

The network geographies of Singaporeans



Teresa Tan

National University of Singapore

Future Cities Laboratory

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Burning Question

Do technological advances affect individual's social capital and network geographies, in ways that better life outcomes and result in inequalities?

Which factors affect network geographies?



Research Question(s)

Describe/ Measure

- What - in terms of **degree, spatial dispersions** etc. - do the social networks, or **personal communities**, of a sample of Singaporeans (stratified by gender, ethnicity and age etc.) look like, and whether they are stretched out geographically due to advancements in communication and travel technologies?

Research Question(s)

Explain/ Causal

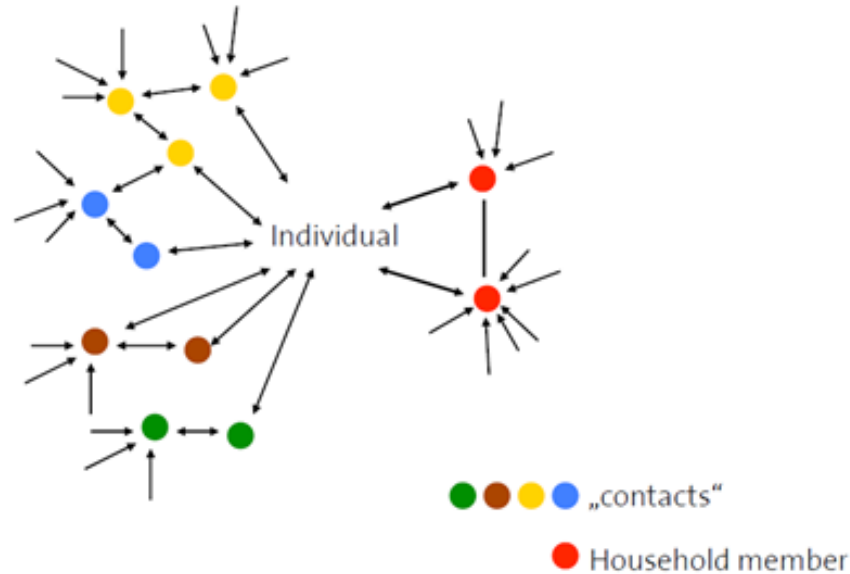
- How do these technological advances (in communication and travel) affect Singaporeans **social capital**, defined as the capacity for joint activities (Frei and Axhausen 2009)?
- *Does distance matter?* How far do people live from their significant others, and how this **distance influences** the practices of **phoning, texting, emailing and meeting up** face-to-face?
- How do these technological advances affect a person's social **network geography**, defined as the (addresses of daily life) of everybody involved in their social network (Axhausen 2008)?
- How do these networks potentially enable the individual to achieve better **life outcomes**, such as life satisfaction, mental

Social Network

Social Network Analysis explores the structural properties that *connect* people in webs of friendship, mutual support and sociality through face-to-face talk, phone conversatic
2006).

Position: Person as a member of multiple networks

Axhausen

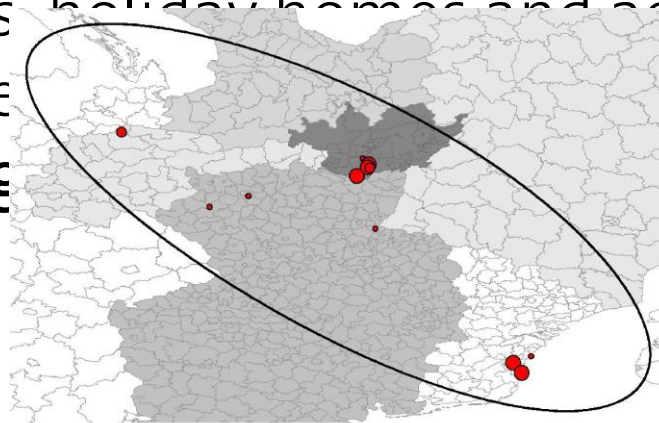


Social Network Paradigm

1. Social networks: resources, tie strength, size, composition and location – structural holes (Burt 1990) - density, closeness, betweenness, and eigenvector (Borgatti, Jones et al. 1998)
 2. Social networks in terms of their spatiality, particularly as 'network geographies'?
- First study of network geographies as social sciences has not systematically measured or mapped distances between members of networks and associated networking practices (Larsen, Urry and Axhausen 2006).
 - Findings: Geography – distance and proximity – matters greatly in relation to weak or new ties, but less so with 'strong ties'. Too much distance to significant others has detrimental effects upon one's social capital.

