

Connectivity, Peripherality and the Rural Development Problem

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Who are the most peripheral?

- Second generation North African immigrants living in the “banlieus” of Paris
- Software designers in the Faroe Islands
- Coal miners in Central Appalachia in the United States who can reach multiple major metropolitan regions in a 200 km drive
- Salmon farmers in Arctic Norway

But first some context

- Vast majority of academic literature and government policies argue that economic development in remote sparsely populated regions is improbable, simply because they are small and remote.
- Peripherality is not just a Nordic issue – also important in Australia, Canada, Chile, Russia and other countries with similar large geographies and sparse rural populations.

Newfoundland and Labrador

Population: about 500,000 people

Largest city: St John's – metro region about 200,000 people

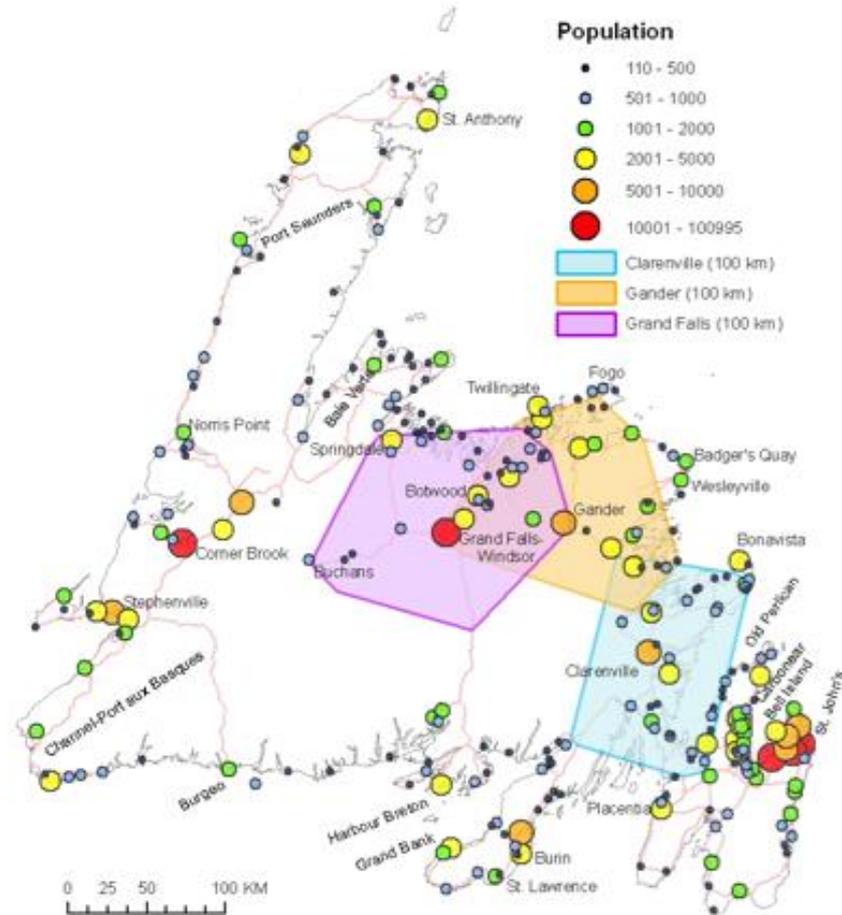
Size: 405,000 sq. km. (4% of Canada)

Population Density: 1.38 per sq. km.

