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TERRITORIAL INNOVATION MODELS: A CRITICAL SURVEY OF THE INTERNATIONAL LITERATURE

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PART I. TERRITORIAL INNOVATION MODELS: A CRITICAL SURVEY OF THE INTERNATIONAL LITERATURE

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ABSTRACT

This paper provides a critical review of the international literature on Territorial Innovation Models (Industrial Districts, Milieux Innovateurs, New Industrial Spaces, Local Production Systems, etc.). The review is organized in two steps. First, the main features of each of these models and their view of innovation are compared. Second, their theoretical building blocks are reconstructed and evaluated from the point of view of conceptual clarity and analytical coherence.

It is found that despite some semantic unity among the concepts used (economies of agglomeration, endogenous development, systems of innovation, evolution and learning, network organization and governance), Territorial Innovation Models (TIMs) suffer from conceptual ambiguity. The latter is partly a consequence of the differences in the specific national and regional contexts where TIMs are observed and/or theorized (institutional, as well as social and economic). But it is also, to a very large extent, influenced by a growing political bias, namely the tendency to view territorial innovation in terms of a technology driven innovation and of a business culture that is mainly instrumental to the capitalist market logic. This pressing ideological priority pushes the ‘conceptual flexibility’ of TIMs across the border of coherent theory building.

1. INTRODUCTION

Over the last couple of decades, regional economists, geographers and planners have devoted a considerable part of their time and energy to the search for a ‘new’ model of regional development. Once the euphoria of the reconstruction after World War II had waned, the structural economic weaknesses, particularly in traditional manufacturing regions, but also in backward agricultural ones, became increasingly visible. Inspired by location theory, investment and employment subsidies were granted to corporations, which came to invest in these regions (BROWN and BURROWS, 1977). And, following the logic of the growth pole model (PERROUX, 1955), infrastructure works combined with significant aid to investment were expected to generate the necessary production initiatives in lagging regions.

The effects of these policies on regional development were ambiguous. On the one hand, these infrastructure and cost subsidising measures did encourage new employment in local firms and did attract external direct investments to the regions, offsetting at least partially the loss of employment in traditional industries and agriculture. But on the other hand, in many regions little linkages developed between the new investments (often assembly branch plants) and the local economic structure, and no self-sustained development process was engineered (MARTINELLI, 1998). These limits became overt with the advent of the economic crisis in the mid 1970s, when many branch plants began to reduce their activities or closed down, together with the remaining coal mines, steel and textile plants, shipyards, etc. and when central governments, pressed by budgetary constraints, became increasingly selective in their regional development policy (de MONTRICHER, 1995). This selectivity meant in the first place a shift in political ‘clientele’ from loss-making old industrial firms to promising new initiatives applying new technology and advanced services. Selectivity was furthered by the creation of the European competitive space (European Union) and by the several rounds of GATT negotiations, which not only led to the creation of the WTO, but also to the proliferation of a global ‘market watch’ by the
geoeconomically dominant regions (North America, Europe, Japan) over each other’s industrial and competition policy (see GENEVA Papers and Progress Newsletters)2.

It is in this climate of crisis in ‘traditional’ regional policy that, starting in the 1980s, an appeal for (endogenous) local and regional initiatives for economic development started to emerge. The genesis of this trend is multiple and different contradictory movements converge in building this ‘local’ focus. In the first instance, must be mentioned the generalised social mobilisation for greater civil rights, democratic governance, and more balanced development, which arose in most European societies, starting in the 1970s (the workers, feminist, peace, ecological, etc. movements), which in many countries had a strong “grassroots” and local dimension. Secondly, must be mentioned the strong pressures for ‘regionalization’, which also developed in many European countries, although with different emphases and political trajectories. With regard to the latter point, it is worth mentioning that the political discourses legitimising claims for greater regional administrative autonomy are quite different, e.g. in the UK or Spain, from those e.g. in Italy. Last, but not least, must be mentioned the (re-)emergence of the SME sector – both as a reality and as an analytical topic – in many countries, which actively contributed to reassert the value of the local and regional development potential, as an alternative to National State-led regional economic policy. The latter component – i.e. the focus on small firms as the main engine of the ‘regionalisation’ of development – has come to dominate the current debate and accounts for the significant political ambiguity of local development strategies.

Historically, thus, in many countries, the ‘regionalist’ critique to development policy and the pressures for more ‘self-determination’ in policy choices was originated in the radical, left, and community movements. Throughout the 1980s, however, it was ‘appropriated’ by the hegemonic neo-liberal discourse, shedding all the progressive dimensions and retaining only the economic aspect of competitiveness and a technocratic approach to policy.

TIM (Territorial Innovation Model) is the generic name used in this survey to include a wide variety of ‘territorialised’ development models based to some extent on some form of local innovation potential. As shall be argued, there are profound differences in emphases and

2 For a theoretical analysis of the tension between competition and regional policy in the European Community, see MARTIN and STEINEN (1995).
concepts. Some models focus more on the economic dimension of innovation and the ‘competitive’ assets of localities in a market-led logic; others focus more on the social dimension of innovation and the role of collective knowledge, social interaction and local institutions; others, still, focus more on the political dimension of local ‘governance’. Furthermore, there is a tension – often a straightforward ambiguity – between descriptive models and normative ones: very often theoretical analyses have been translated into policy paradigms, without the necessary caution. Finally there are also ‘scale’ issues, i.e. different notions of ‘territories’, ranging from the neighbourhood, to the municipality, to larger subnational regions. Still, the TIM literature mainly focuses on the region, with the agglomeration of a number of municipalities or an urban region as the minimum spatial scale.

In academic circles, the beginning of an interest in the ‘localized/territorial’ dimension of development can be traced in the early works of BECATTINI (1975, 1979), BAGNASCO (1977), and BRUSCO (1980) on Italian industrial districts. They were followed by AYDALOT (1986) and the GREMI, who laid the grounds for the regional endogenous development approach. More in the footprints of “orthodox” growth theory, a regional version of the endogenous growth model was put forward (BARRO and SALA-i-MARTIN, 1992). “Local” growth and development factors, such as human capital, local business culture and schooling system, infrastructure, quality of production factors and systems, learning from the regional experience for renewed regional development (RATTI, 1992) were put in a context of territorial innovation dynamics. This was the beginning of a literature on ‘territorial’ development and regional ‘innovation’ systems (KAFKALAS, 1998) that is now almost twenty years old.

Many convergent or competitive academic currents contributed to the development of this debate. In the US, the Californian school of economic geography stressed the relationship between technical innovation, industrial organisation and location (STORPER and WALKER, 1989) and launched the notion of New Industrial Spaces (STORPER and SCOTT, 1988). The industrial district school, which historically preceded the GREMI, but only later begun to explicitly tackle the innovation dimension of competitiveness, focused on the quality of formal and informal social, economic and political relations in the region, as a determinate factor of sustained reproduction and long-term economic development (BRUSCO, 1982; BECCATINI, 1981; GAROFOLI, 1992). The French current of ‘Systèmes Productifs Locaux’ came in the footprints
of the Industrial District school and stressed the founding role of artisan production systems in the diffusion of manufacturing patterns in urban and rural areas (COURLET and PECQUEUR, 1990).

