

Are there regional innovation policies in Canada?

Superclusters, smart specialisation and context

David Doloreux / Richard Shearmur

HEC Montréal / Université McGill

Strasbourg, Octobre 2022

Basic question we address

The government of Canada has recently introduced a supercluster policy.

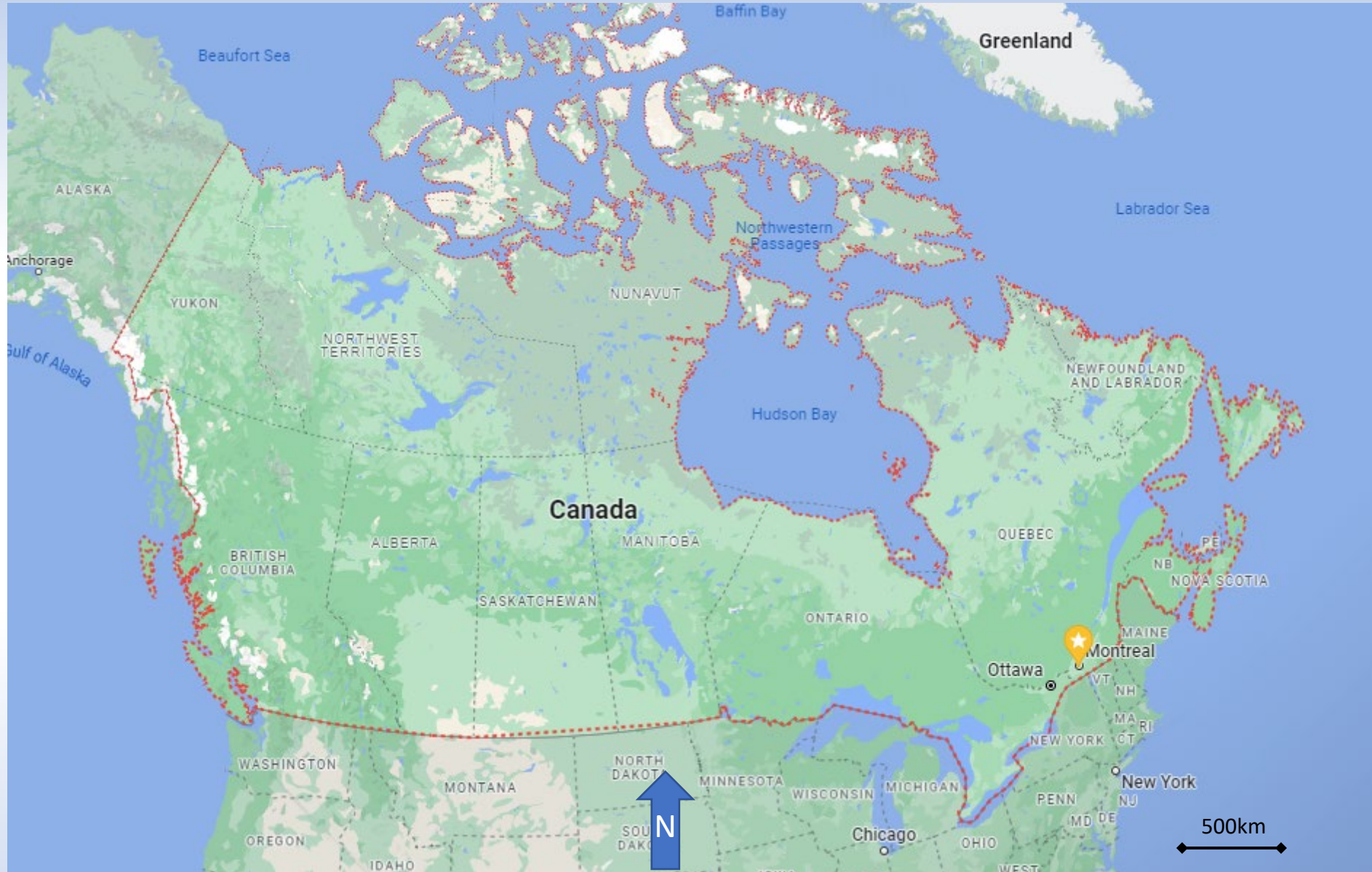
It seems to be premised on the logic of regional specialisation, somewhat similar to smart specialisation.

