
Struggling with Regional Innovation Models: Towards a Synthesis of the Connection between Geography and Innovation

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Context

- The territorial innovation approach (regional innovation systems, clusters, innovative milieus, districts, etc.) has produced an extensive body of research in recent years and has been used widely to underpin analytical concepts and development tools that seek to understand and support innovation at the regional level.

Objectives of the presentation

- Understand how the 'RIS field' developed since the 1990s
- Describe the current state of RIS research
- Suggest recommendations for moving RIS field forward

How the 'RIS field' developed since the 1990s?

How the 'RIS field' developed since the 1990s

- Since 1990s, there has been a growing interest in the subnational dimensions of innovation systems (Cooke, 2004; Asheim and Isaksen, 2002)
- Encompasses a considerable range of research fields (and confusion): local knowledge spillovers, innovative milieu, industrial districts, clusters, learning regions...
- And related to a considerable range of literature in regional studies and in the broader stream of innovation studies and evolutionary and institutional economics

The role of the region in enabling creativity and innovation to occur

- Innovation is a place-based process
 - Innovation is a network-based process
 - Innovation is a localised process
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Sources of Competitive Advantage in Regional Economies

- 'Untraded interdependencies' - technological spillovers
 - Networking - based on trust
 - Social capital - shared norms and trust
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Regional innovation systems

- Regional Innovation System has developed into a widely used theoretical framework, analytical instruments and gained popularity as a framework for innovation policy learning

For what for?

- Creating a policy framework aiming at favoring localized learning process in order to secure regional innovativeness and competitiveness
 - Improving capabilities and performance of local firms, as well as improving their business environment
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Key empirical questions and studies

- Analyse how regional capabilities enhance firm's innovativeness?
- Analyse the spatial clustering of economic activity and knowledge creation
- Diversity of regional innovation systems and their economic performance

Applications of the RIS

- Individual case-studies on regional innovation systems
- Comparative case-studies of 'successful regions' and 'successful cities (Simmie, 2001; Cooke 2004; Wolfe and Gertler, 2004)
- Typologies of RIS (Cooke, 1998; Asheim and Isaksen, 2002; Cooke, 2004)

Some limitations about RIS in 2000s

These are primarily based around concerns that related to:

- Lack of conceptual clarity over a number of spatial concepts that have been introduced and a wide variety of such concepts exist (Moulaert and Sekia, 2003)
- The application of the regional innovation system as a analytical concept and development tool (Doloreux and Parto, 2005)
- A primary focus on ‘successful’ regions and *High Tech* sectors