Social Network Geography

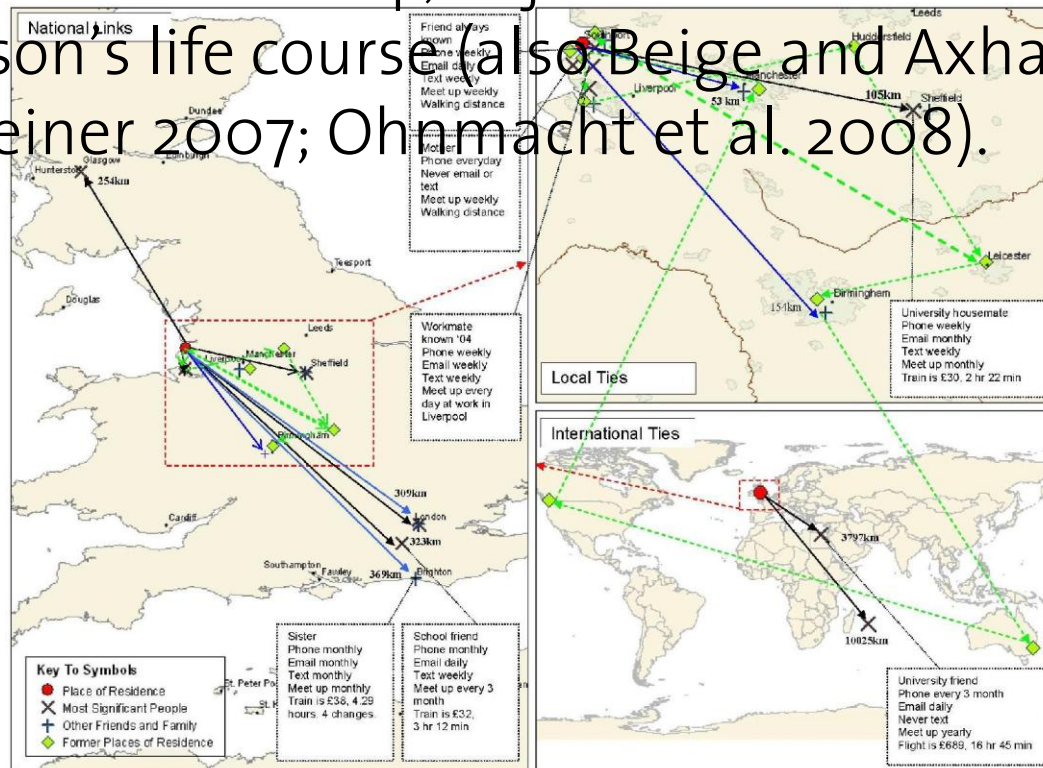
The **travel** necessary for the building and maintenance of the social capital of a network is tied up with the **longer term locational choices** of its network members - their homes, workplaces etc. The destination choice of an individual is the result of **joint choices** with those other persons, whom the individual wants to travel to meet. The pegs of the daily lives of everybody involved, i.e. residences, holiday homes and accommodations, common meeting places form the **social network geography** (Schönfelder and Aussen 2008).



Social Network Geography of a UK Architect

Mobility biography refers to a set of an individual's longitudinal trajectories, assuming that the existence of **events at certain moments in an individual's life, changes their daily travel patterns.** For example, by relocation, car ownership, or job and education changes over a person's life course (also Beige and Axhausen 2006; Scheiner 2007; Ohnmacht et al. 2008).

