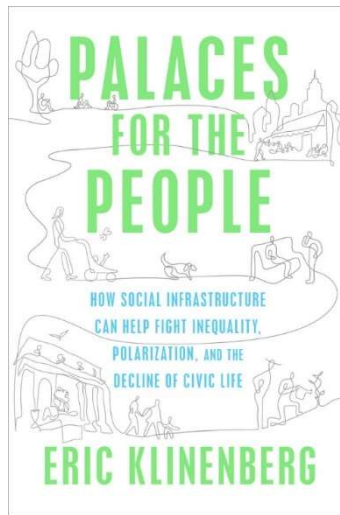**LSECities**

LSE Department of Methodology

On socio-spatial measures of community

Community as a concept

Resurgent interest in forms of built environment conducive to rich civic life and strong communities (Klinenberg 2018)

The concept has a unique ability to represent the notion of collective well-being and positive social relations and to denote a description or categorisation of social problems and `problem populations' (Mooney and Neal 2008)

Discussions of the meaning of community and the connections within and between communities necessarily spill over into debates about the research methods needed to capture community phenomena (Crow & Mah, 2012)

Past Definitions

'Montreal's Italian community'

Tonnies, Simmel, Wirth, Park... divided community and society
community = typically rural, close connections, morally superior
society = urban, weak and depraved relationships

'the gay community in London'

'the scientific community'

Definition of community typically operationalised still carries
this legacy as a measure of interpersonal networks (and the
qualities of those networks - centrality, density, tie strength,
structural holes...)

(Oxford, 2012)

However... community as strong ties only does not really fit how
the term is used in every day life...

Sense of belonging, group cohesion and reciprocity (McMillan & Chavis, 1986)

Shared values, ways of life and mutually recognised identities (Mason, 2000)

Definition

Community (Oxford, 2012): A group of people

1. living in the **same place** or
2. having a particular **characteristic in common**

PLACE BASED

PEOPLE BASED

Territorial and **relational** dimensions of community. Gusfield (1975)

Communities need a "spatial or demographic anchor around which relationships and social capital can coalesce" (Neal, 2015)

Measuring Community in an Urban Age – Seed Funded Study

Search based on terms: community, urban, city, neighbourhood, spatial, embed* & place*

Post ca.2000 only

top 100 results of each search were reviewed

~ 1000 titles considered

1. 71 in depth, 50 included

2. 33 in depth, 10 included

Interest in socio-material determinants of urban community prompted LSE Cities seed-funded research *Measuring Community in an Urban Age*.

Study team: Alasdair Jones and Meg Bartholomew

Review based study to:

1. Gather, review and thematically synthesise studies that have employed an understanding of social and/or infrastructural networks to understand issues related to urban communities;

2. Search for studies that use network-based approaches to analyse the social consequences of transport patterns in urban settings;

3. Distil the range of methodologies employed to date to analyse urban neighbourhood-level networks constitutes by both 'hard' (infrastructural/morphological) and 'soft' (social) networks

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What are the relationships that make Community?

PEOPLE

Eponymous : Family and Friends – nameable alters (eg. village community)

Institutional : Relationships from work, school, etc (eg. alumni)

Avocational : Shared hobbies and interests (eg. cycling community)