Moulaert et Sekia, 2003

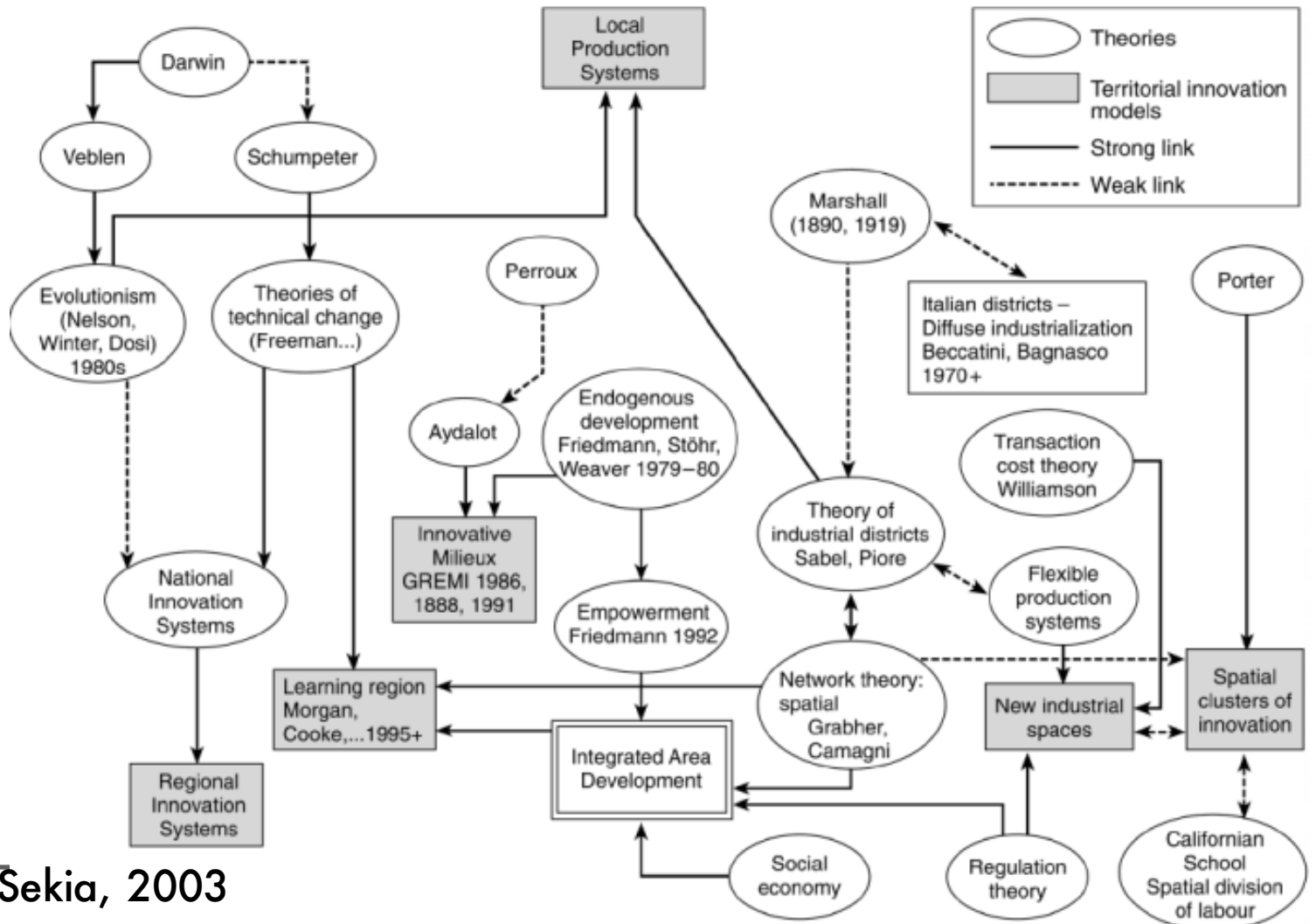


Fig. 1. Territorial innovation models: theoretical roots and challenges.

Some 'early' critical voices

- 'RIS are not sufficient on their own to remain competitive in a globalizing economy... This line of reasoning is followed to a point where the regional innovation system expands beyond its own boundaries through a process of economic integration and globalization (Asheim and Gertler, 2005)
 - 'The regional system of innovation framework lacks clarification on what is a region and in what way a specific region can be label as an innovation system (Shearmur, 2011)'
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Some 'early' critical voices

- 'Local-buzz and global pipelines... (Bathelt et al., 2004)
 - Different proximities enable information and knowledge exchange (Boschma, 2005; Torre and Rallet, 2005)
 - Innovation is not bounded by geographic frontiers (Freel, 2003; Doloreux, 2004; Lorentzen, 2007)
 - 'Open' regional innovation system (Belussi et al., 2010)
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What is the current state of RIS research?

The current state of research in RIS research

New domains of investigation in the RIS research

- The geography of knowledge flows (Grillitsch et al., 2013; Tödting et al., 2015)
- Knowledge bases and RIS (Asheim et al. 2011; Martin et al., 2011)
- Regional resilience and path renewal (Asheim et al., 2015; Boschma, 2015; Hassink, 2013)
- Policy measures – Constructive regional advantages (Cooke et al., 2011; Asheim et al. 2011) and smart specialisation (Foray and many Europeans colleagues)

The current state of research in RIS research

Applications of the RIS approach to other regional contexts

- Peripheral and rural regions (Isaksen et al., 2014; Fitjar and Rodriguez-Pose, 2011)
- Capital city-regions (Warland et al., 2015; Doloreux et al., 2010)
- Cross-border regions (Trippel, 2010; Lundquist and Trippel, 2013)
- Latin America regions (Felzensztein, 2014; Tiffin and Kunc, 2011)
- East Asia and Chinese regions (Li, 2014; Yoon et al., 2014; Chaminade, 2011)