The regulationist school, in line with its institutional tradition, modelled some of the archetypes of industrial relations accompanying the successful application of technological innovation. It gave a social and territorial content to the concepts of ‘technological paradigm’ and system of innovation (LEBORGNE and LIPIETZ, 1988; MOULAERT and SWYNGEDOUW, 1989). More recently, the role of the local ‘institutional context’ in explaining industrial districts performance and local development success has been further investigated, linking the debate about post-Fordism to the question of ‘institutional capacity’ and institutional ‘thickness’ (AMIN 1994, 1995, 1997, 1999). Along this line, the ‘regional innovation system’ and the ‘learning region’ models have provided a new interpretation (a synthesis?) of the territorial innovation model (BRACZYK, COOKE and HEIDENREICH, 1998; MORGAN, 1997).

After more than fifteen years of theoretical debate, analysis and policy implementation the Territorial Innovation Models (TIMs) are up for critical evaluation. This paper seeks to contribute to such an evaluation and, to this effect, it pursues two tasks:

- The presentation of the various TIMs, from Becattini, Bagnasco and Aydalot till today’s learning region, stressing as much as possible the varieties found in the literature, especially with respect to the concept of innovation (section 2);

- The analysis of the building blocks on which these models were built: the main concepts (economies of agglomeration, endogenous development, systems of innovation, evolution and learning, network organization and governance) and the generic theories (e.g. regional development and evolutionary innovation theory). This analysis includes an evaluation of the conceptual clarity and analytical coherence of the different TIMs (section 3).

It is found that, despite their apparent semantic unity, these models are conceptually quite diverse and in many cases their theoretical building blocks are used in incongruent ways. This is a consequence of many factors. In the first place it certainly stem from the variety of cases investigated, belonging to different institutional, social, economic and political contexts. Secondly it also reflects nation- and region-specific theoretical and political trajectories, which
affect the way ideas and practices are developed and implemented. Finally, in many instances, it stems from superficial theoretical reflection, a hegemonic technocratic view of innovation and a strong ideological attachment to the capitalist market logic of development.

2. THE TERRITORIAL INNOVATION MODELS

‘Territorial innovation model’ (TIM) is used here as a generic name for models of regional innovation in which local institutional dynamics play a significant role. Still, at least three traditions can be distinguished within the population of TIMs. In the original French model on the ‘Milieu Innovateur’, which was the basis for the synthesis produced by GREMI (AYDALOT, 1986), the role of endogenous institutional potential to generate innovative dynamic firms is emphasised. The same basic idea is found in the literature on the Industrial District model and the Local Production Systems, stressing even more the part of cooperation and partnership in the innovation process. Therefore, the Innovative Milieu and the Industrial District, both with a strong focus on local institutional endogeneity, can be considered as a first family of TIMs. A second tradition is more in line with the broader set of innovation literature: a translation of the institutional co-ordination principles found in the sectoral and national innovation systems toward the regional level of development (EDQUIST, 1997) and an evolutionist interpretation of the learning economy concept at the regional level (COOKE, 1996; COOKE and MORGAN, 1998). A third tradition stems from the Californian School of Economic Geography: i.e. the New Industrial Spaces (STORPER and SCOTT, 1988; SAXENIAN, 1994). A final category, close to Porter’s clusters of innovation concept, is the ‘spatial’ Clusters of Innovation model, which has gained great popularity with policy makers, but suffers from severe inconsistencies from a theoretical point of view.

We will now present the main features of most of these territorial innovation models as put forward by their protagonists. At the end of section 2, we will confront the various dimensions of their views of innovation: core of innovative dynamics, role of institutions, place of innovation in regional development, culture and types of relationship with the environment.
2.1. Innovative Milieus (IMs)

In the theory of the 'milieu innovateur' developed by the GREMI, the firm is not an isolated innovative agent, but part of a milieu with an innovative capacity. In their theoretical and empirical works, the GREMI authors seek to analyse the relationships between firms and their environment and to study the modes of organisation characterising them (RATTI, 1992, p. 54). They distinguish between three functional spaces for the firm: the production, the market and the support space. It is the support space that empowers the enterprise to face uncertainty. The support space is constituted around three types of relations: (i) qualified or privileged relations with regard to the organisation of production factors; (ii) strategic relations between the firm, its partners, suppliers and clients; (iii) strategic relations with agents belonging to the territorial environment. In particular it is the support space that determines the relations between corporate innovation and spatial development; it is this space that qualifies the nature of the ‘milieu innovateur’ (RATTI, 1989; RATTI, 1992, p. 56). The current research agenda of the GREMI stresses the concept of ‘apprenticeship’, which means that the innovative capacity of the different members of the milieu depends on their ‘learning’ capacity. Learning enables them to perceive changes in their environment and helps them to adapt their behaviour accordingly. Today, the apprenticeship dynamics and the co-operative organisation based on interaction constitute the core of the ‘milieu innovateur’ theory; it converges quite well with the more recent theory of the ‘learning region’ (CAMAGNI, 1991).

2.2. Industrial Districts (IDs)

The theory of the Industrial District (ID), starting with Becattini and Bagnasco in the late 1970s, stresses the innovative capacity of SMEs belonging to the same industry and local space. The industrial district is commonly defined as a geographically localised productive system, based on a strong local division of work between small firms specialised in different steps in the production and distribution cycle of an industrial sector, a dominant activity, or a limited number of activities. There are multiple relationships among firms, and between the firms and the local community, within as well as outside the market. The latter relationships are based on ‘trust’ and ‘reciprocity’. This hybrid mode of organisation, combining competition and cooperation, formal
and informal institutional relations, cannot be understood without highlighting the role of historical and socio-economic factors crucial to the success of a district (BECATTINI, 1987; BRUSCO, 1986, 1992; DEI OTTATI, 1994a; MOULAERT and DELVAINEQUIERE, 1994). The modes of coordination (market, firm, cooperation) of agents, and particularly small firms, in the economic system have received considerable attention in the ID literature (DEI OTTATI, 1994a, 1994b). The coordination of complementary activities among many small firms with specific roles and specializations in the production and distribution systems calls for greater information and knowledge than the price system can grant. “Local customs and particularly the custom of reciprocal cooperation […] play an important role in the ID by making possible transactions that would otherwise be blocked because they are too risky …” (DEI OTTATI, 1994b, p. 465).