Larsen, Urry and Axhausen, 2006



Social Capital Paradigm: debates

1. Normative (Coleman; Putnam and Leonardi) or a resource (Portes; Bourdieu)?
2. Individual (Lin, Vaughn; Bian), group (Bourdieu), families (Hanifan), neighborhoods (Loury) or communities (Coleman)?
3. Closure (Bourdieu, Coleman) or bridges (Granovetter; Burt)?
4. What outcomes and under what conditions a denser/ sparser network might generate (Lin)?
5. Social capital: combination of network size, the

Social Capital

Social capital is the joint skilled ability of the members of a network to perform, act and enjoy each other's company as the result of their joint history, commitments and references.

This capital is built up through **joint activity** and therefore **travel**, but also through **technology** mediated interaction, such as letter writing, texting via SMS, emailing, videoconferencing, instant messaging, amongst other new technologies (Frei and Axhausen 2009).

The transmission of **social capital benefits**, such as, **social support** (Wellman and Wortley 1990), or, receiving important advice (Fischer 1982) and help with

Alternative Paradigms - Better life outcomes and inequalities

- Community mobilization
- Cooperation
- Identity formation
- Cognitive dissonance
- Individualizing the collective experience
- Castell's concept of project identities
- Role of the state
- Role of the market
- Martha Nussbaum and Amartya Sen's concept of capabilities
- John Friedmann's concept of empowerment
- Iris Young's concept of the five faces of oppression

Technological advances increase social network geography and social capital

- New spatial network patterns due to improved transportation and communication systems, lower generalized costs and changing social practices (Frei and Axhausen 2009).
- Inequalities due to network and economic capital
“How long does it take a 10,000 word letter to reach the receiver?”



Coach and sailing boat until 1840



Steam ship and locomotive, 1840 - 1930

Propeller aircraft, 1930-1950



Jets, from 1950



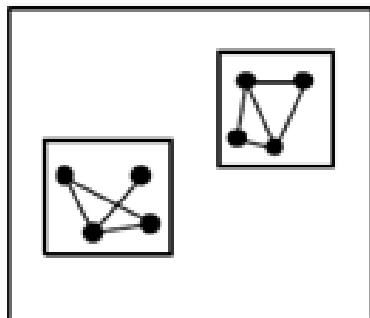
Dicken, 1998

Networked Individualism and Personal Communities

- Communities are in **networks**, and not groups
- Communities are **far-flung, loosely-bounded**, multiple, sparsely-knit and fragmentary networks of kin, neighbors, friends, workmates and organizational ties.
- Networked communities are stretched out geographically and socially. Each person is connected to diverse networks, possessing a **'personal community'**, providing

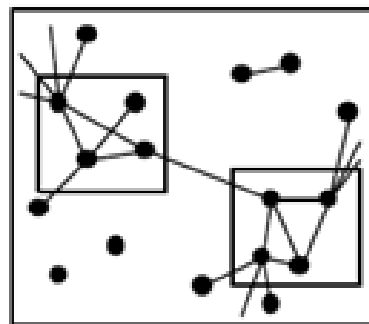
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Little Boxes



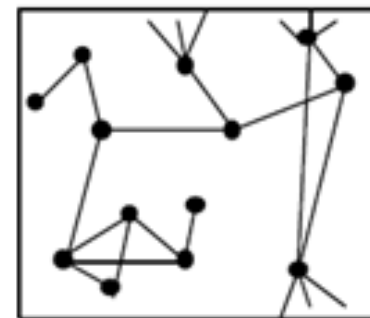
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Networked Individualism