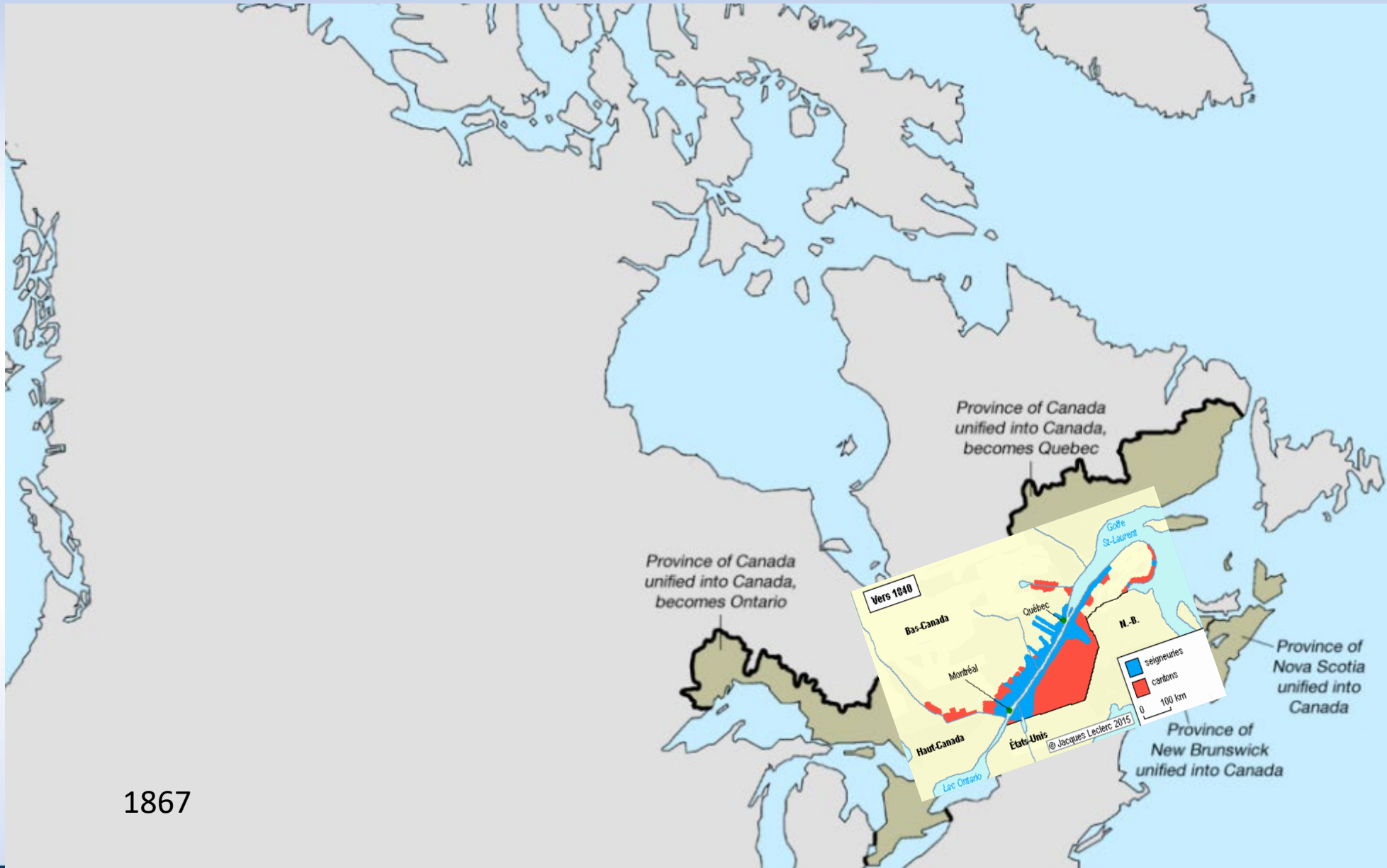
**Has Canada introduced a regional innovation policy?
Can it be compared to Europe's smart specialisation?**

Plan

- Canada is not Europe
 - Geography
 - Institutions
 - Mindset
 - ... so comparison with Europe is more difficult than we first thought.
- So what *is* this supercluster policy?
 - Is it a regional innovation policy?
 - If not, how can it be understood?

