Introduction

Innovative Milieus and Regional Development

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Guest Editor

Even though regional science has been questioning since its inception the role of space in social, cultural, and economic dynamics, it now seems necessary to review the spatial concept of milieu, given the growing literature on the subject. In fact, over the last few years a good number of scientists have been investigating the "milieu effect", which appears to be one of the factors in contemporary socioeconomic regional dynamics.

The traditional approaches and the variables they use to explain the greater dynamism of certain regional spaces seem to have reached a limit in their conception of new development strategies. In most Western countries regional policy has, because of necessity and circumstance, enhanced regions with a variety of assets: means of access to natural resources, branch plants of major companies, transportation infrastructures, development poles, industrial parks, business incubators, sociocultural facilities, specialized colleges, socioeconomic facilitators, venture capital funds, export assistance programmes, and so forth. But after these tools are in place, there is a shortage of alternative strategies for encouraging dynamism, bringing about concrete action, and introducing development where it is truly needed. New theses and new theoretical components are needed.

Along these lines, the "innovative milieus" approach, as presented in scientific publications, opens a new field for modeling. This approach seems to propose that, in a swing of the pendulum, regional development theorists move from a perspective focusing on industry to a more holistic one that takes into account social, cultural, administrative, political, environmental, and economic factors. Thus, scientists are interested in creating models of new elements in local and regional dynamism. The present body of theoretical work is clearly scattered in some of its propositions, yet it is heading in several important general directions. These include entrepreneurial culture,

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skill training, environmental amenities, flow of information, socio-economic encouragement, basic services to the population, and territorial synergy.

In the literature the concept of innovative milieus has been described in diverse ways (the term is part of the systemic approach that is currently influencing all the social sciences). An innovative milieu is usually defined as a grouping of economic, social, political, and cultural elements (Maillat 1992) or as a group of relationships having particular characteristics and occurring within a specific geographic continuum (Ratti 1992).

Although the work published recently under the auspices of GREMI[1] gives it a fresh dimension and audience, the milieu approach is not entirely new. Several of its elements originated with already recognized concepts or rules. Authors frequently refer to the work of Alfred Marshall on industrial districts (1919), particularly to the famous principle of external effects. A critical reading of the literature reveals several other older observations, such as concentration, cooperation, and polarization, which have been renewed and resuscitated in a contemporary context. Moreover, it is evident that the givens of industrial location theory, community organization theory, export base theory, and several other development theories are considered implicitly.

The principal influence underlying the extensive empirical and theoretical work on innovative milieus is that of meso-economy. Growing out of biology, mesology tries to explain scientifically the influence a milieu has on its internal components.

Meso-analysis represents an intermediate approach between micro- and macroanalysis of social phenomena, particularly economic ones. It is generally recognized that it was formally and explicitly proposed within the Holland model (1976); its premises, however, have been enriched and restructured, notably by Barrère (1978) and Perrin (1983, 1985). Rather than spatializing diverse scientific disciplines independently, the meso-approach concentrates on space, using the micro and macro tools of these disciplines. Thus, understanding is increasing of the logic—cultural, social, administrative, political, environmental, and economic—behind the conditions of populations and organizations. Because of certain characteristics of identification and interaction, these contexts seem more local than regional in nature (Aydalot 1984).

1. GREMI or *Groupe de recherche européen sur les milieux innovateurs* (Association Philippe Aydalot) has brought together over the last decade some 15 teams studying the processes around innovation and local development in about 20 local contexts.

This development of a theory of innovative milieus also draws on the growing economic importance of small and medium-sized firms, which are currently creating the majority of jobs in Western countries. The factors influencing their inception, location, and growth are being sought. Small business depends heavily on its environment since it cannot itself generate all the types of input necessary to the production process (resources, skills, information), particularly in a context of innovation and increased performance. Planque (1988) has clearly shown the importance of the quality of the immediate milieu for much of small businesses' inputs, given the characteristics of the decision making of this type of firm.

This promising basis for the advancement of a general theory of regional development has been sustained by the realization that there are, within national areas, subspaces that do not correspond to the traditional criteria for growth and development but that are nevertheless economically healthier than adjacent areas. To well-known American examples can be added others: the Swiss Jura; Cambridge in Great Britain; Sophia-Antipolis, Alès and Grenoble in France; the "third" Italy; and the Beauce region of Quebec. As traditional models no longer suffice, regional science is looking for an "alternative" model that will explain this phenomenon of milieus that are creative, dynamic, fertile, or innovative.

