

Territory and proximity: what can be learnt from economics of platform?

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Regional development and proximity relations

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Main points

- *Starting points* : the conclusions reached by « Proximity School »
- *Missing points, shortcomings* : territory, new nature of innovation
- Nature of innovation : ecosystems and platforms
- Role of proximity and territory in organizing innovative ecosystems ?

Starting Points I

- Entry into spatial analysis :
 - why and how proximity matters in the coordination between economic agents ?
- Focus on innovation activities supposed to require strong proximity constraint
- Initial objective :
 - to relativize the importance of the districts as a form of local development

Starting Points II

How have we done ?, What have we shown ?

- Different types of proximity (Rallet & Torre, 2005)
- Spatial patterns as a combination of different types of proximity
- Depends on the characteristics of innovation, the stage in the coordination process and the means used (F2F, organised proximity, ICTs and geographical mobility) (Rallet and Torre, 2009, Torre, 2010)

Starting Points II

Main conclusions (empirical results)

- from a functional point of view, less and less need for economic agents to be co-located in the same place thanks to organised proximity, ICTs and travel
- However, there are strong geographical agglomeration in the field of innovation activities
- Paradox explained by 3 main reasons :
 - existence of indivisibilities (shared facilities), fixed costs
 - existence of localized social networks : economic relationships embedded in social networks and social networks are more territory-based than economic networks
 - Metropolitan regions stimulate innovation due to heterogeneity and diversity of economic actors (serendipity). Innovation comes from the encounter of heterogeneous elements
 - impact of public policies that creates geographical proximity between economic agents because public authorities believe in the role of physical proximity in innovation (local systems of innovations, clusters ...). Self-fulfilling prophecy.

Missing points, shortcomings

- *Territory is not conceptualized*
 - Not a starting point : territory can be explained if territory is not given to analysis
 - A fuzzy concept
- *A current change in the nature of innovation*
 - In a growing number of areas, innovation is no longer developed inside a single firm or in networks of firms or partnerships between public labs and private firms but *in the context of ecosystems, i.e a more complex organisation*

Ecosystems

- Ecosystem (ES) :
 - *a set of **heterogeneous** actors who must cooperate to design, to develop and to bring an innovation to the market*
 - ES includes
 - private firms belonging to different sectors (equipment manufacturer, services providers, delivery companies, intermediaries...)
 - institutions such as local authorities, standards committees, professional associations...
 - associations such as user associations, consumer associations, NGOs
 - individuals (users, consumers)

Ecosystems II

- Different concept from innovative milieu or district
- Intrinsically, milieu and district are territorial concepts. ES is a concept of industrial economics
- Important to keep the same epistemology :
 - territory can be explained if it is not given at the start of the analysis
 - Start with industrial economics : role of proximity in the organisation of innovative ecosystems
- Why the growing importance of ES :
 - a further deepening in the division of labor
 - even important for production of physical goods, specially important in digital economy

What impacts of ecosystems on innovation process ?

- Impact on industrial organisational
 - horizontal organisation of the industry tends to replace a vertical organisation
 - organisation around a platform able to organise the EC : multisided platforms versus B2B2C
- Impact on innovation process :
 - due to numerous interdependencies between the components, a lot of coordination and incentives issues.
 - The existence of externalities between providers of components in an ES creates an *chicken and egg problem* or start up problem.
 - Aim of a platform is to solve this kind of problems for innovation grows and market reaches a critical size.
- That's why we can define innovation as the ability to solve nontrivial problems of coordination.
- These problems were before intra-organizational or bilateral problems (partnerships) and are now inter-organizational problems, knowing that platform connects players which are not only firms.

Role of territory in ES

- Most platforms have no territorial dimension
- But some require local roots :
 - Example of urban mobility services (make easier navigation of individuals in urban areas)
 - One of the most important issues for cities, key point for temporary geographical proximity
 - These services are still in the starting blocks : technologies exist, user needs exist due to increasing energy prices, but still very few services at a wide scale

A complex ES

- A large number of actors :
 - data providers (transport companies, telecommunication operators, local communities, users may provide information about traffic jams, police radars, or associations can provide information on the needs of disabled people, their movement within the city),
 - infrastructure providers (eg electronic stations located throughout the city, manufacturers of devices (smartphones)
 - tools for capturing automatically information on mobility
 - banks for payment services, standards for access or contactless payment (Near Field Communication)
 - service providers
 - integrators providing interfaces between all these elements

What could be the role of territories ?

- A lot of externalities, coordination problems : for instance, nobody wants to share its data.
- Because services involve data sharing (between the RATP, the SNCF, the telecom operator, the municipality....), services can not be built.
- chicken and egg problem, Market unable to solve it

Role of territories

- Territory : superposition of geographical and geographical proximities
- 4 roles :
- 1) It's a hardware platform :
 - Territory means a lot of infrastructures spread around the city, which are necessary for the construction of mobility service
 - Most of these infrastructures belong to local authorities or are granted by them to private companies.
 - *It is a territorial and specific asset*

Role of territories II

- 2) *Solutions to problems of coordination can be global or local, the local solution as an alternative to the overall solution.*
 - In the digital economy, *the global solution* is provided by large firms that act as predators.
 - They invest huge sums of money in an open platform for all innovators who want to propose new services to consumers.
 - Predators because they redistribute only a very weak part of their revenue created by the ecosystem to service providers and to end users (such as Google through advertising or by selling devices for Apple).
 - *The local solution* is based on partnerships between local and small or medium or big firms (transport, telecom).
 - Services are more fitted to the market and revenue sharing is more equitable but coordination problems are more difficult to resolve
 - innovation is slower (the time to build partnership, who invests, who capture the value added, is there a link between the money spent and the money received ?)

Role of territories III

- Local authorities can play an important role to solve the start up problem
- They can bring together stakeholders of the ecosystem and encourage them to cooperate.
- Local authorities are not necessarily the dominant player (it can be a transport company or a telecom operator), but they can support the resolution of some problems of coordination.
- It is the function of *experiments, local experiments*.
- The experiment has two roles, one traditional and one innovative.
 - traditional role : to test technical service and encourage the appropriation of the service by users.
 - new role : to experiment efficient forms of cooperation, creating a cooperation framework in which the ecosystem can work.
- More and more living labs which are territory-based.

Role of territories IV

- **public policies to support innovation can be renewed by territories.**
- In the 60's and 70's, innovation policy part of sectoral industrial policies.
- At this time, innovation could be planned by a central authority.
- Since the 80s, industrial policies replaced by policies of openness to competition, competition being supposed to foster innovation.
- Today, market unable to solve problems of coordination, particularly as innovation grows within ES.
- Going back to the industrial policies of the 60s is impossible. Quite impossible to know what will be innovations in the future. Very high uncertainty.
- Relying on local experiments in which the territory is both physical infrastructure and institutional facilitator may be a way to solve the problem
- Rely on local public initiatives, supporting experimentation with new services and extend them to a larger scale (national or European), as part of a bottom-up consolidated process.
- Innovation policy could be redesigned as the consolidation of territory-based processes of experiment.