Géographie





1867

**CANADA
1871**



© Encyclopædia Britannica, Inc.

Today – inhabited zones

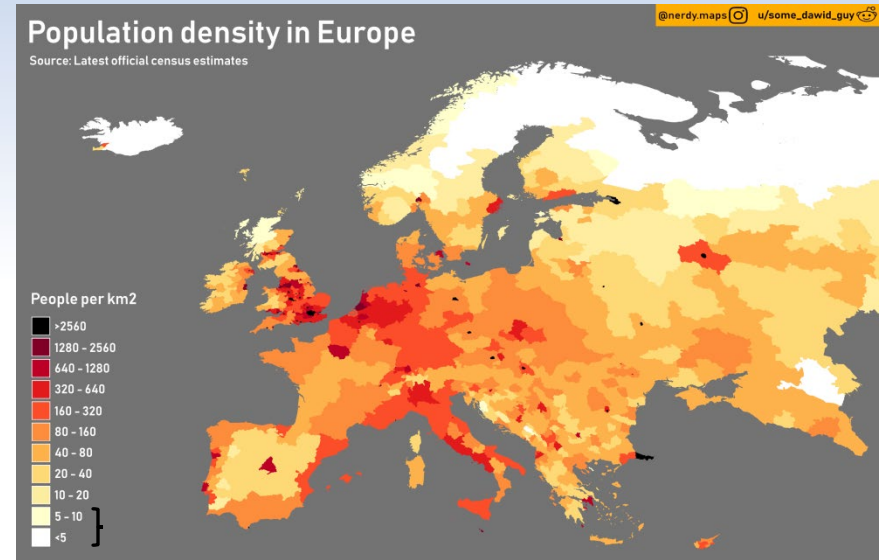
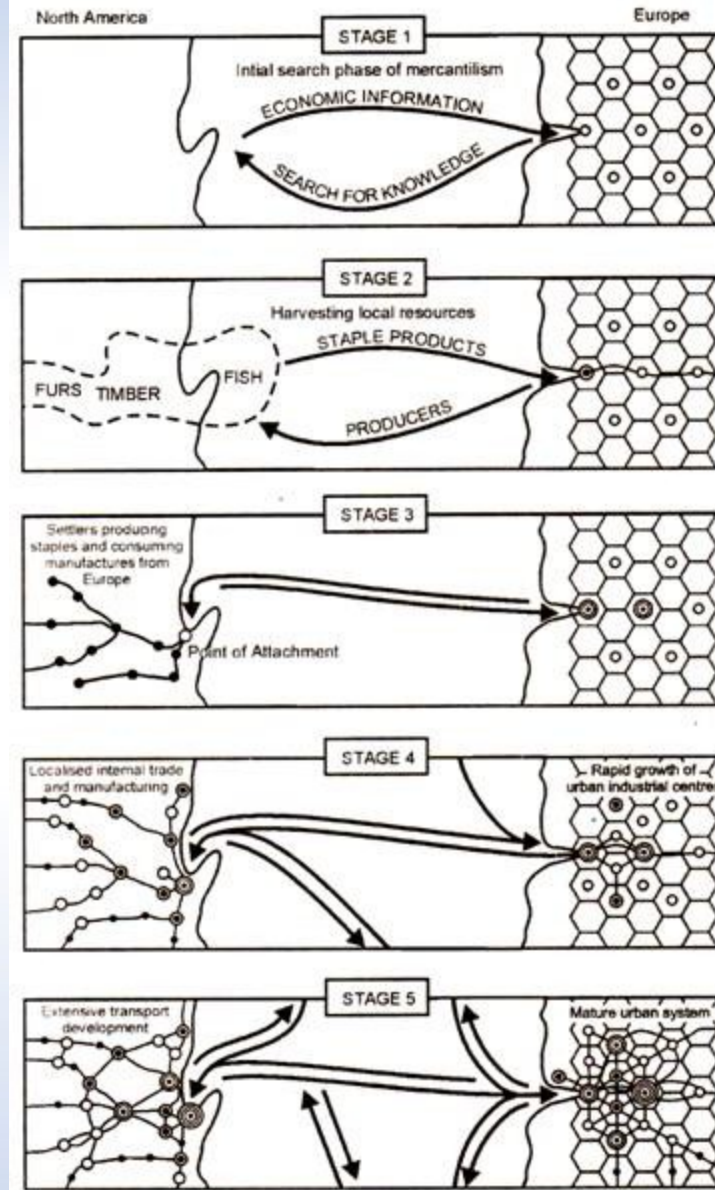
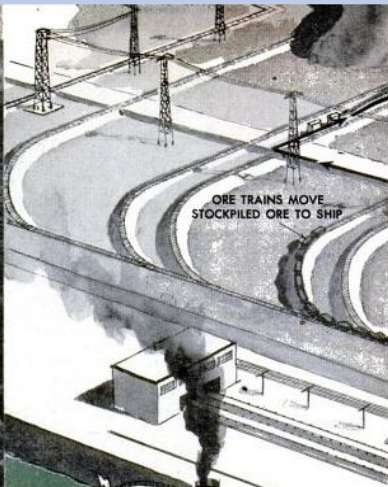