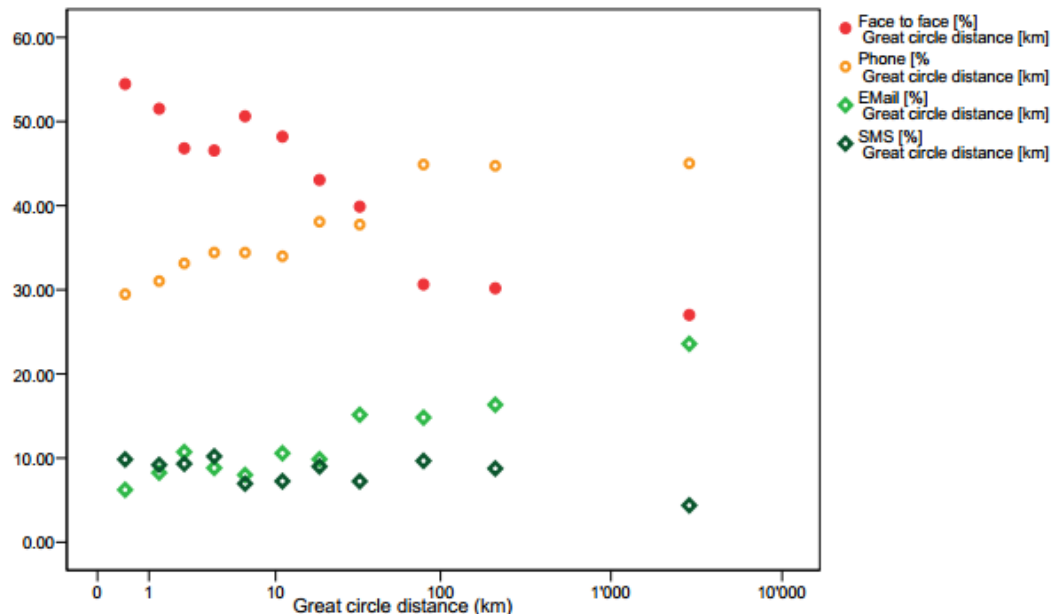


Communication technologies mediates distance, to increase social capital

Modern networked individuals manage personal communities with the help of **communication technologies** which enable people to talk over large and short distances.

- **Distance becomes less of a barrier (but still a barrier)** in maintaining personal communities (Mok et al., 2009; Rainie and Wellman 2012).

- Frei and Axhausen, 2007
Social stat



Singaporean communication patterns

Singaporeans are heavy users of new media:

- **75%** of Singaporean population have **internet access** in 2012 (European Travel Commission New Media Trend Watch)
- 85% of digital consumers in Singapore own an Internet-capable mobile phone (Nielson's inaugural Southeast Asia Digital Consumer Report 2012)
- 68.1% of Singaporeans used social media on a regular basis, at least once per week, in 2012 (The state of social media in Singapore, Rockpublicity Report 2012)

Singaporeans' travel patterns

- Travel produces social capital in societies with dispersed social networks (Urry and Larsen 2006)
- **Singaporeans are highly mobile, but differences exist due to network capital**
 - More than 20,000 Singapore citizenship applications approved (Channel News Asia, 25/2/13)
 - Almost 40% of marriages in 2011 are between citizens and non-citizens (A sustainable population for a dynamic Singapore 2012)
 - 200,000 Singaporeans living overseas in 2012 (Population in brief report 2012)

Additional social capital benefits

- According to Borgatti et. al (2009), one of the four mechanisms whereby networks can influence outcomes, is through **transmission**. Network-based theories treat network ties as pipelines through which things flow: social support (Wellman and Wortley, 1990) etc.
- Personal communities can change situations. As conduits through which resources such as money, skills, information and services are exchanged, personal communities **enhance life outcomes** such as receiving important advice (Fischer 1982) and getting a job (Granovetter 1995) etc.

Specialized Interpersonal Boutiques

Modern individuals shop at ‘specialized interpersonal boutiques’ rather than at ‘general stores’ (Wellman and Wortley 1990).

- They select **unique persons for unique tasks** (Chua 2011).