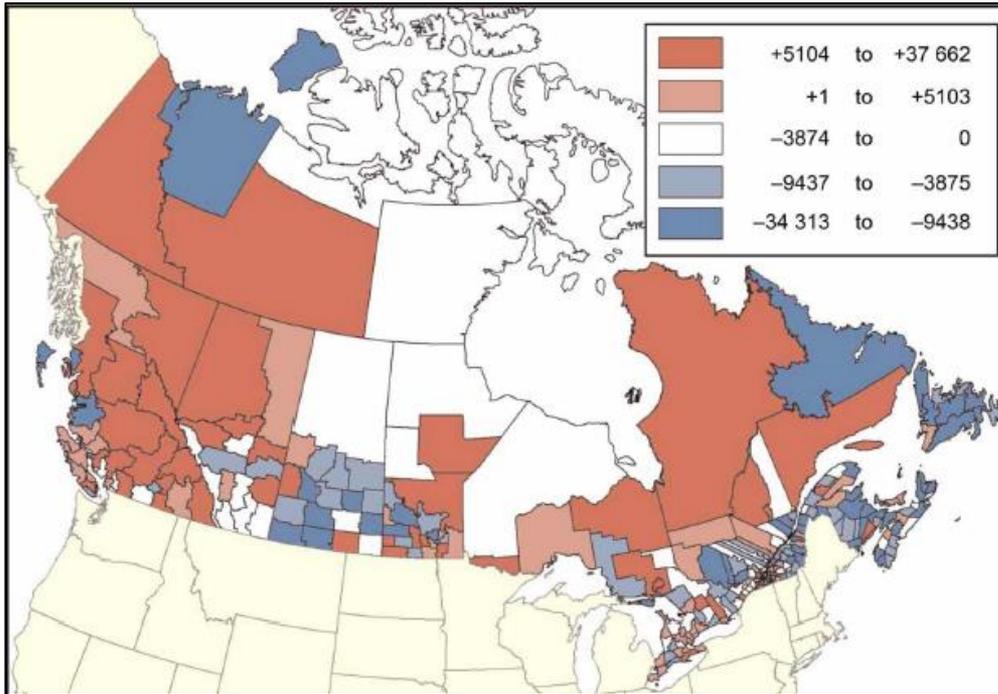
Main exports – oil and gas, fish, iron ore, electricity and forest products

Roughly triangular in shape (400 km.) but irregular coast with bays fiords and islands

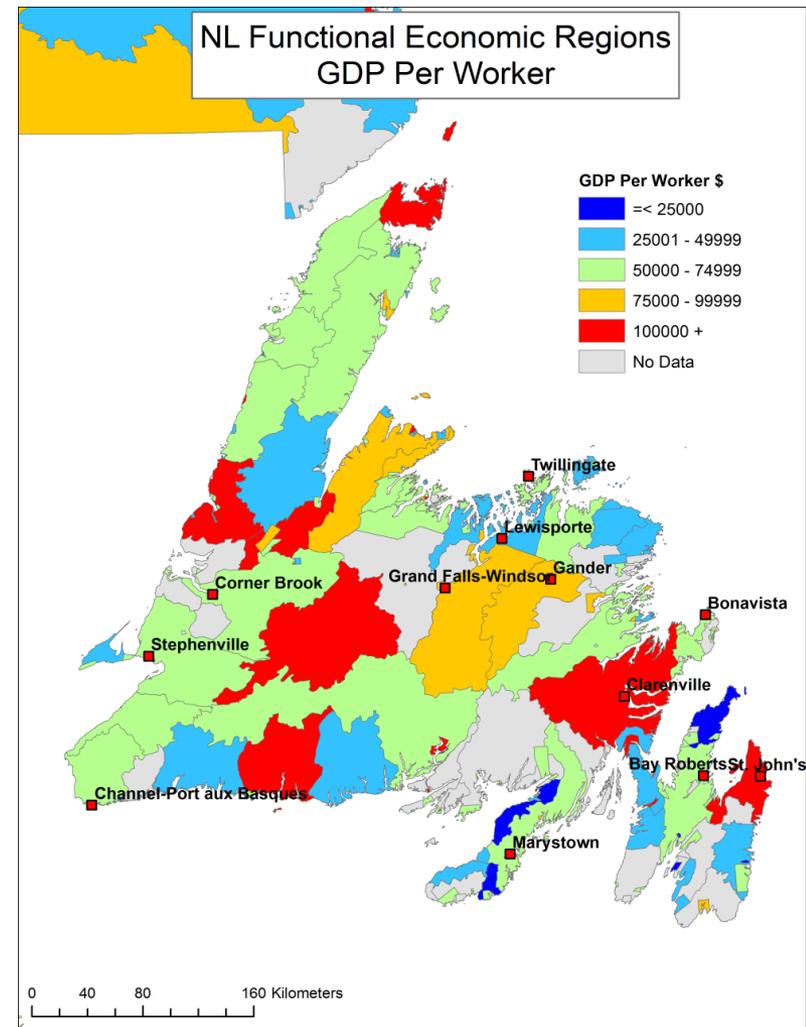
Population and Overlapping 100 km Service Areas