In many ways the Industrial District comes quite close to the Innovative Milieu. BECCATINI (1981) talks about the Industrial District as a ‘creative milieu’, to which he, like BRUSCO (1982), attributes features that are also typical of the Milieu Innovateur – especially those fostering the ‘support’ space of firms (KAFKALAS, 1998, p. 6). The commonalities of the Industrial District and Milieu Innovateur approaches rest on the role of the local socio-economic community, based on cooperation and complementarity among functionally specialised agents. But the ID literature goes further in analysing relations of trust versus opportunism, the role of culture as a vehicle of change, and the way in which agents who ‘behave incorrectly’ with regard to the norms of community interaction are penalised (DEI OTTATI, 1994a, p. 531).

The notion of social capital, the role of the quality of social and cultural relations and its links with democratic governance in a locality are increasingly investigated as a major factor in explaining local development (see PUTNAM 1993; MUTTI 1998). AMIN has recently stressed the role of ‘institutional capacity’ and institutional ‘thickness’ as a major factor in explaining the successful performance of IDs and other localities. from this point of view his work converges with the Regional Innovation system and Learning Regions models (see below).
2.3 Localized Production Systems (LPSs)

The LPS model can be considered as a generalization of the Industrial District view of local economic development. The main distinctive element of differentiation with the ID seems the fact that it does not necessarily refer to a ‘sectorally’ defined system of firms (see on this point also BRUSCO and PABA 1997). From this point of view it is, possibly the most ambiguous and less defined Territorial Innovation Model (FM). The term was introduced in the early 1980s (see e.g. WILKINSON 1983). GAROFOLI (1983) uses it to reviews the different models of territorial clusters of firms in Italy. The French scholars talk of systèmes industriels ou de production localisés (RAVEYRE and SAGLIO 1984; COURLET and PEQUEUR 1991; COURLET and SOULAGE 1994). CROUCH et al (2001) use this label to encompass several of the TIM families reviewed here.

As stressed by COURLET (1999), the LPS model has no agreed-upon definition. In the frame of the colloquium on “Les systèmes productifs locaux” (Toulouse 1999) it was loosely defined as a system characterized by the territorial proximity of productive units (firms, plants, services suppliers, R&D centres, training institutions) interlinked in different forms (formal and informal, material and immaterial, market and non-market). As with industrial districts, LPSs view industrialisation as a process occurring in urban or rural areas with an explicit artisan tradition (process of diffuse industrialisation). Key to the development of the LPS are: the "productive system" itself (in terms of workforce, technology, methods etc.), which, although a result of the industrialisation process rather than a condition for its start, represents a basic condition for its reproduction and renovation (COURLET, 1999); “external economies”; non transferable knowledge; specific forms of regulation; strong local identity. (COURLET, 1999).

In contrast with fordist industrialisation that seeks to shape (and shake!) space to the exigencies of industrial society, diffuse industrialisation is a process of continuous evolution that, unlike the industrial district approach, fears ruptures in development trajectories. The LPS model conceives a dialectics between local diffuse industrialisation rooted within a local community and the economic pressures from ‘outside’ (national and international conditions of development). LPS proponents have, indeed, taken the local-global tension on board from the beginning – another difference with ID scholars, who only acknowledged such a tension after having been criticised for their local bias.
2.4. New Industrial Spaces (NISs)

STORPER and SCOTT launched the notion of New Industrial Spaces in 1988. It combines insights from the literature on Industrial Districts (BRUSCO, 1986), flexible production systems (PIORE and SABEL, 1984), social regulation (BOYER, 1986; LIPIETZ, 1986) and local community dynamics (STORPER and WALKER, 1983). In many instances, it links the concept of ‘flexible specialisation’ with post-Fordist restructuring trends (see AMIN 1994 for a survey).

STORPER and SCOTT (1988) identify ‘flexible production systems’ by referring to forms of production characterized by a well developed ability both to shift promptly from one process and/or product configuration to another, and to adjust quantities of output rapidly up or down the short run without any strongly deleterious effects on levels of efficiency. (p. 24)

The authors link the efficiency of the flexible production system to locational agglomeration of a selected set of producers:

This locational strategy enables them to reduce the spatially-dependent costs of external transactions. In flexible production systems, the tendency to agglomeration is reinforced not only by externalization but also by intensified re-transacting, just-in-time processing, idiosyncratic and variable forms of inter-unit transacting, and the proliferation of many small-scale linkages with high unit costs. (p. 26)

Referring to the history of industrial districts and other spaces of activity, STORPER and SCOTT observe that the flexible production system has bloomed in places unburdened by fordist institutional legacies. New Industrial Spaces involve more than agglomerated production systems, because they also involve a social regulation system providing:

(i) the coordination of interfirm transactions and the dynamics of entrepreneurial activity; (ii) the organization of local labor markets and social reproduction of workers; and (iii) the dynamics of community formation and social reproduction.( p. 29)

While we observe that this list of challenges to regulation shows significant overlaps with the definition of the ‘espace de soutien’ (or ‘support space’) of the GREMI, it is not evident that
these three domains of regulation can be reconciled through an economic approach (see section 3).

In the above TIM family could also be included the work of SAXENIAN (see below), although, from a disciplinary point of view, her background is more in the political science field, rather than geography.

### 2.5. Clusters of Innovation (CIs)

ENRIGHT (1994) provides a good survey of publications on ‘the [spatial or regional] clusters of innovation’, that are often considered as an offshoot of the New Industrial Spaces literature. However, the cluster of innovation approach offers no analytical ‘family’ coherence, except for its reference to MARSHALL’s (1920) analysis of the advantages of localised systems. One of the most cited sources is SAXENIAN and her work on the now mythical Silicon Valley case (SAXENIAN, 1994), in which she underscores the role of local institutions and culture as well as industrial structure and corporate organisation for economic performance. She contrasts the creative impact of the network based industrial system in Silicon Valley with the integrated corporate structure of Route 128 (cited from EHRENBERG and JACOBSSON, 1997, pp. 333-334).

In our opinion, the literature surveys (ENRIGHT, 1994; EHRENBERG and JACOBSSON, 1997) enforce an artificial relationship between SAXENIAN’s work on regional innovation in Silicon Valley and Porter’s notion of clusters of innovation. SAXENIAN’s analysis combines agglomeration economies, industrial organisation, flexible production systems and regional governance and belongs rather to the “New Industrial Spaces” family. It is much richer than Porter’s original model, which emphasises market and competition rather than networking and social interaction as success factors for clusters of innovation, and showed only a marginal interest in ‘regional’ dimensions of innovation (PORTER, 1990). But, as with so many concepts in management science and economics, geographers have also embraced the notion of the cluster.
Porter’s view of the sources and nature of technological development, his short prayer to localised processes and the gradual ‘networking of the clusters’ lay the grounds for the spatial operationalisation of the ‘regional cluster’ as the most practice oriented, but also the most market logic-led version of the model of territorial innovation (see LAGENDIJK, 1998).