Figure 3.6
Vance's Mercantile Model





Kailroada leaps across chasms, through mountains, using trestles



ORE TRAINS MOVE STOCKPILED ORE TO SHIP

1963

....And Record Home Building

They're fast pushing back the town frontiers in Labrador City, as witness this amazing housing achievement of 1963—so close to the woods that new streets have to be carved out to keep pace with the growth—132 homes erected in 27 days!



For six years the cry has been "Ore by '54," and 6000 men have battled the wilderness to make it come true. Ungava's fabulous ore will be rolling this year on

The IRON ROAD to LABRADOR

By Richard F. Dempewloff

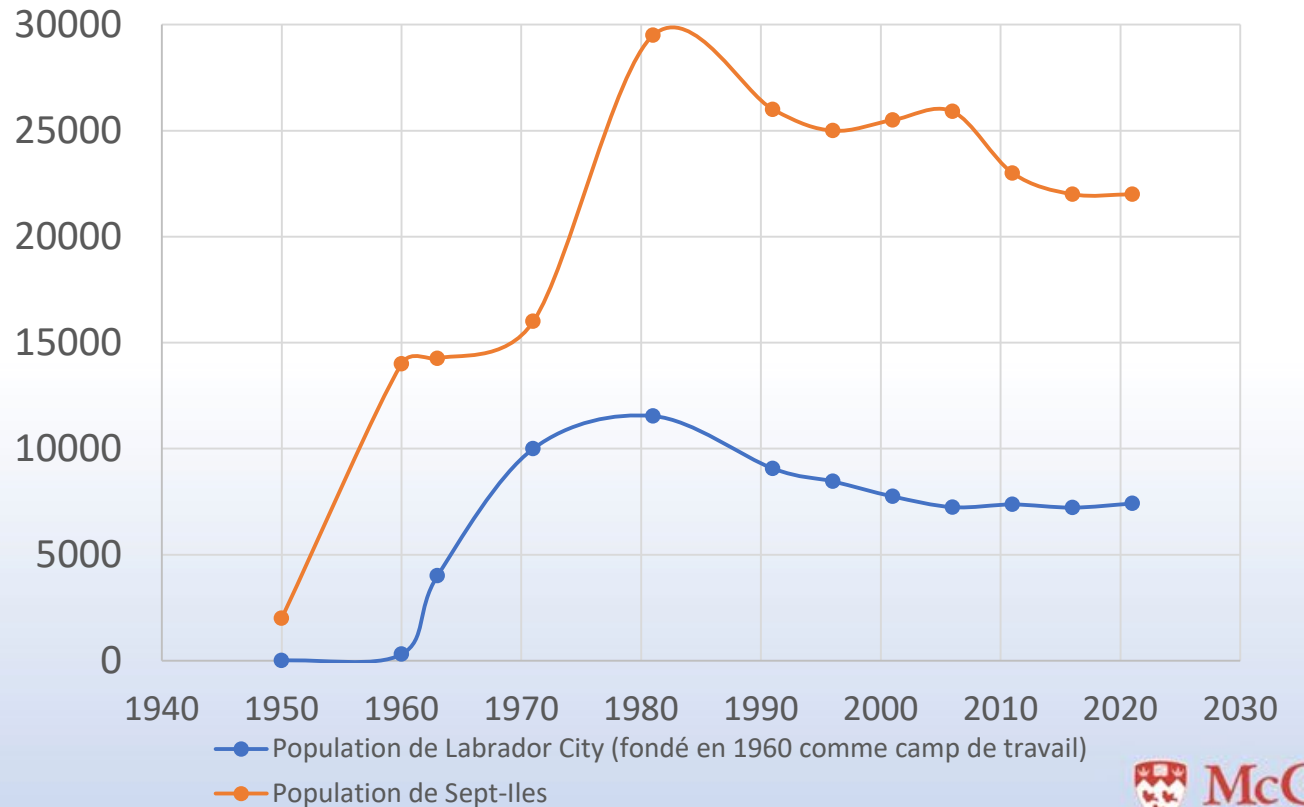
G IANT "CATS" are roaming the forests and lake-strewn wilds of Labrador. They're gouging the muskeg, toppling the stunted spruce trees and pounding the thick moss carpet to a pulp.