Familiar Strangers : People not known by name that share space or identity
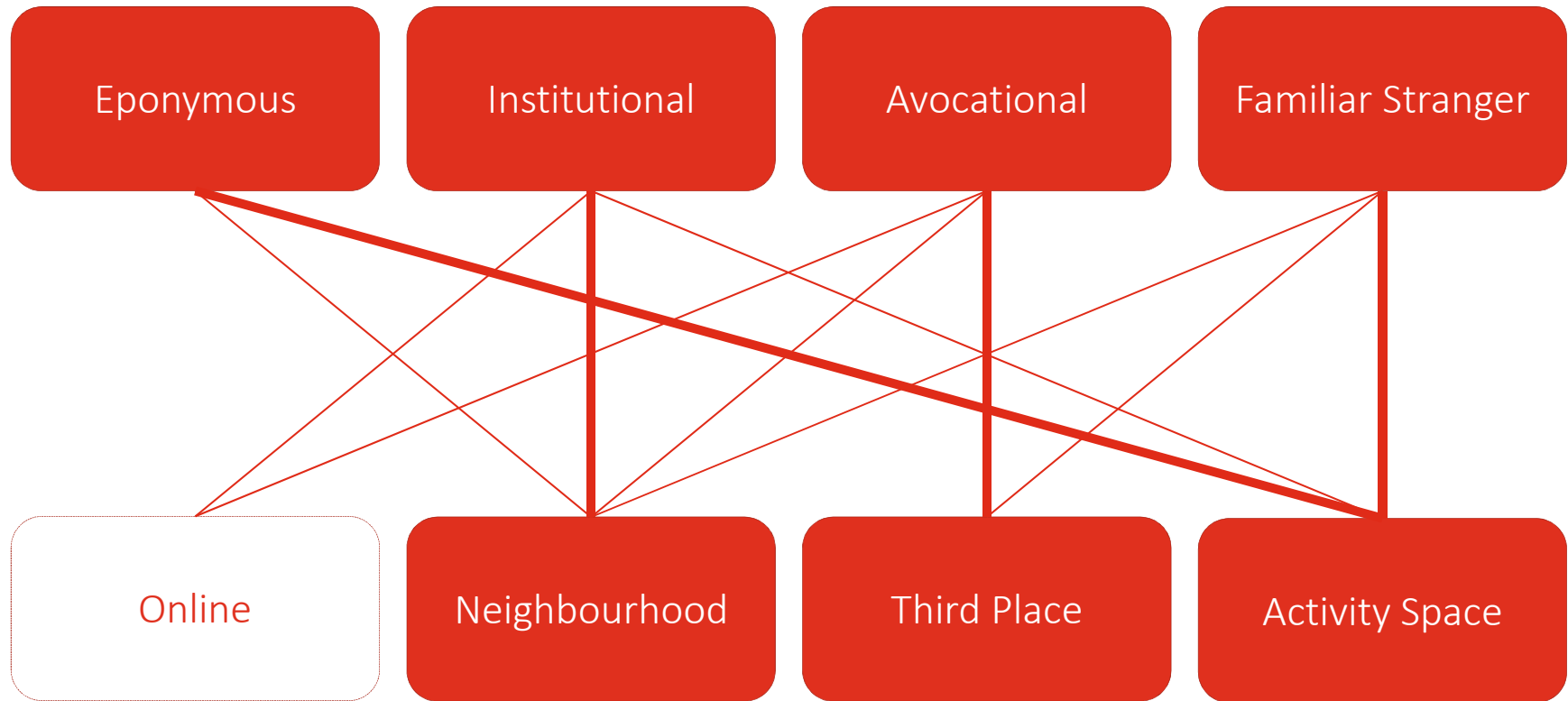(eg. ethnic communities)

PLACE

Neighbourhood : Home localised relationships

Third Place : People from regularly frequented favourite locations

Activity Space : Encounters along daily routines

Socio-material Overlap

PEOPLE

Almost nothing is known about the joint effects of network structure and geographic position (Habinek, Martin, & Zablocki 2015

| Eponymous | Institutional | Avocational | Familiar Stranger |

PLACE

| Online | Neighbourhood | Third Place | Activity Space |

Eponymous Relationships

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Tie Type: STRONG

PEOPLE

Eponymous

Institutional

Avocational

Familiar Strangers

PLACE

Neighbourhood

Third Place

Activity Space

Community is implied by clustering in whole networks

Useful to inform who people choose to spend to with and the underlying characteristic of potential communities

Number of named ties generally less than 50 so groups are too small to represent entire communities in most cases

Bulk of contacts made through family or friends of friends, and also work, organisations, neighbours

Distance matters – for the formation of new ties particularly and generally 50% live within 25km

Institutional Relationships

Tie Type: STRONG & WEAK

PEOPLE

Eponymous

Institutional

Avocational

Familiar Strangers

PLACE

Neighbourhood

Third Place

Activity Space

"established official organisation" (Oxford, 2018). Not necessarily but generally has a physical presence

More critical than neighbourhoods to strong ties (Nast & Blokland, 2014)

Level of community higher in areas with more facilities (Volker, Flap & Lindenberg, 2007)

Unclear whether online is as formative as face-to-face

Institutions can be significant sites of bridging capital, especially through schools – cohesive communities

