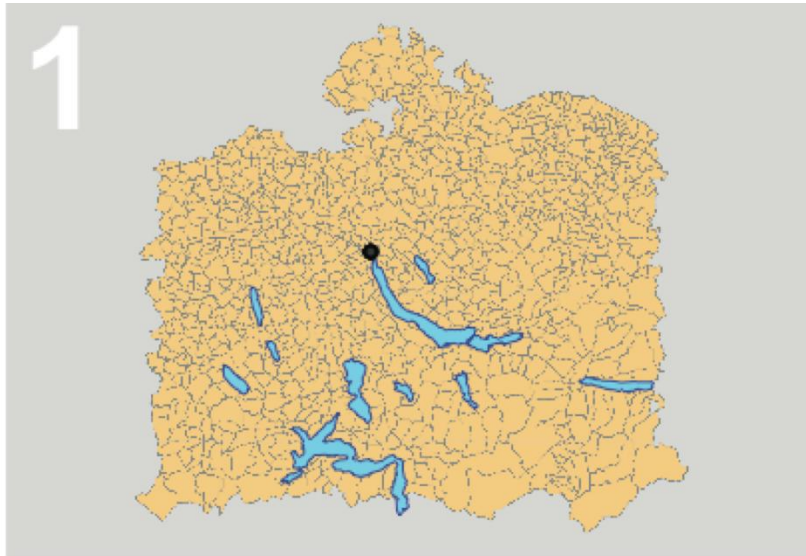
Contents: Diary

- Eight days in sequence
 - Geographical spread of (leisure) activities
 - Persons involved (re-identified from the network questionnaire)
 - Evolution of (joint) activities

Protocol

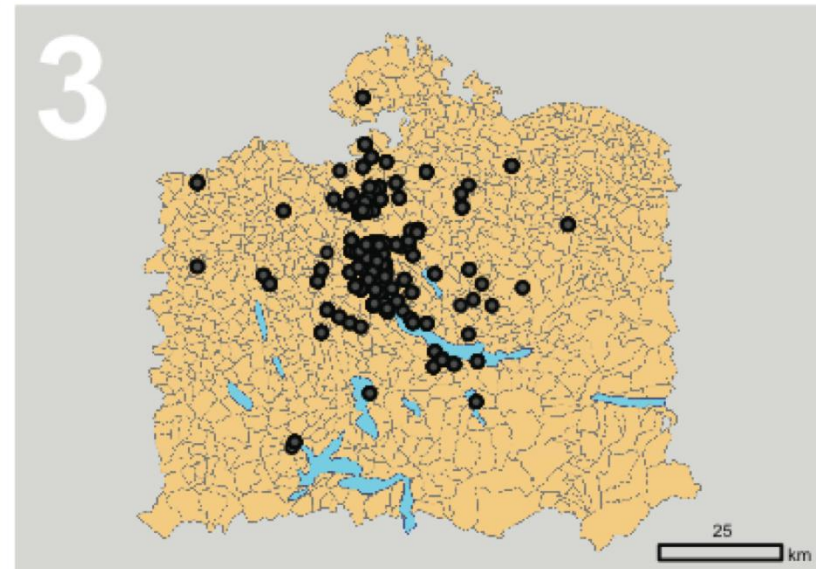
Steps	Ego	Alters
Announcement letter	yes	yes
Recruitment call	yes	yes
Post card of Ego via IVT	-	yes
Interview (20 sFr)	Only	-
Written instrument (20 sFr/€)	If requested	Only
Diary survey	Only participants	Only participants

Postcard from Ego



The spatial dimension of social contacts:

The pictures illustrate the survey's aim. A single respondent is investigated (1) and the respondent's friends' locations are established (2). Continuing the survey with these friends provides information about the geographical spread of friendship networks (3).



Data validation

- Start with a stratified random sample
- Run several subsamples successively
- Compare with other data
- Compare with data from Swiss Environmental Study

Survey data: Response rate

	Whole sample		Ego-seeds		Iteration 1		Iteration 2	
	[abs]	[%]	[abs]	[%]	[abs]	[%]	[abs]	[%]
Sample size	844		166		250		494	
...second time	66		-		-		66	
Wrong addresses	237		3		71		163	
Valid addresses	607		163		179		265	
Contacted	533	100.0	152	100.0	176	100.0	205	100.0
Participants	116	21.8	20	13.2	61	34.7	(35)	(17.1)