They have carved a 360-mile gash from the boom town of Seven Islands on the St. Lawrence River to a bleak campsite at Knob Lake, between Hudson's Bay and the coast. The bulldozers are grading a right of way for the biggest railroad-building project this continent has seen in nearly half a century.

Since 1950, an army of 6000 men has battered its way northward through a land so inhospitable that, until they came, only a handful of Indians prowled the shores of its myriad lakes to hunt bear and caribou, or set traplines for mink, marten and muskrat. But by last July the steel had reached Mile 140. Farther up the line, graders were pushing past Mile 185.

Behind them lay the rugged mountains through which they drilled and blasted their way via two tunnels—one 2200 feet long, the other 760 feet. At Mile 12 they'd carved grading from the sheer granite sides of towering cliffs, sent steel girders leaping 708 feet across a deep gorge over the Moisie rapids where seals bask and preen their whiskers.

Ahead lay the goal—a bleak tableland of jagged rock swept by Arctic winds whistling down from Ungava Bay. Cinnamon-red hills surround a large campsite of log buildings on a dirt street called Burnt Creek. Jeeps whine and pitch over roads that disappear in the bush. In this terrain, a Jeep is a wreck at 10,000 miles. Mobile churn and diamond drills—some of them riding weird, marsh buggies to support them on the soft muskeg—tower against the sky, their bits probing for the rich iron ore that is the reason for all this activity.



Institutions

Canadian Constitution

- Federal government is responsible for international affairs affecting the whole of Canada (e.g. Air pollution; trans-Canadian transports), and equalization payments between provinces.
- Equalization?
 - The redistribution of tax revenue to compensate for provinces' different tax bases different capacities to raise taxes.
 - It aims to even the playing field – at the provincial scale.
 - The federal government cannot intervene directly at the infra-provincial scale.

Canadian regional innovation policy?

- The federal government can offer funds, and can offer specific programmes, but has no other means of intervention (e.g. regulatory; forced cooperation between municipalities...) and cannot compel uptake.
- If the federal government offers programmes or funding at an infra-provincial scale, it must do so in all provinces.
 - If not, other provinces feel slighted.
 - So cannot address Canada-wide regional development issues.

Canadian regional innovation policy?

- Nothing until late 1960
- 1969: DREE (Department of Regional Economic Development)
 - Targeted interventions for less developed regions; criteria elaborated to identify such zones.
 - Actual regional development policies, focussed on attracting industries.
 - Inter-provincial tension because some provinces had more less-developed-regions than others.
- 1987: abolition of DREIE (successor to DREE)
- Since 1987:
 - Economic development agencies for each province or group of provinces:
 - ACOA (Atlantic); DEC (Québec); FedNor / FedDev (Ontario); CanNor (Far North); PrairiesCan (Prairies); PacificCan (BC)
 - These agencies have no specific regional development programmes. Rather, they centralise information and ease access to federal innovation, industrial, export or other programmes.

What about the provinces?