The current state of research in RIS research

Applications of the RIS approach to other sectors/clusters

- Natural resource-based clusters
 - Low-tech industries
 - Cultural and creative industries
 - Knowledge Intensive Business Services
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The current state of research in RIS research

RIS under threats: connecting regions together

- Findings new 'ways' to capture the complexity of the spatial distribution of innovation geography and innovation
 - Phil McCann (2007) proposed a model to understand how different types of innovation occur at different distances from metropolitan areas, which are highpoints for interactions; access to global markets and information; access to labour and other consultants
 - Empirical studies on KIBS (Doloreux and Shearmur 2012, 2013) and manufacturing in the province of Québec (Shearmur, 2013)
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The current state of research in RIS research

RIS under threats: innovation beyond metropolitan regions

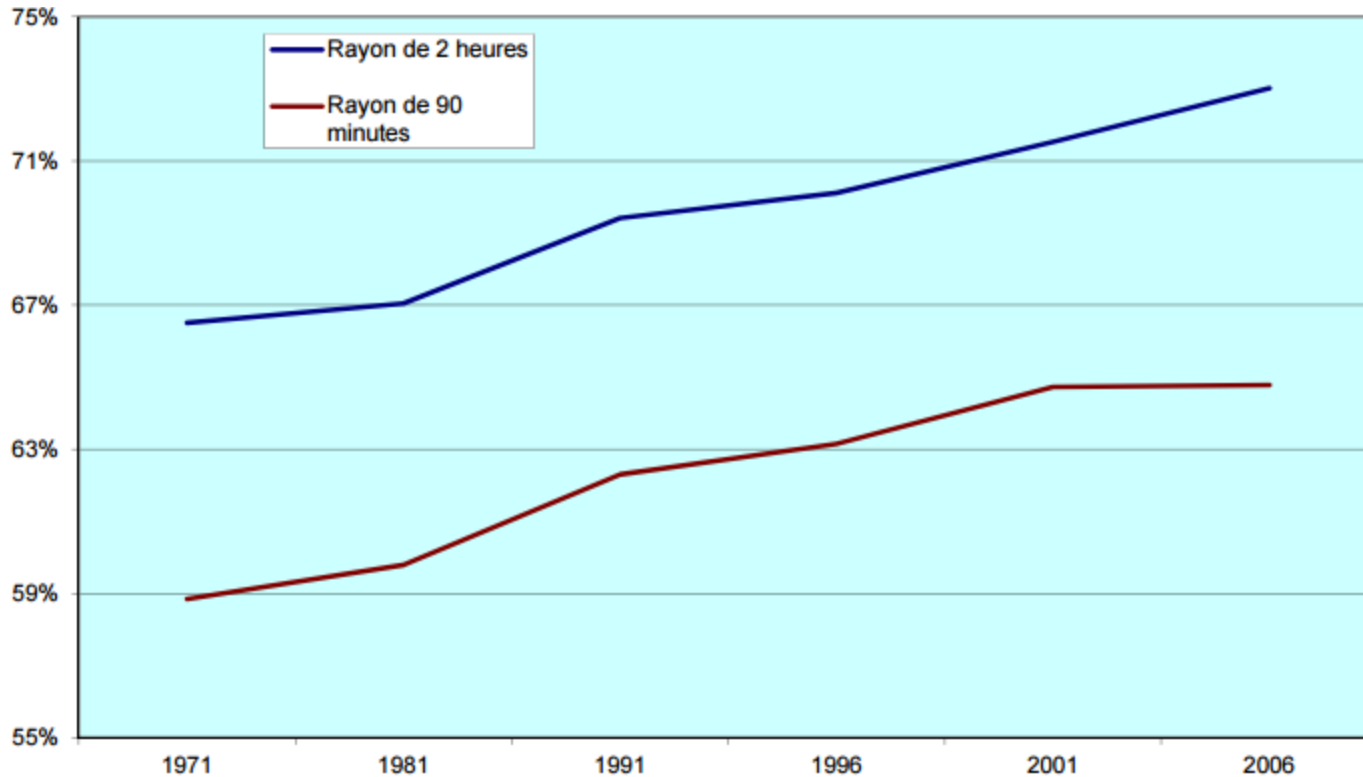
- Findings new 'ways' to capture the complexity in understanding the evolution of innovation and the role of the region
 - Shearmur's (2015) model is on the access to different sources of information at different points of time in order to explain how innovation takes place in different places
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- The response proceeds in two stages (Shearmur, 2015)
 1. **Spatial dimension to entrepreneurial innovation:**
 - Different stages of innovation occur in different places
 - Innovation occurs everywhere, but product development and firm growth needs city resources.
 2. **Introducing a new dimension to information and knowledge:**
 - Some knowledge loses value quickly, proximity to interlocutors matters
 - Some knowledge remains valuable over time: proximity is less important, but its value depends
 - on internal capacities
 - on interaction with localised knowledge.
-