Survey data: Response rate and response burden



Response: Returning the incentive payment

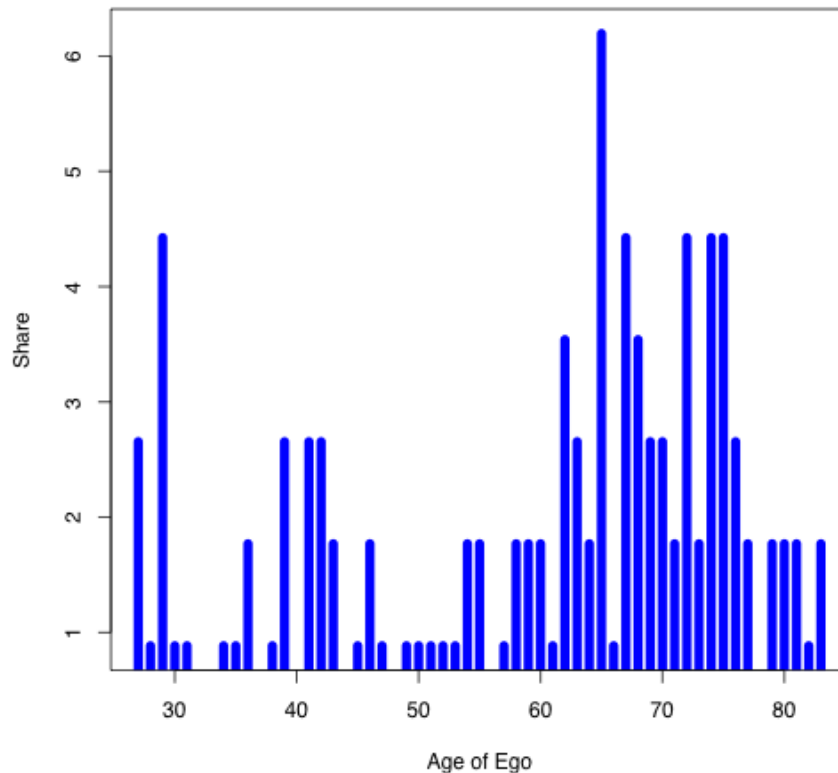
	Recruited participants	(Recruited) non-participant	All
Payment received			
Absolute []	146	109	255
Payment returned			
Absolute []	12	33	45
Share [%]	8.2	30.3	17.6

Survey data: Representativeness

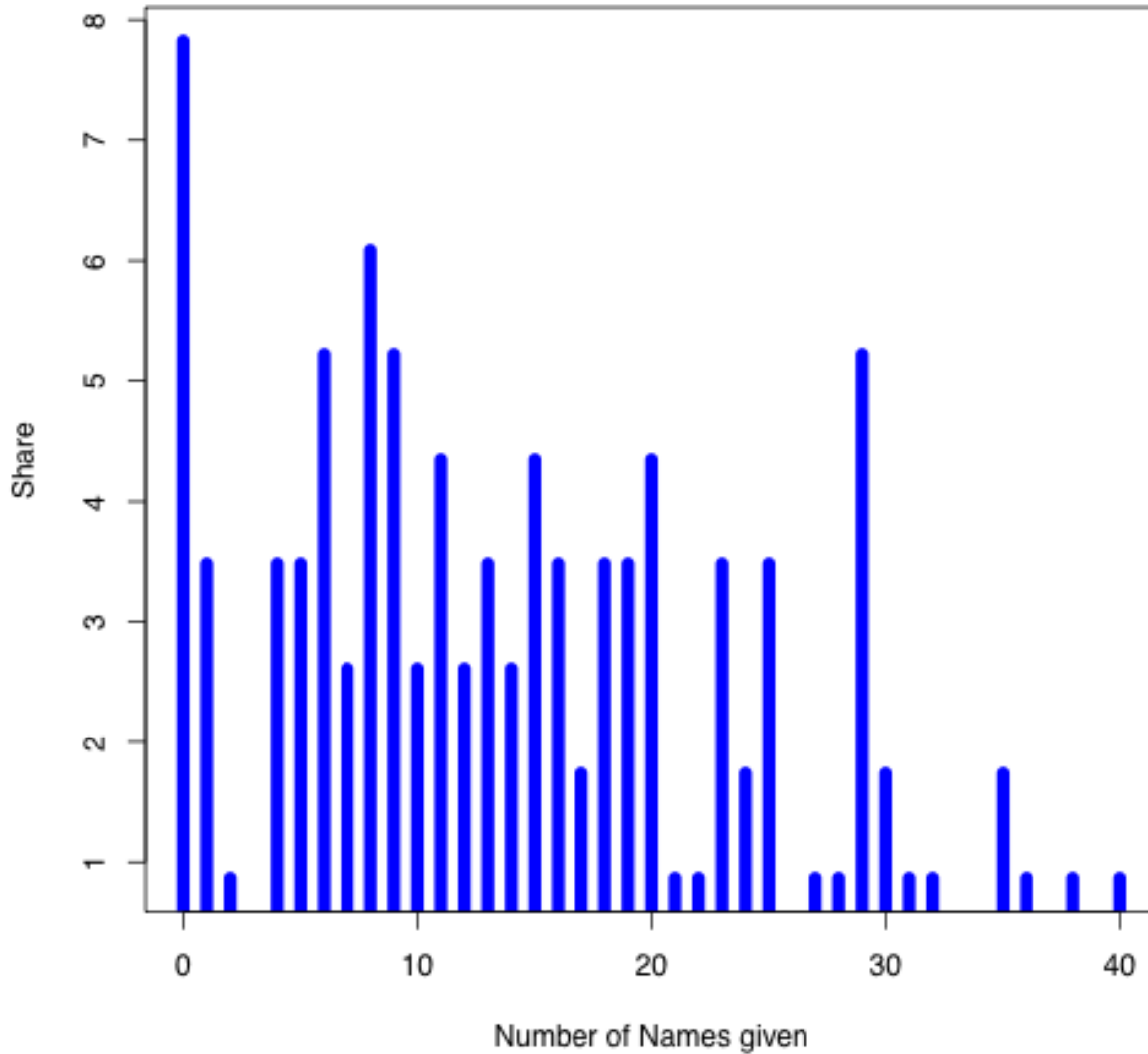
	All Egos (n = 115)	All Alters (n=1649)	Microcensus 2005
<hr/>			
Sex			
- Male	49.6	48.1	48.7
- Female	50.4	51.9	51.3
<hr/>			
Civil status			
- Single	15.8	23.6	29.9
- Married	61.4	60.5	54.5
- Divorced	9.6	8.0	7.6
- Widowed	12.3	7.2	6.6
- Living seperately	0.9	0.7	1.4