- Very few targeted regional development policies.
- They provide a framework for ‘bottom-up’ development (e.x. CLD: Centre Locaux de Développement)
- Very substantial, but hidden, régional subsidies:
 - Infrastructure maintenance
 - Access to public services
 - Health care
- Tension between regions and cities:
 - Outside of cities, regions rely essentially on agriculture or resources.
 - Regions feel that ‘their’ riches are being extracted.
 - Cities feel this is an exaggeration: capital, resource markets, etc...are urban

Mindset



So, Canada is not Europe

- Recent colonisation and (colonial) settlement.
- Until 1930's the Prairies and the West were still being settled.
- Until late 1960s 'regional policy' was essentially mercantile and resource-driven: clearing land, opening mines, municipal organisation of territories, building and abandoning villages...
- The local anchoring of people and families exists, but is different from, and less marked than, in Europe.

So, Canada is not Europe

- **Similar geo-economic processes** (similar development levels; national innovation and development policies and ambitions; political systems; languages; culture...)
- **But the context within which they are deployed is different**
 - Geography
 - Institutions
 - Mindset

To sum up

- In Canada, regional issues have been resolved through migration, not regional development or regional innovation policy.
- This works (or worked) provided:
 - there are opportunities elsewhere (not always the case, especially when skills are not matched).
 - there is limited attachment to regions (but as Canada acquires more history, attachment grows).
- History of local ‘bottom-up’ initiatives:
 - North American self-help culture.
 - Success depends heavily on Leadership, Location and Luck (the three L’s ?).

Superclusters as a new policy strategy

- What is the idea behind superclusters?
 - How do they work in practice?
- What are the challenges that need to be addressed to clarify the scope/objectives and potential benefits of the policy?

Canadian Superclusters
–The intention



Context

- In 2017, Canada's Federal government launched the *Innovation Superclusters* strategy to “invite industry-led consortia to lead and to invest in bold and ambitious proposals that will supercharge their regional innovation ecosystems. By pulling in large firms, innovative small and medium-sized enterprises (SMEs) and industry-relevant research institutions, business leaders will come together—with partners and in new ways— to build business-led innovation superclusters at scale.” (Innovation Canada, 2017: 4).

Canadian Superclusters – what is being proposed? (1\2)

- A supercluster is defined as *‘an innovation hotbed that is home to a strong industrial cluster, or clusters, linked through their shared reliance on specialized inputs, including technologies, talent and infrastructure’* (Innovation Canada, 2017).
- The objectives of a supercluster are to support *‘large-scale industry industry partnerships, supported by other innovation ecosystem players, and asks them to work together on ambitious market-driven proposals to supercharge **their regional innovation ecosystems**, enhancing the growth and competitiveness of participating firms and **maximizing economic benefits, including good, well-paying jobs and prosperity for Canada’*** (Innovation Canada, 2018).

Canadian Superclusters—what is being proposed? (2/2)