2.6. Regional Innovation Systems (RISs)

Another family of TIMs belong to the ‘systems of innovation’ literature: a translation of the evolutionist view of economic development and of institutional co-ordination found in the sectoral and national innovation systems at the regional level (EDQUIST, 1997). Here we are mainly concerned with the regional systems of innovation (MALERBA 1993; BRACZYK, COOKE and HEIDENREICH, 1998) and (in the next section) with the regional learning economy (COOKE, 1996; COOKE and MORGAN, 1998).

The theory of Regional Innovation Systems stresses the role of ‘collective learning’, which in turn refers to deep co-operative relationships between members of the system. This theory is indebted to the evolutionary theory of technical change. Rather than a result of a research activity, innovation is a creative process, with the following features: the interaction between agents of the process (built on feed-back), the cumulative aspect of, and increasing returns to, the innovative process and the "problem-solving" orientation, which shows the specific nature of the innovation. Moreover, innovation is not only a technological but also an organisational process. And it is this organisational dimension that is of paramount importance and determines the technological innovation itself. There is little risk in arguing that the Regional Innovation System is a lower-scale offshoot of the National Innovation System - whatever the latter’s definition may be (EDQUIST, 1997, chapter 1). Still, as LAGENDIJK (1998) indicates there are in this theoretical corpus at least two basic interpretations of the region as an innovation system: either as a subsystem of national or sector-based systems, or as a reduced version of the National System of Innovation, with its own dynamics.
2.7. The Learning Region

The notion of the learning region was launched by COOKE, MORGAN, ASHEIM and others, and can be considered as an intermediate synthesis in the debate on TIMs (COOKE, 1998; MORGAN and NAUWELAERS, 1998). The model integrates innovation systems literature, institutional-evolutionary economics, learning processes, and the specificity of regional institutional dynamics. MORGAN (1997) provides an excellent summary of the logic of the learning region. The purpose of his article, the author declares, is “to connect the concepts of the network [or associational] paradigm – like interactive innovation and social capital – to the problems of regional development in Europe” (p. 492). First, MORGAN highlights the state of knowledge in evolutionary economics by stressing two of its main propositions: a) innovation is an interactive process; b) innovation is shaped by a variety of institutional routines and social conventions (p. 493). Together these propositions have helped “to stimulate an interesting, and highly significant, debate about the nature of capitalism as a learning economy” (see section 3). On this issue, MORGAN cites LUNDVALL (1994) and claims that “knowledge is the most important strategic resource and learning the most important process.” Then, MORGAN underscores the importance of the growing interests of economic geographers, planners, etc. in innovation dynamics: “Within economic geography a number of tentative efforts have been made to utilise some of the insights of evolutionary economic theory, especially with respect to learning, innovation and the role of institutions in regional development.” (p. 494). MORGAN especially refers to STORPER’s recent work as ‘the fullest attempt to marry the two disciplines’.

STORPER (1997) recognises ‘the principal dilemma’ of economic geography as the re-emergence of regional economies at this time of globalisation. He explains this phenomenon by the association between organisational and technological learning within agglomerations, based on traded (input-output relations) and untraded interdependencies (labour markets, regional conventions, norms and values, public or semi-public institutions).
Figure 1 summarises the view of innovation represented in each of the TIM families just reviewed: 1) definition of innovation; 2) role of institutions and organisations; 3) view of regional development (evolution, learning, role of culture); 4) view of culture; 5) type of relations between different development agents (network concept); 6) type of relations with the outside world.

**Figure 1. Views of innovation in territorial innovation models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Milieu innovateur/Innovative milieu (MI)</th>
<th>Industrial District (ID)</th>
<th>Regional Innovation Systems (RIS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features of innovation</strong></td>
<td>Capacity of a firms to innovate through the relationships with other agents of the same milieu</td>
<td>Capacity of actors to implement innovation through cooperation, in a system of common values</td>
<td>Innovation as an interactive, cumulative and specific process of research and development (path dependency).</td>
</tr>
<tr>
<td><strong>Core of innovation dynamics</strong></td>
<td>Very important role of institutions in the research process (university, firms, public agencies, etc.)</td>
<td>Institutions are &quot;agents&quot; and enabling social regulation, fostering innovation and development</td>
<td>As in NIS, the definitions vary according to authors. But they all agree that the institutions lead to a regulation of behaviour, both inside and outside organisations</td>
</tr>
<tr>
<td><strong>Regional development</strong></td>
<td>Territorial view based on &quot;milieux innovateurs&quot; and on agent's capacity of innovating in a co-operative atmosphere</td>
<td>Territorial view based on spatial solidarity and flexibility of districts. This flexibility is an element of innovation</td>
<td>View of the region as a system of &quot;learning by interacting/ and by steering regulation &quot;</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td>Culture of trust and reciprocity links</td>
<td>Sharing values among agents - Trust and reciprocity</td>
<td>The source of &quot;learning by interacting&quot;</td>
</tr>
<tr>
<td><strong>Types of relations among agents</strong></td>
<td>The role of the ‘support’ space: strategic relations between the firm, its partners, suppliers and clients</td>
<td>The network is a social regulation mode and a source of discipline. It enables a coexistence of both co-operation and competition</td>
<td>The network is an organisational mode of &quot;interactive learning&quot;</td>
</tr>
<tr>
<td><strong>Type of relations with the environment</strong></td>
<td>Capacity of agents to modify their behaviour according to the changes in their environment. Very 'rich' relations: third dimension of support space</td>
<td>The relationships with the environment involves constraints and opportunities. Capacity to react to changes in the environment. 'Rich' relations. Limited spatial view of environment</td>
<td>Balance between inside specific relations and environment constraints. 'Rich' relations</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th>New Industrial Spaces</th>
<th>Local Production Systems</th>
<th>Learning Region (synthesis?)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features of innovation</strong></td>
<td>A result of R&amp;D and its implementation; application of new production methods (JIT, etc.)</td>
<td>Same as for ID</td>
<td>As for RIS but stressing co-evolution of technology and institutions</td>
</tr>
<tr>
<td><strong>Core of innovation dynamics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Role of institutions</strong></td>
<td>Social regulation for the co-ordination of interfirm transactions and the dynamics of entrepreneurial activity</td>
<td>Same as for ID, but with focus on role of governance</td>
<td>As in RIS but with a stronger focus on role of institutions</td>
</tr>
<tr>
<td><strong>Regional development</strong></td>
<td>Interaction between social regulation and agglomerated production systems</td>
<td>Diffuse industrialisation, i.e. socio-economic development based on an evolutionary process without rupture</td>
<td>Double dynamics: - technological and techno-organisational dynamics; - socio-economic and institutional dynamics</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td>Culture of networking and social interaction</td>
<td>Role of local social-culture context in development</td>
<td>As in NIS but with a strong focus on interaction between economic and social cultural life</td>
</tr>
<tr>
<td><strong>Types of relations among agents</strong></td>
<td>Interfirm transactions</td>
<td>Interfirm and inter-institution networks</td>
<td>Networks of agents (embeddedness)</td>
</tr>
<tr>
<td><strong>Type of relations with the environment</strong></td>
<td>The dynamics of community formation and social reproduction</td>
<td>Close to MI</td>
<td>As in RIS</td>
</tr>
</tbody>
</table>