Avocational Relationships

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Tie Type: STRONG & WEAK

PEOPLE

Eponymous

Institutional

Avocational

Familiar Strangers

PLACE

Neighbourhood

Third Place

Activity Space

Very definition of community as shared interest, however least studied area in relation to community formation. Five loosely related studies only

Co-presence and shared practices can lead to movements and collective action (Diani & Mische, 2015)

Cultural choice can either bridge or divide society (Lizardo, 2014)

Behavioural studies suggest who you spend your time with influences your behaviour as much as close relationships (Pentland, 2014)

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Familiar Strangers

Tie Type: WEAK or subWEAK

PEOPLE

Eponymous

Institutional

Avocational

Familiar Strangers

Familiar Strangers (Milgram, 1977);

Consequential Strangers (Blau & Fingerman, 2009)

Familiar people from everyday situations providing repetitive reinforcement of sense of community & identity (Neal, 2013; Fingerman, 2009)

Co-presence and shared practices can lead to movements and collective action (Diani & Mische, 2015)

PLACE

Neighbourhood

Third Place

Activity Space

Weak ties more important than strong for social cohesion (Hipp & Perrin, 2009)

Smart card travel data shows strong periodic encounters in 75% of cases with a heavy tail (Sun, et al, 2013)

Neighbourhood Relationships

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PEOPLE
Eponymous

Institutional

Avocational

Familiar Strangers

PLACE
Neighbourhood

Third Place

Activity Space

Tie Type: STRONG & WEAK

Most widely studied area – aligns with dictionary definition

Seven studies found moving or living close to others in your social network positively impacts relationships and can be a trigger to form new ones, neighbours beget neighbours

Factors:

- Age of neighbourhood and length of residence

- Age and number of children

- Socioeconomic homogeneity or stratification

Is neighbourhood overemphasised? 50% of respondents do not name anyone in their local neighbourhood in ego-generator surveys (Volker & Flap, 2007). Assumed +ve

Spatial arrangements of neighbourhoods may still play a significant role in the formation of local communities and neighbourly interactions (Mahmoudi Farahani, 2016:362)

Third Place Relationships

Tie Type: TYPICALLY WEAK

PEOPLE

Eponymous

Institutional

Avocational

Familiar Strangers

Ray Oldenburg (1991) *The Great Good Place* = accessible, non-exclusive, quality spaces outside of home and work

Level of community higher in areas with more facilities (Volker, Flap & Lindenberg, 2007). Walkability, land use mix and street interconnectivity also has a positive relationship to social capital (Mazumdar et al., 2018).

PLACE

Neighbourhood

Third Place

Activity Space

Parks and Shopping Areas feature highly, often mundane spaces are the most important

Leftover spaces and "in-between activities such as waiting and queuing, established favourable conditions for ... social interaction with strangers to occur"...the "more criss-crossing of paths and activities, the more the social density and the likelihood of unplanned encounters" (Aelbrecht, 2016)

Activity Space Relationships

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Tie Type: STRONG & WEAK

PEOPLE

Eponymous

Institutional

Avocational

Familiar Strangers

Concept often used in Transport Studies

Neighbourhood redefined as flows of mobility (Van Kempen & Wissink, 2014)

Overlapping activity spaces reoccur with different groups of familiar strangers over the course of a day (Sun et al, 2013; Leng, et al., 2018) and people living in the same area are more than randomly likely to work in the same location (Tilahun & Levison, 2011).

PLACE

Neighbourhood

Third Place

Activity Space

Face Block Communities (Young & Willmott, 1957) & Belonging

Social Cohesion – segregation and intergroup contact

Economic Development – diversity and opportunity

Information Spread – strength of weak ties (Granovetter, 1973)

Socio-material
Double Embeddedness

PEOPLE

PLACE

A relationship between two people "may be embedded in a local structure of other relationships, in turn embedded in geographic space" (Habinek et al., 2015: 27).