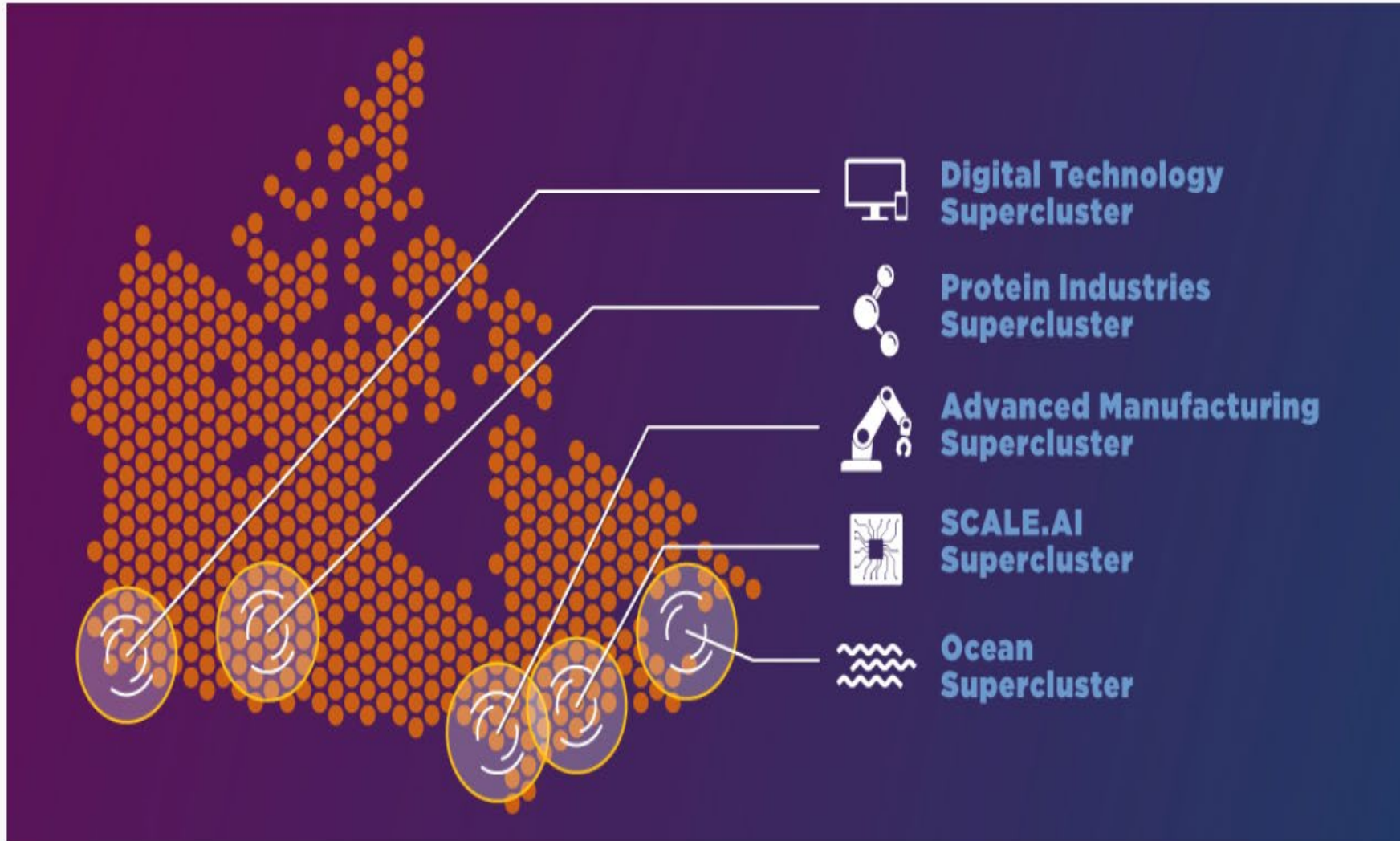
- \$950 million over five years to support business-led innovation superclusters with the greatest potential to build world-leading innovation ecosystems
- Industry led-consortium
- Five themes of activity
 - **Technology leadership**
 - **Partnerships for scale**
 - **Diverse and skilled talent pools**
 - **Access to innovation**
 - **Global advantage**

Canadian Superclusters—a place-based policy?

- It builds on regional concepts such as regional innovation systems, clusters and (Localised) entrepreneurial ecosystem
- it lies on the assumption that local specificities, such as culture, demographics, institutions, and historical specialization, matter for the economic development and performance of a region
- the general policy is ‘national’, but the formulation of objectives and decisions regarding funding and certain aspects related to governance are devolved to ‘local’ business actors.

Canadian Superclusters—How do they work in practice?

Meet the superclusters



The *Canada's Supercluster* – 4 key challenges

Challenge #1

What is a supercluster?

The *Canada's Supercluster* – 4 key challenges

Challenge #2

Which types of region (will) benefit (the most) from the supercluster initiative?

The *Canada's Supercluster* – 4 key challenges

Challenge #3

What kind of (spatial) dynamics support the supercluster?

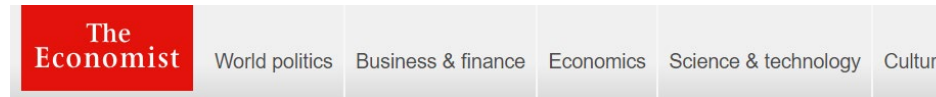
The *Canada's Supercluster* – 4 key challenges

Challenge #4

What are the (long-term) structural impacts of the supercluster initiative?

Conclusion

- Is this an example of government trying to pick winners?



The global revival of industrial policy

Picking winners, saving losers

Industrial policy is back in fashion. Have governments learned from past failures?

Aug 5th 2010 | PARIS



Like 186

Tweet



Conclusion

- Innovation policy is messy:
 - theory does not easily translate into practice.
 - policy rhetoric \neq policy substance
- Context matters
 - Geography, culture, institutions and history shape innovation policy (especially when it is territorialised)