Figure 1 suggests a strong semantic unity and complementarity among the features of innovation. But this semantic unity of concepts is only superficial. This can be illustrated by considering the notion of innovation and the meaning of culture in the various TIMs. None of them defines the purpose of innovation explicitly. Reading through the various contributions one concludes that the main shared purpose of innovation is the development of new technology and its implementation. There is more clarity, but also diversity, in the way TIMs identify the innovation process: capacity of firms to innovate (*Milieu Innovateur*), innovation as an interactive
cumulative process (*Regional Innovation System, Learning Region*) or an R&D process (*New Industrial Spaces*). As to the driving forces – and impact – of innovation (not included in figure 1), most models refer to competition and/or improving the competitive position (see also SWYNGEDOUW 1992, who stresses how competition among places is a major feature of the new global regime). There is no reference to improving the non-(market) economic dimensions of the quality of life in local communities or territories. This becomes particularly clear when the meaning of culture is considered: culture is ‘economic culture’, or ‘community culture’ to the extent that it is functional to improving the competitiveness of the local or regional economy. Of course, this functional link between culture and market economic performance means an impoverished view of territorial development since it is limited to only its economic dimensions, within the current logic of capitalist growth and competition.

The conceptual superficiality of the TIM literature is a consequence of several factors. As already mentioned, it partly stems from the different theoretical, political, and economic trajectories of specific regions and countries (see the national literature surveys in Part II), which inevitably leads to a conceptual ‘plurality’ and, often, inconsistency. To a large extent, however, it depends on the way theories are appropriated in policy practice – and, in turn, on the way theories respond to hegemonic political discourse. There are, indeed strong links with the current regional economic competition policy (many TIMs contributed to legitimise it). There is a general trend in today’s scientific practice towards ‘fast theory building’ and a diffused confusion of analytical theory with normative modelling.

3. THE BUILDING BLOCKS OF THE TERRITORIAL INNOVATION MODEL

In the previous section we pointed out how Territorial Innovation Models share a significant number of *concepts*. But also well-known *theories* belong to the common ground of TIMs: endogenous growth and development theory, innovation systems theory, network theories, etc. But how real is this ‘sharing’ of concepts and theories? First of all, not all concepts and theories play a comparably significant role in all TIMs. Second, their use is often diverse or ambiguous. The lack of clarity about the concept of innovation and its various dimensions is revealed also
from the theorising ‘à la carte’ utilised in the various TIMs. Let us look at the diversity in the use of the most important concepts and theories.

**Figure 2 Territorial Innovation Models : theoretical roots and challenges**

Figure 2 provides a synthetic survey of the strong and weak links between the various economic, social, geographical and planning theories, on the one hand, and the different TIMs, on the other hand. TIMs are presented in rectangular boxes, theories in ellipsoids. Some of the main theories and their *conceptuarium* (i.e. the body of concepts that they mobilise) are discussed in the sequel of this section.
3.1. Economies of agglomeration

‘Agglomeration economies’ are portrayed as a general concept, although it refers to a number of different theories. In fact, the debate on the appropriate content for the notion of economies of agglomeration in regional economics is far from finished. Various viewpoints oscillate today between the original Weberian formulation in terms of minimum transportation costs and industrial organisation, the Marshallian conceptualisation of external economies, the Hooverian reformulation in terms of localisation and urbanisation economies, and the innovation process-oriented revisiting of the concept as mentioned in various TIMs. Recent contributions to the latter debate were offered by CAMAGNI and SALONE (1993) and MOULAERT and DJELLAL (1995), who make a plea to involve various spatial scales in the analysis; MALMBERG and MASKELL (1997), who enrich the notion by a targeted qualitative analysis of the network dynamics in regionally specialised agglomerations; MOULAERT and DJELLAL (1995), again, who provide a qualitative interpretation of locational and urbanisation economies; and several other authors who, in the context of the regional innovation literature, pursue the ‘qualitative calibration’ of the agglomeration concept (MOULAERT and DJELLAL, 1995; MALMBERG and MASKELL, 1997). The counter position is given by PORTER (1996) who argues that it is time to shed ‘agglomeration economies’ (p. 87, cited from LAGENDIJK) and concentrate on the nature of the network externalities.

This said, the concept of agglomeration economies is explicitly used in the New Industrial Spaces and the non Porterian version of the Clusters of Innovation model. In the Industrial District and the Milieu Innovateur models the economies of agglomeration come in through the Marshallian backdoor, stressing the role of externalities for industrial organisation. In general, when used in TIMs, ‘agglomeration economies’ tend to receive a rather qualitative content, with positive externalities stemming from local and regional business culture, learning by clustering and networking, and urbanisation economies resting on the educational system, research infrastructure as well as the culture industries in the case of large agglomerations.

The use of the concept of economies of agglomeration for defining territorial innovation models leaves a tremendous ambiguity regarding their spatial character. We observe that even in the most culturally rooted institutional models (ID, MI, NIS, RIS, LR) the interpretation of local business culture varies according to the socio-political discourse in which the notion of district or
of industrial space is used. Meanings range from the institutional capability to carry technological innovation policy (technology determined institutional dynamics), to endogenous institutional dynamics of localities leading to strategic socio-political choices.

### 3.2. Endogenous development theory

Endogenous regional development theory combines the three principal dimensions of development: the economic dimension, i.e. economic development based on inputs that are at least partly available or generated locally; the socio-cultural dimension, which reflects cultural needs and community identity; and the political dimension, relative to political decision-making and involvement of local institutions, interest groups and individuals in the policy process. A large range of interpretations and combinations of these three dimensions can be found in the literature. Endogenous inputs can be defined in a technical-economic way, looking at natural resources, human resources, entrepreneurship, existence of an industrial structure, technical know-how, etc. (COFFEY and POLESE 1984; GAROFOLI, 1984); or they can include the wider socio-cultural fabric of growth coalitions involving the educational system, Chambers of commerce, business and professional associations, etc., leading to a definition of the region as ‘the clustering of social relations, the place where local culture and other non-transferable local features are superimposed’ (GAROFOLI 1992, p. 4; FRIEDMANN and WEAVER 1979); or, from a more socio-anthropological point of view, they can involve the institutional dynamics of all groups in the local population (STÖHR, 1984; FRIEDMANN, 1992). In the latter case endogenous development derives from the empowerment of deprived groups whose needs are structurally alienated, and who gradually manage to establish their bottom-up development models.

Another important dimension of the plurality of endogenous development interpretations is the relation of endogenous to ‘exogenous’ development factors, and how significant is the role played by the endogenous portion of the development assets (GAROFOLI, 1992). This issue is strongly related to that of the ‘spatial scale’ of endogenous development: how ‘far’ does a locality or a region reach in its endogenous strategy? Is endogenous development a response to destabilising external factors? (STÖHR, 1984). Here the debate on endogenous development
evokes to a great extent concepts derived from the *theory of systems*. Beyond the polarisation between self-sufficiency – quite unrealistic – and complete openness to competing external dynamics – which means abandoning the political possibilities of self-determination – where are the ‘boundaries’ of the endogenous regional system?