- ~~Need to look at distances or how far are parties related~~

NETWORK	TASK	STUDY	
Parents-children	(+)	Financial aid	Wellman and Wortley, 1990, Canada Fischer, 1982, US Freeman and Ruan, 1997, China
	(+)	Emotional aid	Wellman and Wortley, 1990, Canada
	(+)	Long term commitments	Litwak and Szelenyi, 1969, US
	(+)	Crisis management	Fischer, 1982, US
	(+)	Major repairs	Wellman and Wortley, 1990, Canada
Spouse	(+)	Emotional aid and counselling	Hollinger and Haller 1990, multi-country Lee, Ruan, Lai, 2005, China Fischer, 1982, US
	(+)	Instrumental aid	Hollinger and Haller 1990, multi-country Lee, Ruan, Lai, 2005, China
	(+)	Sickness	Freeman and Ruan, 1997, China
Siblings	(+)	Companionship, general support	Wellman and Wortley, 1990, Canada
	(+)	Family matters (spousal issues)	Freeman and Ruan, 1997, Australia, Hungary, US
	(+)	Financial aid	Freeman and Ruan, 1997, China
Extended kin	(+)	Family get-togethers (seasonal)	Wellman and Wortley, 1990, Canada
	(+)	Migration and jobs	Salaff, Fong, Wong, 1999, Canada
Neighbours	(+)	Emergencies	Litwak and Szelenyi, 1969, US
	(+)	Look after the house	Lee and Campbell, 1999, US Fischer, 1982, US
	(+)	Economic support, mutual aid	Freeman and Ruan, 1997, China, Austria, Germany, Netherlands, US, Britain, Italy... Espinoza, 1999, Chile
Co-workers	(+)	Emotional aid	Freeman and Ruan, 1997, China
	(+)	Sickness	Freeman and Ruan, 1997, Australia, Hungary, Italy, US, Germany, Britain
	(+)	Confidants	Ferrand, Mounier, Degenne, 1999, France
Friends	(+)	Discuss work problems	Lee, Ruan, Lai, 2005, China
	(+)	Give advice	Fischer, 1982, US Freeman and Ruan, 1997, Australia, Hungary, Italy, Britain, US, Netherlands, Austria
	(+)	Sociable pleasure	Wellman and Wortley, 1990, Canada
Others	(+)	Companionship	Fischer, 1982, US
	(+)	Access to jobs	Granovetter, 1974, US
	(+)	Emotional support	Lee, Ruan, Lai, 2005, China; Freeman and Ruan, 1997, Australia, Britain, US, Austria...
	(+)	Give advice	Freeman and Ruan, 1997, Hungary, Italy, Netherlands
(+)	Financial aid	Freeman and Ruan, 1997, Australia, Hungary, Italy, Britain, US, Netherlands	

Distance?

Specialized Interpersonal Boutiques (Singapore)

- In Singapore, communities exist in personal networks made up of diverse individuals. Neighbors, given their physical proximity, are called upon as watchers of the house; kin are sought for emotional aid, important matters, and financial matters; friends and coworkers are sought for social companionship and job-seeking (Chua 2011).
- Although modern individuals are autonomous shoppers in ‘specialized interpersonal boutiques’ (Wellman and Wortley, 1990), **structural forces** (such as **gender**, **race**, **class**

Social Network Survey: Overview

Demographics

Individual
(Gender, Age,
Ethnicity, Education)

Household
(Income, housing,
education, network
capital)

Locations
(Residences,
workplaces, schools)

Topics

Work satisfaction

Life satisfaction (Projects)

Family (Residence)

Leisure

National Service

Voluntary Organizations

Identity

Mobility and
Communication

Name Generators

Who listens (important or depressed)?

Who helps (financial/ job/
housework/ childcare/)?

Work buddies?

Voluntary organizations

National service buddies?

Leisure and exercise buddies?

School buddies?

Close alters (local/ overseas)?

Name Generator – Help with obtaining a job

50

How did you **come to know** about this job? (If you have a few positions with the same company, your answer should be based on your 'first' position with the company)

- I saw an ADVERTISEMENT in a newspaper (magazine, trade, technical journal etc.)
- I found out through an EMPLOYMENT AGENCY (or personnel consultant, head-hunter etc.)
- I SUBMITTED AN APPLICATION before anyone told me about the job
- Someone I didn't know contacted me and said that I had been RECOMMENDED
- I asked a FRIEND/ PERSON who told me about the job
- A FRIEND/ PERSON who knew I was looking for a job contacted me
- A FRIEND/ PERSON who didn't know I was looking for a job contacted me
- Family business
- Signed on after National Service
- Bonded
- Not sure/ Can't say/ Can't remember
- Others (pls. specify)

52

How did you **get hired** for your **current job**?