Survey data: „The age problem“

Age	All Egos (n = 115)	All Alters (n=1649)	Microcensus 2005
- Mean		59.2	42.3
- Median			42.0



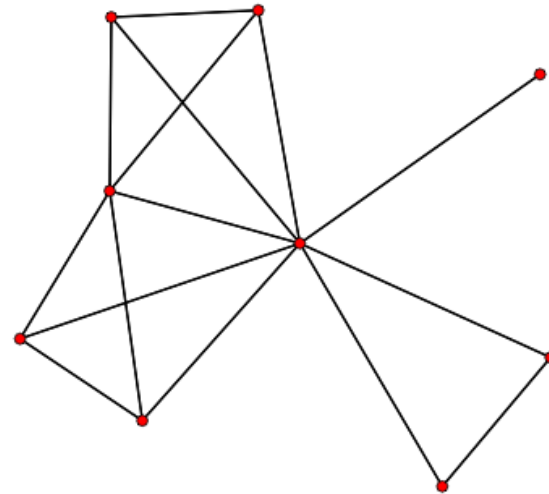
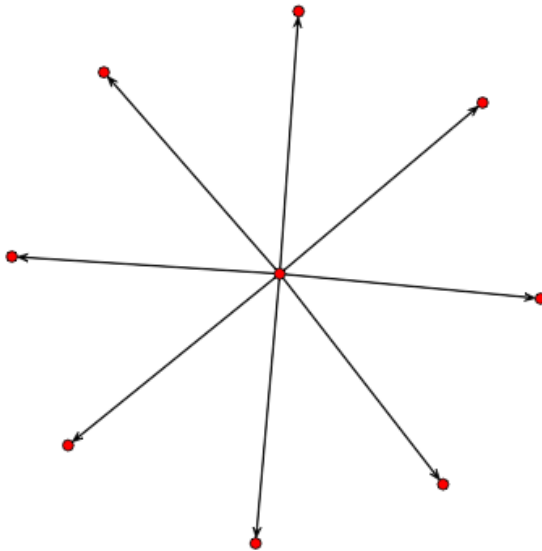
Survey data: Name generator