To this regard, one strand of analysis focuses on the decision-making process about the type of local potential that should be valorised, and which external assets should be integrated into the regional development cocktail. STÖHR and TÖDTLING (1977) talk of ‘selective regional closure’, referring to a strategy aiming at spatial equity between groups of human beings in terms of material well-being, but also with respect to the right of being different and seeking self-fulfilment. The strategy should not be autarkic, but rather a combination of territorial aspirations and functional exigencies. This means that endogenous development involves a dose of regional preferences with respect to production and exchange, as well as a selection of relations with the extra-regional environment. The STÖHR-TÖDTLING view implies a ‘co-habitation’ of two logics that are hard to reconcile: the functional logic – national or international – embodied in the strategies of TNC's and the various logics (economic, socio-cultural, political) of local communities whose objective is to achieve their own development, based on their own identity. PECQUEUR (1989) describes the local aspirations of the communities as an ‘autonomous reaction’ to the constraints originating from the extra-territorial environment (qualifying them as ‘herenomous pressure’).

The core of endogenous development theory is, thus, a new conception of space: ‘territorial’ space replacing functional space. An internal dynamics of development replaces space as a ‘simple’ support of economic functions. In the territorial approach, in addition to (or in interaction with?) the usual economic attributes privileged by prior theories of regional development, space is ‘upgraded’ with a new content of socio-cultural values and traces of the local history. Economic space is now more articulated, and contains the ‘milieu de vie’ of a human community where the members are mutually linked by economic, cultural and historical values. Territorial space becomes a ‘cadre d’action’ of a particular human group.

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3 E.g. in the meaning of distance, representing a transportation cost; in the technical view of space according to PERROUX; or in space as a ‘temporality’ in the social division of labour in the theory of spatial division of labour.
It is a small step from this ethical judgement to an ecological development approach. Human beings should live in harmony with their natural environment, in order to valorise local resources, in full respect of the environment. However, when employed in ‘a practical’ economic development context, this enriched view of territorial development becomes easily re-functionalised, as SACH’s eco-development approach illustrates (figure 3).

SACHS (1980) in his eco-development approach analyses the cohabitation of two different logics as they are also portrayed in the theory of endogenous development. The author stresses that the eco-development approach ‘allows to solve the increasingly dramatic conflict between growth and the state of nature, in ways different from stopping growth ‘ (p. 12). In regional economics a similar approach can be found in what PERRIN (1983) calls the ‘eco-ecological paradigm’. Briefly, this ‘paradigm’ illustrates the dialectical relation between economic organisation and the ecological organisation of human activity; these dialectics create the possibility of ‘autonomous territorial organisation’. In a similar way the theory of endogenous development, stresses that the process of development originates partly from the local capacity to organise, without wasting natural resources. However, despite the original link between the eco-development and the endogenous development approaches, the recent theory of sustainable development has been designed in complete independence from regional development theory.

Indeed, in most TIMs the combination of the three dimensions fabricating endogeneity often receives a strong economic-deterministic flavour. The orientation is towards local and regional development defined with reference to the dominating growth images: high technology production, new producer services, capital intensive cultural filières, etc.

Forces of globalisation and regionalisation can both be integrated in innovative milieux, as GENOSKO (1997) argues. But contrary to this author’s beliefs, when global market forces are followed, local dynamics are coloured by the dominant growth images. Only local political forces can counter this dominance. But in reality most often politics legitimise and catalyse this ‘globalised endogenous’ growth strategy. The growth coalition model is, therefore, the most celebrated conception of institutional dynamics within a locality or a region seeking to reconcile the global with the local. The question becomes: which are the institutional forces that can be
geared towards the appropriate (but usually ‘exogenously’ pre-cooked) endogenous development strategy? How can socio-political forces be adapted to the ‘right’ model? We are confronted here with ‘institutional instrumentalism’, whose sole endogenous ingredient is the capability to produce the ‘orgware’ and the human resources to accomplish the exogenously imposed or inspired economic growth targets. The other sides of the institutional dynamics, such as participatory governance (AMIN, 1995a, 1995b), basic needs determination (FRIEDMANN, 1992), bottom-up innovation in governance systems (MOULAERT et al., 2000) are left out of the picture.

3.3. Systems of innovation, evolution and learning

The multi-faceted character of the ‘innovation and learning process’ has been discussed quite openly in the scientific literature and, particularly, in evolutionary economics (see for example EDQUIST, 1997).

The earlier debate about the nature of innovation led to the gradual recognition that innovation is neither a one-way diffusion process, nor a clear-cut factor-impact relationship between the creative innovative entrepreneur and the firm, but a process and/or a system of innovation. One strand of this early debate was a confrontation between epidemic diffusion models and organisational learning processes (RATTI, 1992). A second concerned the various interpretations of SCHUMPETER’s theory on the innovative entrepreneur (GALLOUJ, 1994).

A third strand concerned the dynamic aspects of the innovation process, stressing retro-activity but also path-dependency (EDQUIST, 1997; DOSI, 1984).

A more recent debate deals with the nature of national innovation systems, and especially the way institutional dynamics are interpreted (EDQUIST and JOHNSON, 1997; LUNDVALL, 1992; MOMIGLIANO and DOSI 1983). Here the whole range of views on the role of institutions is discussed, i.e. the opposition between technological and organisational determinism, on the one hand, and the social and political dimensions of learning, on the other. There is a growing consensus in this literature that innovation is a socio-organisational process; but there remains some divergence of opinion on the relationship between technological and organisational
innovation. And so far there is no answer to the question about what the role of social dynamics and democratic decision-making in innovation trajectories should be. The socio-organisational dimension is now fully integrated in the technological innovation debate; but the innovation process remains in the first place subject to market laws and economic efficiency imperatives.

A third debate concerns the nature of the innovation process at the local and regional level. Most of the contributions on the nature of innovation in TIMs refer to innovative dynamics based on technological change, organisational learning and path dependency. We are here at the heart of the application of contemporary concepts of evolutionary economics. The theories of the technological paradigm and trajectories (DOSI, 1984, 1988) were a good starting point, but became soon criticised by the founding fathers themselves (DOSI and MARENGO, 1994) and by authors of the regulationist school for missing the proper dynamics of the social fabric within leading (innovating) firms and across territories (LEBORGNE and LIPIETZ, 1988; DJELLAL, 1993).