Six studies collected both social & spatial data

Larsen, J., Axhausen, K., & Urry, J. (2006)
Cattell, Dines, Gesler, & Curtis. (2008)
Nast, J., & Blokland, T. (2014)
Simões Aelbrecht, P. (2016)
Oloritun, Rahman & Pentland, Alex & Khayal, Inas. (2013)
Francis et al (2012)

Eight studies used spatially signatured big data sets

Xu, Y., Shaw, S., Zhao, Z., Yin, L., Lu, F., Chen, J., . . . Li, Q. (2016)
Trestian, I., Kuzmanovic, A., Ranjan, S., Nucci, A. (2009)
Xu, Y., Belyi, A., Bojic, I., & Ratti, C. (2017)
Schlapfer M, et al. (2014)
Sun, L., Axhausen, K., Lee, D., & Huang, X. (2013)
Bingham-Hall, John, & Law, Stephen. (2015)
Ahas, R., Silm, S., Järv, O., Saluveer, E., & Tiru, M. (2010)
Agryzkov, T., Martí, P., Tortosa, L., & Vicent, J. (2017)

Methodology: Data Collection Approaches

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Data Collection	PEOPLE	PLACE
Big Data	3	7
Ego Generators	3	8
Interviews	12	12
Survey	8	13
Observation	2	3
Mapping	3	5

Methods that capture something more than ties:

Sense of belonging, group cohesion and reciprocity (McMillan & Chavis, 1986)

Shared values, ways of life and mutually recognised identities (Mason, 2000)

Methodology: Analysis

PEOPLE

Analysis Used	People Based Instruments	Big Data Instruments	Place Based Instruments
Qualitative	9	1	4
Network Analysis	5	6	3
Statistical Analysis	3	1	0
GIS / Mapping	1	2	0
Regression Model	12	0	1
Various Models	6	1	0

PLACE

Ethnographic	Social Science / Economic	Computer Science

QUALITATIVE   **QUANTITATIVE**

Policy Implications

Wellbeing

Tie Type: STRONG

Eponymous Relationships

Time spent socialising, in particular with strong and volunteering based ties, has significant effects on reported enjoyment as well as emotional and material support (OECD, 2017)

Inclusion

Tie Type: STRONG & WEAK

Institutional, Avocational, Neighbourhood

Community is by definition inclusive and exclusive. Finding a balance between promoting identities that foster a positive sense of belonging without causing deep divisions is a policy challenge

Social Cohesion

Tie Type: WEAK

Familiar Strangers, Activity Spaces, Third Places

Social Cohesion = social relations, sense of belonging, and orientation towards the common good (Schiefer & Noll, 2017).
Weak ties found to be most social cohesive (Hipp & Perrin, 2006)

Wellbeing, Institutions & Neighbourhoods

A wider study has been envisioned that would explore the relationship between modes of travel at the neighbourhood level and a) measures of community using Social Network Analysis and b) qualitative accounts of community belonging. An observational study design (Rosenbaum, 2000) is proposed which will survey and interview parents at a stratified sample of primary schools in London. This data will be used to understand i) school travel habits at the individual level and ii) connection between respondents and other individuals and institutions at the neighbourhood level. Multiple sources of data will be collected – spanning qualitative and quantitative, social and spatial – with a view to generating a multi-level, spatialised understanding of relationships between school-based travel behaviour and qualities of 'local community' measured as a socio-spatial construct (e.g. density of ties, perceptions of community, levels of social capital, provision and use of third spaces and so on)

Social Cohesion, Familiar Strangers & Activity Spaces

Investigating the role of familiar and consequential strangers on social cohesion using street markets as places of frequent encounter of different others in public space. Implicit aggressions between different ethnic groups is a feature of current urban existence, markets are at the front line of interethnic exposure and therefore play a key role in this exchange. Studying spatial and social network manifestations in the market is intended to open discussion on pluralities of public space as both perpetuators of established prejudice but also catalysts for social cohesion. In literature, mere contact effect is a factor in ethnic social cohesion, do structural and institutional relations and inequalities, as manifest in a market, unconsciously translate into public sensibility? Can logics of ethnic territoriality in every day activity spaces significantly impact on wider community cohesion?

On socio-spatial measures of community

Presentation at AAG Conference in Washington DC

Paper invited for *The Handbook of Cities and Networks* (Neal and Celine Rozenblat, Edward Elgar Publishers) (in preparation)

Separate methodological paper (hopefully)

- Collaborations
- Publication Suggestions
- Further Presentations

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