INVENTORY AND LINKAGE OF DATABASES FOR STUDYING THE RELATIONSHIPS BETWEEN PLACES AND HEALTH IN URBAN SETTINGS (Montréal Site)

Louise Potvin
Katherine Frohlich
Pierre Hamel
Marie-France Raynault
Slim Haddad
Maria Victoria Zunzunegui

Lise Gauvin
Clément Dassa
Éric Robitaille
Sébastien Giroux
Robert Choinière
Nancy Ross
Why are we concerned with small areas?

Most scientists regarded the new streamlined peer-review process as ‘quite an improvement.’
Why are we concerned with small areas?

- There is a debate regarding the most appropriate unit of analysis for exploring the role of social, cultural, and economic disparities on health.
Why are we concerned with small areas?

- There is a need to theorize about health and place.
The most appropriate unit of analysis might be neighbourhoods of residence because ...

- ... the neighbourhood environment is closer to the everyday pursuits and experiences of people and therefore is very likely to exert direct causal influences;
- locale wherein persons find and use resources to accomplish the aspirations they deem subjectively meaningful;
- people with similar values and lifestyles often aggregate to the same geographical locales;
- evidence that neighbourhood environments influence a variety of health outcomes including health behaviours.
What are some of the problems we have encountered?
Some of the challenges ...

- Different conceptual definitions of neighbourhoods as a function of:
  - Disciplines
  - Convenience
  - Availability
What is a neighbourhood?

... “place with physical and symbolic boundaries” ... (Keller, 1968. p: 89.)

... “place and people, with the common sense of limit as the area one can easily walk over” ... (Morris & Hess, 1975 p: 6.)

... “a physical or geographical entity with specific (subjective) boundaries” ... (Golab, 1982, p: 72)
What is a neighbourhood?

- “a limited territory within a larger urban area, where people inhabit dwellings and interact socially” ... (Hallman’s, 1984 p: 13)

- “a social organization of a population residing in a geographically proximate locale” ... (Warren, 1981, p: 62)

- “Geographic units within which certain social relationships exist” ... (Downs, 1981, p: 15)

- “common named boundaries, more than one institution identified with area, and more than one tie of shared public space or social network” ... (Schoenberg, 1979, p: 69)
How can we best define neighbourhoods, conceptually?
Some more challenges ...

- Most databases dealing with health were *not conceived with spatialization* in mind rendering analyses “post hoc”
The most frequently used criterion for dividing territories into neighbourhoods is **HOMOGENEITY**

- Is this the right criterion? The best criterion?
- What other criteria are there?
A sampler of what we did ...
Census tracts
Material deprivation
Social deprivation
Maximizing homogeneity
What are the most appropriate criteria?
Another musing ...

... the age and the history of a city matter ...
Are data from different cities comparable?
Still another musing ...

- ... different populations have different degrees of freedom in spread out across neighbourhoods (some people are prisoners of their area of residence because of poverty, exclusion, ...) ...
How do we account for differential exposure to neighbourhoods?
Yet another musing …

… time …
How do we account for change across time?
Multiple levels of spatial analysis

- Enumeration Areas
- Census Tracts
- Police Districts
- “Arrondissements”
- City-defined neighbourhoods
- Community Divisions
What is the most appropriate scale?
More ideas ...

- Many researchers are using multilevel modeling to decompose variance from neighbourhood and individual levels:
  - In re-structuring data hierarchically, how are we affecting the representativeness of samples?
  - Are we appropriately teasing out compositional from contextual effects?
What is the most appropriate analysis strategy?
The Structuring of our Work

Conceptual Development work group

Database work group

How to interface the conceptual and the empirical?
Two parallel processes (1)

Attempts to develop a coding scheme of the literature on health and place

- Reading a variety of relevant paper
- Elaborating tree-like logic models for each paper
- Creation of a glossary and definitions of concepts encountered in papers
Two parallel processes (2)

Attempts to develop an understanding of how places produce health

- Create a synthesis of papers concerned with spatialisation and food safety to be analysed from various theoretical perspectives
- Try to establish an understanding of what is meant by community and neighbourhood
Questions

- Is the question of defining « perfect » geographic borders a trap
- Is the criteria of maximising within homogeneity and between heterogeneity
- Does the relationship with space change with: SES, the health issue
What is the best way to interface the conceptual and the empirical?
Where do we go from here?
Current conceptualisations and operationalisations of neighbourhoods may still be far from optimal.