Organisational selection, learning processes, path dependency, networks, institutions, governance, etc. became distinctive elements of new theories (CARLSSON and JACOBSSON, 1998), which probably managed to distance themselves from the economically determinist interpretation of the innovation process more effectively than the critical authors participating in the first and second debate (STORPER, 1997). It is explicitly recognised by economists of this (evolutionary) approach to innovation that:

Learning and technological change are therefore rooted in the present economic structure; they are local in nature and include strong elements of path dependency (CARLSSON and JACOBSSON, 1998, p. 267)

In any case, there seems to be more clarity about the meaning and role of the innovation process as used in TIMs, than is the case for the concept of agglomeration economies or endogenous growth potential. Still, the diversity in interpretation remains great, ranging from technological determinism at one extreme of the spectrum, to socio-organisational innovation trajectories at the other extreme. The works of SAXENIAN (1994), MALMBERG and MASKELL (1997) and STORPER (1997) particularly stress the socio-organisational dimensions of the regional innovation process. However, even for these authors, innovation remains a process mostly obeying a market-economic logic.
An even more fundamental problem is the fact that, in theorising innovation and learning, the biological metaphor of evolution is constantly referred to, but without clarifying which concepts and theories of evolution are used as sources of theoretical inspiration. Of course, a biological metaphor is not mandatory for a social theory of development or evolution; but when it is used, at least some definitional efforts on the principles of genesis, heredity, selection etc. should be provided (see HODGSON, 1993). Moreover in a social theory of evolution, other modes of social evolution like associativity, reciprocity and solidarity should be considered (KROPOTKIN, 1972).

3.4. Network theory

As can be seen from figure 2, most of the territorial innovation models cited in this paper use the network concept as a key-element. The Industrial District literature, the Milieu Innovateur, the STORPER-SCOTT and SAXENIAN versions of the New Industrial Spaces and the Learning Region models all use a network approach which bypasses, more or less, the mainstream technocratic interpretation of the professional, technological or industry network. Gernot GRABHER (1993) provides a good synthesis of the use of the network concept in socio-economics. According to GRABHER, working in the footsteps of GRANOVETTER, a generic ‘form of exchange’ called ‘network’ can be identified, which obeys the following four basic features: (i) reciprocity; (ii) interdependence; (iii) loose coupling; (iv) power. Some of the features are close to those in the ID (trust, reciprocity, loose coupling). But of course when we start analysing the interplay dynamics from the perspective of power within or imposed to, and of the ‘finality’ of the network, we may end up with quite unbalanced configurations, which can be more reminiscent of the relations of exploitation in the medieval putting-out system (MASSEY, 1984) or the Japanese automobile production system (CHILD-HILL, 1989). If we confront this network concept with the blend of ideas present in the TIM literature (for partial surveys, see HANSEN 1992; CARLSSON and JACOBSSON, 1997), we notice that networks are, in the first instance, introduced as intermediate organisational forms between markets and firms, when these fail in efficiency and efficacy. In particular, trust (reliability in terms of technical features, timing,
etc.), demand or supply specificities, and possibilities for co-operation are the basis for the choice of supplier-producer and buyer-subcontractor network relationships, such as extended family networks or co-operative networks. These have formed the organisational structure of local small firms production systems, where the market was not able to provide this type of function (HANSEN, 1992, p. 100-101). However, they are slow to develop in peripheral regions, where trust and co-operation are limited (MARTINELLI 1998). For example, SME's in peripheral regions have no access to advanced producer services because of the absence of specialised public-private networks (CAVOLA and MARTINELLI, 2001, for the case of the Italian Mezzogiorno).

3.5. Governance

The discussion about ‘networks’ leads to the even more contemporary discussion about ‘governance’. Fashionable in most social sciences, the term is (re) used to widen the debate about the administration of social entities (firms, organisations, groups, neighbourhoods, localities, cities) and the role of agents (workers, members, citizens) in the decision-making and ‘governing’ processes (KING and STOKER, 1996). The spectrum of interpretations is again wide. From the discussion on market and hierarchy and intermediate forms initiated by COASE and others in neo-institutional economics, the improvement of the ‘urban growth coalition’ and ‘urban machine’ literature (MOLOTCH 1976; STONE, 1989; LOGAN and MOLOTCH, 1987) and the contemporary debate on local governance at the regional and urban level (LE GALES, 1998; STORPER, 1997; MOULAERT et al., 1996) there emerges a wide array of notions of governance. These notions can easily be related to various views of planning and political theories (FAINESTEIN and FAINSTEIN, 1996) or to the theorising of the relationships between structure, institutions and agency (social theories). This pluralism in the views of governance is again present in the territorial innovation literature, almost in the same way as for the notion of network. This is quite natural for those concepts of governance in which networking – in its different interpretations – stands central. Networking could be considered the most challenging concept for administration and the key notion in theories of government and public governance. However, it would be misleading to identify administration with a top-down approach; and networking with a democratic or horizontal approach to governance. In fact networking can be
more alienating than a top-down, but justice-based, administration. In the same way, ‘local’ governance can be a form of ‘selective social closure’, privileging the growth coalition to the detriment of grassroots movements. This is especially true when local governance is based on private instead of public norms (informal agreements instead of legislative regulations), which can further undermine democratic decision-making.

4. TOWARDS A COMMUNITY-BASED CONCEPT OF TERRITORIAL INNOVATION

There is a broad field of tensions among the various TIMs about how territorial innovation is theorised. The apparent semantic uniformity and the shared theoretical sources hide a pluralism of interpretations of innovation dynamics and their theoretical inspirations. This pluralism could be interpreted in a positive way, as a creative and/or converging stage in the building of a new theory. But for the time being, ambiguity predominates and there is a clear need to achieve some analytical clarity.

There appear to be two possibilities for the epistemological improvement of Territorial Innovation Models. The first one is to admit that there is ambiguity and to provide a decent definition of the nature, process and forces of market-led innovation at the local and regional level. As of today, none of the TIMs provides such a definition. Even in the light of a shared definition of innovation, it would still be necessary to launch a detailed and systematic rediscussion of all the ingredients of the model. Such an endeavour may succeed if the observed confusion between normative innovation strategies and positive – sometimes less innovative – development strategies are disentangled. But that is a difficult working task to impose on a community of scientists that is often deeply involved with regional and local policy and institutional sponsorship of their research. Moreover, thinking in terms of path dependency, this recommended way out from the epistemological malaise is a bit counter-intuitive, because it is hard to return to an established research trajectory and to reformulate the epistemological borderlines of territorial innovation that were misspelled from the beginning. Path dependency theory aptly enlightens the difficulty here. In fact, the revisiting of the various concepts and
theories in the light of new epistemological boundaries may be much easier than resetting the boundaries themselves.

The second possibility is to recognise the contradiction between a market-led view of innovation on the one hand, and a community-based view of development on the other. There is certainly a strong need to broaden the discussion on innovation in all its dimensions, as a leading theme for the progress of humanity at the local level. This broadening up of the debate on innovation is not easier than the first approach, i.e. the epistemological improvement of TIMs. Just think of the multidimensionality of the desired new concept of community-geared innovation, the role of non-market economy innovation agents, the affinity with community culture, etc. But the undeniable advantage of this second approach would be that it applies more directly to the complexity of local and regional development than any TIM that is oriented solely towards the logic of market-led economic development (MOULAERT and NUSSBAUMER, 2001).