And innovation in the periphery

How are firms able to innovate away from cities and clusters, especially given the information (and connectivity) advantages of agglomeration (Bathelt, 2011)?

Proportion of Canadian population living within 90 minutes (approx 130km) and 2 hours (approx 180km) of a metro areas of above 500 000 people, 1971-2006



Source : Calculs des auteurs d'après des données de Statistique Canada.

Population in Canada's periphery cannot be ignored: it remains a sizeable propo

Some 'modest' suggestions for moving RIS field forward

Suggestions for moving RIS field forward

Knowing what we are dealing with: Region (do we have to care)

- Region typology
 - Administrative
 - Fonctionnal
 - Territories

 - Location and connectivity between different places – locations-
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Suggestions for moving RIS field forward

Knowing what we are dealing with: what spatial scale do processus, such as agglomerations externalities, occur?

- Two contrasting views
 - Dichotomous framework: IN vs OUT the region
 - Distance between different locations
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Suggestions for moving RIS field forward

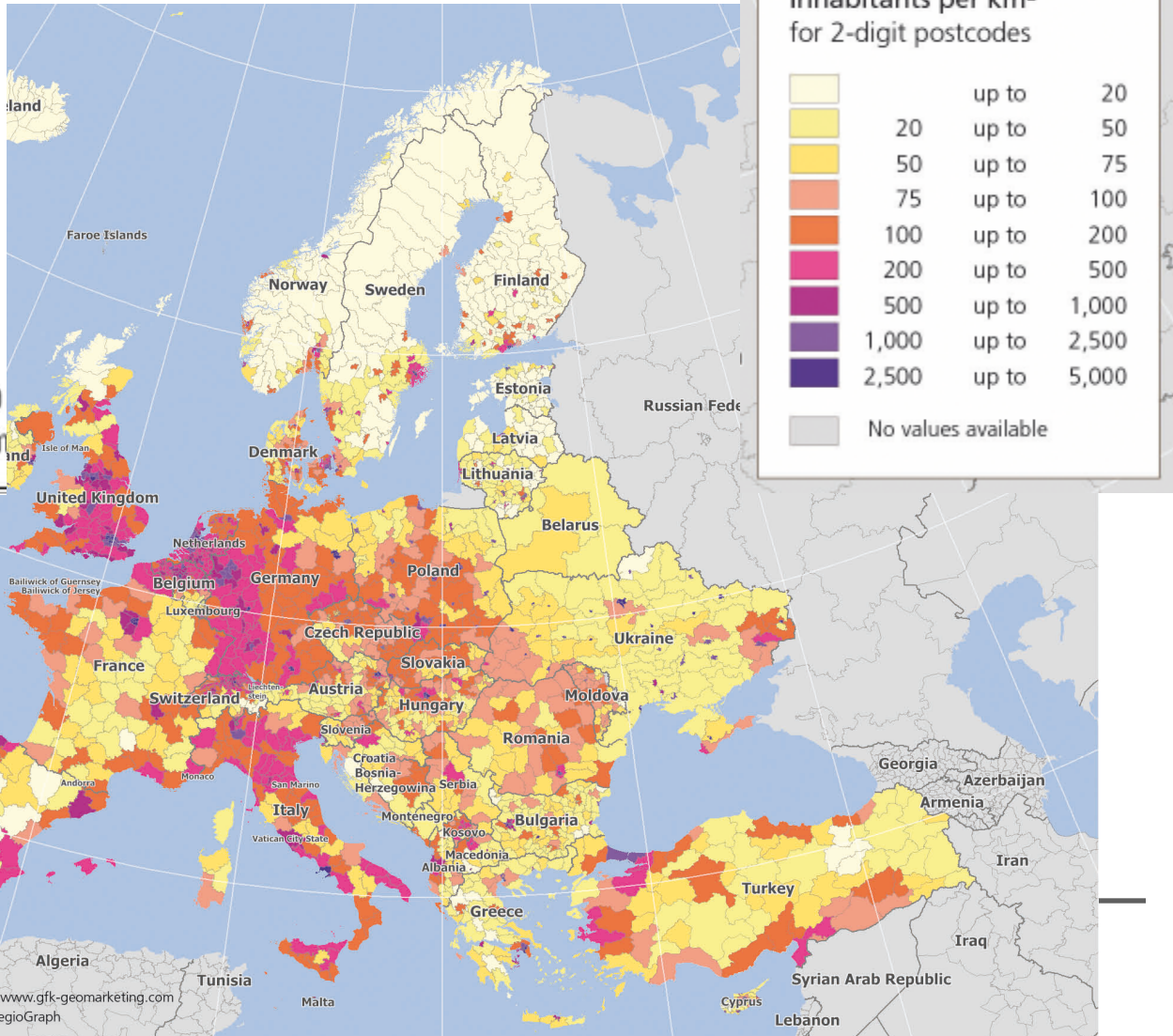
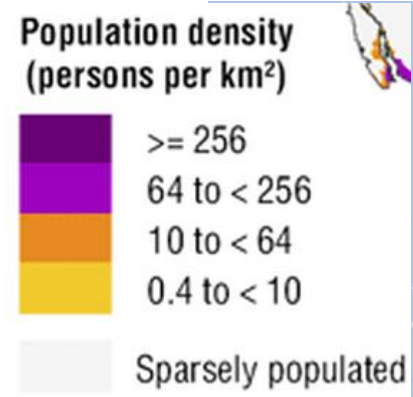
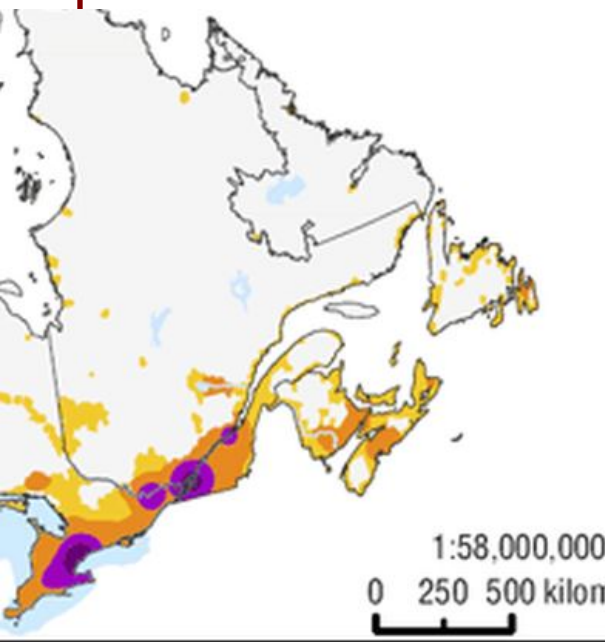
Expand the RIS research field (Boschma et al., 2014)

- On the one hand, we could break with past studies and expand the geographic scope of empirical work
 - On the other hand, the alternative is to focus on a 'familiar' context by asking new questions
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Suggestions for moving RIS field forward

Generalization of empirical results (Shearmur, 2015)

- To what extent the results can be generalised?
 - Diversity of regional innovation systems and configurations
 - National and local institutional settings
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Suggestions for moving RIS field forward

The regional impact of innovation – job creation, increase in incomes (Shearmur, 2015)

How local innovation translate into local economic growth

- Do localities and regions which house innovative firms benefits from this innovation?
 - What are some of the mechanisms through which firm-level innovation impacts localities and regions?
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Concludin remarks

- 'Geography of innovation' may not be enough to understand all the processes involved
- Perhaps we should think more in term of

The geographiS** of innovati**S****



Merci!!!
Thank you !!!

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