The size of the region used influences conclusions about rural productivity



Large parts of rural Canada have high productivity when using CD level data, but at the CSD level it is more complex



Dimensions of Peripherality (Boschma 2004)

- **Geographic:** physical distance from large population centers, or some measure of the cost in time and money to various locations
- **Cognitive:** different learnings, little common knowledge, inability to assimilate ideas
- **Social:** differences in behavior and values
- **Institutional:** different laws, habits and routines that regulate behavior, which increases transactions costs
- **Organizational:** not integrated into an organization's structure, or able to contribute to organizational decisions

Granovetter (1973): The Strength of Weak Ties

Strong Ties

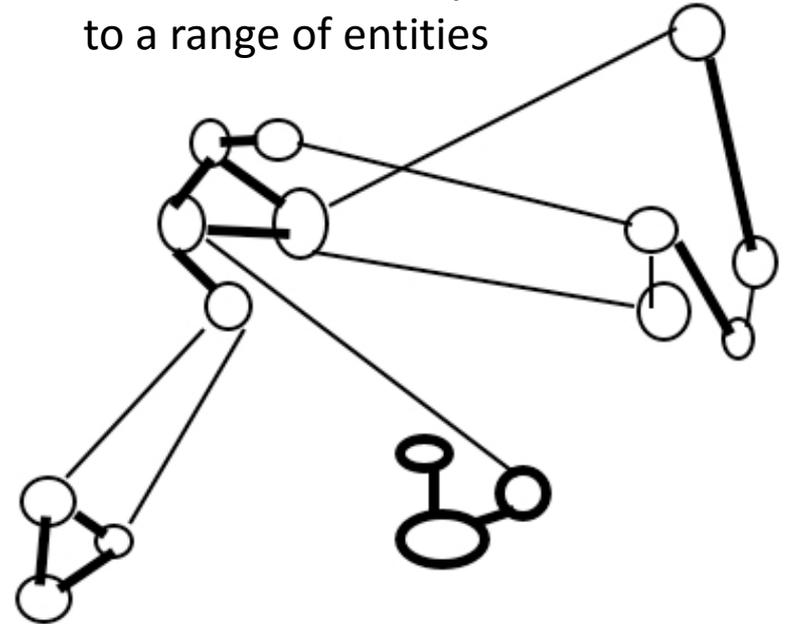
Frequent and strong links to a small number of entities



Bonding

Weak Ties

Links include infrequent connections to a range of entities



Bridging

What Granovetter Means for Rural Development

- People in rural regions typically have very strong ties within their community to fellow residents, but often only a very small number of weak ties to people in other regions.
- While people in successful rural regions have strong local ties, and also have a considerable number of weak ties to people in a number of other regions

More Types of Ties or Networks (Murdoch 2002)

- **Social** – people you see frequently in your daily life
- **Transport** – roads, rail, air, sea
- **Supply or Value Chain** – firms that are vertically integrated in production
- **Professional** – industry organizations, professional organizations, business contacts
- **Telecommunications** – Internet, telephone, social media

Extending Granovetter

- Just as weak social ties add value by bridging, having a broad range of ties of all kinds (networks) is useful. But, having only strong ties might not be helpful.
- The penalty of weak geographic ties (distance) can be offset by developing good linkages in other types of ties.
 - For example, good transport connections, good broadband and good business networks allow a remote firm to be competitive in distant markets.

Some Hypotheses

- Geographic peripherality
 - reinforces social peripherality in rural places, which increases strong bonding and weak bridging relations
 - can lead to organizational peripherality, but for firms this can be reduced through supply chain networks, professional networks and telecommunication networks
 - has no necessary connection to cognitive peripherality
 - makes good transportation networks essential

More Hypotheses

- Cognitive peripherality essentially blocks development since it makes most networks ineffective.
- Social peripherality is strongly reinforced by social networks that lack weak ties
- In rural areas branch plants overcome distance by bringing their networks with them, but locally owned firms must construct networks in order to succeed.

Conclusions

- Rural regions that experience economic development have to have a valuable product to sell, but even where they are remote good networks can offset distance.
- Large externally owned firms overcome distance by importing networks but local firms have to connect them.
- Avoiding cognitive peripherality is crucial – need good education, exposure to other cultures and places and openness to new ideas.
- Good transport and telecommunications is vital, but not sufficient.