According to the classic theory of innovation, technical progress moves outward from large urban centres. Recently, it has been observed that innovation also can stem from the internal dynamism of an area. There are passive spaces, which do nothing but catch onto innovation originating outside, and active spaces, which are inherently creative through the interplay of their endogenous elements (Aydalot 1986). For to the researchers, the existence of inputs which in principle should engender innovation seems to be not a purely quantitative matter but one of the quality of osmosis. The combination of physical and other conditions of the milieu—the right mix—would seem the secret of its innovative character.

In this sense each space/territory needs to find the appropriate recipe: that combination of resources, skills, and information that will bring the milieu into play and give birth to innovation in its many forms—services and products; social, cultural, or economic production processes; markets; decision making. The principal postulate of this theory of innovative milieus, then, is that it is the milieu itself that innovates, undertakes, and produces activities.

"How?" remains an open question. Numerous texts already have revealed a number of factors influencing the creation of milieus. The main contributions have been made by Aydalot (1986), Aydalot and Keeble (1988), Camagni (1991) and Maillat and Perrin (1992), as well

as in the *Revue internationale PME* (1989) and the *Revue d'économie régionale et urbaine* (1991). Though it is difficult to construct a general model, as each environment seems to have its particular characteristics, a basic factor appears to be the way an area is organized by the actions of its main decision makers.

The formalization of this organizational factor—which has been variously labeled organizational culture, information networks, institutional partnership, community cooperation, agreement systems, coalitions, collective learning, and so forth—is now being formalized. Whatever term one favours, the collective process of enhancing the immediate environment by endogenous private, public, and collective organizations clearly is a kingpin in the creation of an innovative milieu.

This special issue of the *Canadian Journal of Regional Science* will seek to contribute to the reflection on the phenomenon of innovative environments. It includes three articles of a general nature that help to define the framework for analysis of innovative milieus by attempts at classification and qualification. Five other articles present case studies that illustrate certain concepts and allow verification of certain hypotheses.

Jean-Claude Perrin, the dean of meso-analysis, places the analytic approach through innovative milieus in the context of a needed updating of regional science. His argument underlines the fundamental epistemological error of economics, the postulate of perfect rationality, which regional science is seeking to overcome. The emerging theory of innovative milieus contributes extremely useful elements, which are related to dynamic processes not recognized by traditional economics.

Next, Denis Maillat offers a most pertinent conceptual clarification. He categorizes the various contributions to milieu theory by creating typologies and qualifying analysis perspectives. His classification of innovation networks is particularly enlightening.

Michel Quévit analyzes the innovative aspect of local milieus by looking at the international responsiveness of firms. Although the logic of organic integration of the milieu is important, he observes that the logic of externalization is essential to the innovative character of a local space. He points to the external search for inputs that are subsequently valorized, thanks to the organic integration of the milieu which allows for their diffusion.

In their case study, Laurent Deshaies, André Joyal, and Pierre-André Julien analyze some relationships between small business and the milieu in the context of the globalization of markets by means of a study of Quebec firms. Their conclusions about the ways small and medium-sized exporting firms draw on their milieu will likely encourage further debate.

Bernard Planque, through a study of the Provence-Alpes-Côte d'Azur region of France, brings out the importance of the local social, cultural and economic fabric in attaining the objectives of regional technological policy. The techno-economic profile of a milieu (structures of the structures of production and behaviour of participants) plays a key role in the success of innovation, as do attitudes in making a territorial "covenant on innovation" work.

A broad empirical study of southwestern Pennsylvania inspires Clyde Mitchell-Weaver to reflect on the conditions needed for existence of the milieu effect. He tackles the role of institutional structures, especially public-private networks. He underlines the methodological difficulties facing the researcher trying to introduce scientific criteria.

Alberto Bramanti deals with cooperative innovation agreements between small and medium-sized firms in northern Italy. This original contribution, using a multidimensional approach, reveals the cultural and organizational dimensions at work in economically fertile milieus.

Finally, Marc-Urbain Proulx tries to understand and formalize the organizational progress of the 95 MRCs (regional county municipalities) in Quebec. His model, based on three concepts—territorial belonging, collective usefulness, and functions—shows how, since 1982, these milieus have more or less organized and structured themselves to offer an innovative environment to the population, workers, and organizations.

It is hoped that this special issue of *CJRS* will contribute to refining a theory of regional development based on innovative milieus and will promote the conception of new development strategies.

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