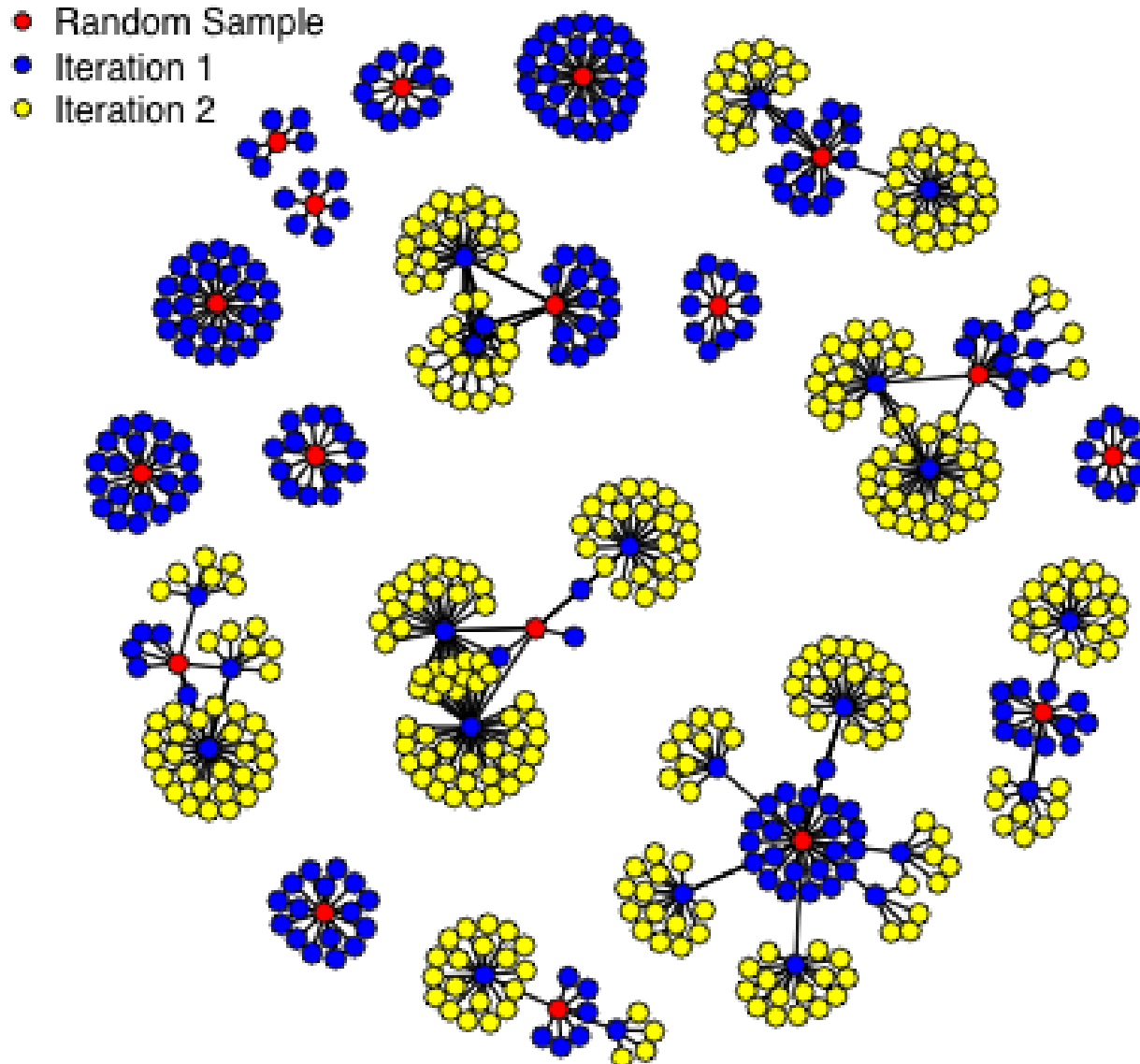
Survey data: Egos' and Alters' relationships

	Snowball sample	Frei and Axhausen 2006
Relatives [%]	25.0	31.0
Weak ties [%]	40.8	48.0
Context of first meeting [%]		
- Introduced by partner	9.6	5.0
- Family	21.3	25.6
- Education	8.6	-
- Work	16.5	26.8
- Club	17.8	-
- Friends	-	41.5
- Other	26.3	1.0
Ø Duration [years]	25.7	20.6