- I was HIRED from outside the organization
- I was TRANSFERRED from another division within the organization
- I was PROMOTED from another position within the same division
- I started MY OWN BUSINESS
- Never worked before
- Family business
- Serve National Service
- Bonded
- Can't remember
- Others (pls. specify)

53

Was there someone **in the company who helped you** get this job or any other jobs previously?

- Yes
- No

54

You mentioned that **someone in the company helped you get this job**. What is the name or initials of this person?

Add Person

No.	Person's First Name	Person's Initials
-----	---------------------	-------------------

1.	Jia Xin	JX
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[More Details](#) →



Person's Details

Person's Name	Jia-Xin
Person's Initials	JX
Person's Address	One Tree Hill, Singapore <input type="button" value="Search"/>



1 What is the person's **gender**?

- Male
- Female

2 What is the person's **ethnicity**?

- Chinese
- Malay
- Indian
- Others (pls specify)

If you have selected '**Others**', please specify

3 What is the person's **marital status**?

- Single
- Married
- Divorced
- Widowed
- Separated

4 What is the person's **year of birth**?

5 What is the person's primary **citizenship**?

6 What is the **highest educational level** the person has completed?

- No formal education
- Some Primary
- Completed Primary (PSLE)
- Some Secondary
- Completed Secondary ('O'/'N' Levels)
- ITE/ Vocational Institute
- Completed Pre-U/ Junior College ('A' levels)
- Polytechnic (Diploma)
- Professional Qualifications/ Other Diplomas
- University Graduate (Basic Degree/ Honors Degree)
- University Postgraduate (MA, MSc, MBA, PhD, Graduate Diploma)
- Refused
- Others (pls. specify)

7 Who introduced you to this person?

- Husband / wife / life partner
- First degree relative
- Other relative
- Married into the family
- A friend
- Colleague
- An acquaintance
- None of the above
- Others (pls specify)

If you have selected 'Others', please specify

8 Where is the place (address) you got to know the person?

Ai Tong School, 100 Bright Hill Dr, Singapore 575646

Search



9 What is the year of the first meeting with the person?

2001

10 How did you get to know the person?

- Partner
- Family
- Education
- Work
- Club/Bar
- Others (pls specify)

If you have selected 'Others', please specify

11 How is this person related to you?

- Child
- Parent
- Spouse/Fiance
- Sibling
- Boyfriend/Girlfriend
- Grandparent
- Parent-in-law
- Other relative

How **frequent** do you have the following **modes of contact** with the person?

	No. of Times	Frequency
12 Physical/Face to face contact	<input type="text" value="3"/>	<input checked="" type="radio"/> Per Day <input type="radio"/> Per Week <input type="radio"/> Per Month <input type="radio"/> Per Year
13 By Telephone (Landline or mobile phone)	<input type="text" value="2"/>	<input type="radio"/> Per Day <input checked="" type="radio"/> Per Week <input type="radio"/> Per Month <input type="radio"/> Per Year
14 By E-mail	<input type="text" value="0"/>	<input type="radio"/> Per Day <input checked="" type="radio"/> Per Week <input type="radio"/> Per Month <input type="radio"/> Per Year
15 By SMS/Whatsapp	<input type="text" value="0"/>	<input type="radio"/> Per Day <input checked="" type="radio"/> Per Week <input type="radio"/> Per Month <input type="radio"/> Per Year
16 By Chat (e.g. Skype) or an Internet Forum	<input type="text" value="1"/>	<input checked="" type="radio"/> Per Day <input type="radio"/> Per Week <input type="radio"/> Per Month <input type="radio"/> Per Year

Power Geometries

- Power geometries refer to the power that different social groups and individuals have in mobilities (Massey 1994)
- Singapore's Gini coefficient is 0.473 in 2011 (comparable with New York, Los Angeles and Hong Kong: >0.5)
- Gender, ethnicity and class are no mere personal characteristics; they are social 'categories' that shape behaviours and life chances (Tilly, 1998).
- In Singapore, gender, ethnic and class stratification

Conclusion

- Does distance matter? How do social distance and geographical distance interact with and affect one another?
- Is there a theoretical space for thinking of network geographies in terms of inequality?

Questions?

Teresa.tan@nus.edu.sg