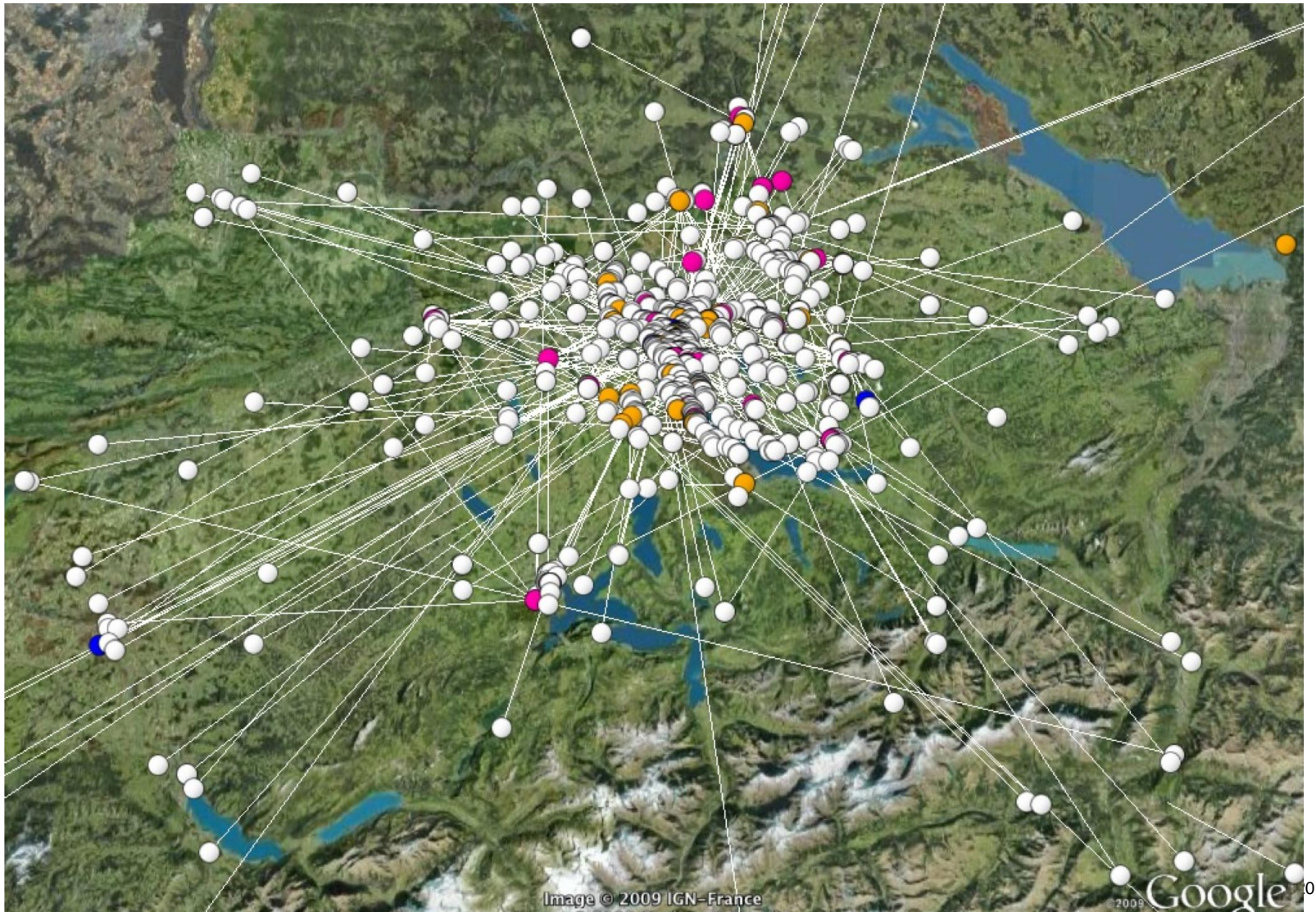
Survey data: 2 types of egocentric network



Survey data: Combined egocentric network parts



Survey data: Locations



How do your contacts know each other ?

Respondents report on average:

2.8 cliques with

4.7 members/cliقة

(Base 113 returns)

Very first experiences: The diary

	All		Ego-seeds		Iteration 1	
	[abs]	[%]	[abs]	[%]	[abs]	[%]
Participants	8	9.9	5	25.0	3	4.9
Ø Number activities	18		19.2		12.6	
Ø Joining persons						
...from household	1.0					
...other persons	2.9					
...known from name generator	1.3					

Perspective

Aims:

- 70-80 egos interviewed
- 450 responding alters from two (three/four) iterations
- About 6000 alters described

- Continue with Subsample II
- Oversample younger persons (new sample has been obtained)
- Test new electronic instrument

More information

Project website:

http://www.soziale-kontakte.ch/news/index_EN

Social network instrument:

<https://survey.ivt.ethz.ch/soziale-kontakte/template/english/WelcomeEng.html>