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The above critical survey merely lays the grounds for further investigation in the relationships, differences and common elements of TIM families. It also represents a provisional analytical framework for reviewing the specific national trajectories – both with regard to the theoretical debate and the policy initiatives – as illustrated in Part II.

The surveys of national literatures included in Part II, clearly show how both theoretical analyses and policy strategies are strongly influenced by national specificities. They also contribute to highlight the role of a number of dimensions just touched upon in this first critical survey. Therefore, before addressing the task of reformulating a coherent and integrated TIM, which fully encompasses the social and political dimension of development, it is necessary to further highlight a number of aspects: a) the issue of ‘scale’, i.e. the different perceptions of the territorial ‘boundaries’ of a locality in the various models, and its impact in terms of development strategies and policies; b) the role of local government institutions, not only in terms of devolution of authority from the central government, but also in terms of their capacity to ‘empowering’ the local society; c) the relationships of TIMs with recent theoretical and political developments in the domain of sustainable development, ecological development, bio-regionalism, etc.; d) the possible contribution of
theoretical work in other disciplines concerning the social economy, the ‘Third sector’ and non-market supply-delivery systems.

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**PART II. NATIONAL LITERATURE SURVEYS ON TIMs**

**INTRODUCTION**

The development of TIMs, both in analytical and policy terms, varies across countries, owing to their different institutional contexts, political trajectories and theoretical specialisations. In the following pages country-specific literature surveys are presented, each attempting to trace the origin and distinctive features of the national economic and political debates on this topic and their links with the international literature.

**Great Britain**

In the Great Britain case, despite the prominence of some of its academic work within the international debate on TIMs, such models are slow in gaining national attention, both in terms of analyses and policy. The theoretical debate is fragmented into different trajectories, that have not yet found a locus for integration, and policy initiatives are rather scattered. This is explained by a number of country-specific factors such as the concentration, openness and internationalisation of the British economy – which also explains the emphasis still given to inward investment strategies – and the strong centralization of governance and policy. Forms of integrated local development strategies are found more at the ‘micro’ local level (e.g. neighbourhood revitalization), as is the case for Germany. Significant theoretical work is also devoted to the analysis of local ‘institutional capacity’ and ‘social knowledge’.

However, new possibilities seem to emerge, owing to the government devolution process, which could provide the locus for integrating into a territorial dimension the different theoretical trajectories and policy actions.
Italy

Despite the fact that this country is the cradle of the Industrial District model, the debate on TIMs is fraught with ambiguities and gaps. The institutional approach of the founders of the model has been progressively lost in the process of “vulgarisation” of the ID concept. In the current economic and political debate the complex interplay between institutions, civil society and entrepreneurship, which was the “enabling” factor for the success of many Italian districts, is overlooked and an “economist” view of the competitive advantages of SME’s clusters is dominant.

This is particularly evident in policy terms. The current policy approach simplistically equates the ID model with the “local development” strategy, ambiguously merging the local governance discourse with deregulation, flexibilization and privatisation imperatives. Moreover, it legitimises central government retrenchment in terms of redistributive policies with the devolution of development policy competences to the local level. Such an approach, although positive in principle, proves rather difficult in regions – such as the Mezzogiorno – where the societal and institutional factors that “enabled” the Industrial District success in some North-central areas of the country have not yet matured or are of a different nature.

Austria

Austria’s trajectory in regional policy closely follows that of Italy, in the shift from exogenous investment-led strategies to a more local focus. However, policies inspired to an “endogenous development” strategy in the 1980s had in Austria a much greater community action basis than in Italy.

In these years, academic analysis – especially through the work of Walter STÖHR and Franz TÖDLING, central government attitudes – especially within the social-democratic party – and local action – especially in rural areas – were synergic in featuring an “endogenous development” model in which politics, society and economics were significantly integrated. Citizens’ movements, urban action groups, small-scale ecological experiments also contributed to an upgrading of local level politics.
At the end of the 1980s the notion of ‘innovation’ made its entrance in the political and academic discourse on regional development. But in the course of the 1990s regional development theories lost their critical and progressive impetus. The original “societal approach” transformed into a “business oriented model”. TIMs in the 1990s turned in Austria as well as in other European countries into pragmatic economic consultancy for regional competitiveness.

**Germany**

In the German economic and political debate there appears to be a strong dichotomy between urban and regional studies, the former focussing on the social aspects and on social exclusions, the latter on the mechanisms of economic development.

As in Italy and Austria, up to the mid 1970s, regional policy was mainly based on sustaining exogenous investments. Heavy deindustrialisation processes in certain regions and, later, the unification of the country, determined here as elsewhere, a shift in focus towards “local” development, “innovative clusters” and the role of networks of firms. However, with the exception of some policy initiatives, particularly in East Germany where unions and civil society have been involved, and of a number of critical works that stress the social aspects of development and the need for territorial embeddedness, the current focus of German regional analysis and policy is mostly on the economic factors that ensure ‘competitive success’.

In contrast, urban studies and policies exhibit a greater focus on the social implications of development and the growing disintegration of urban fabrics, with a strong concern for “integration”, both in methodological terms (need to integrate the different analytical and policy dimensions) and with regard to a “community-based”, socially inclusive development strategy. However, most urban renewal policy programmes launched in the 1990s (also funded at the Federal level) exhibit a sort of schizophrenia, whereby market forces (business interests) keep out of such initiatives, and the public institutions are burdened with the task of solving social problems – i.e. the well-known division of labour leading to privatizing benefits and socialising costs.
Belgium

The Belgian case is characterised by a strong government regionalization, which sets it apart from the previous countries.

With regard to TIMs, Belgian research has focused on the Innovative milieu, Industrial districts (applied to the Kortrijk and Ypres areas) and Learning region models, stressing the strong endogenous development potential of a number of national cases, but also some of their limitations. Particularly feared is the incapacity of local production systems to face external competitive pressures, due to their ‘inward’ attitude, i.e. strengthening internal networks, rather than establishing linkages with the outside knowledge economy.

Another issue debated in Belgium is that of ‘scale’. Partly because of the regionalisation of government, partly because of the small size of the country and its position within the European context, Belgian territory is subject to different territorial dynamics, ranging from the neighbourhood to the global. This tension is especially felt in the Brussels region, but it has spurred a more general discussion about the ‘appropriate’ level of planning initiative.
I. GREAT BRITAIN

by

Jon Coaffee, Sara Gonzalez, Patsy Healey, Ali Madanipour and Geoff Vigar

Kevin Morgan and Huw Thomas

Introduction

Despite the contributions of AMIN et al (1994, 1995, 2000) and COOKE, MORGAN et al (1997, 1998, 2001), until very recently there seems to be less research and policy engagement in the UK with Territorial Innovation Models (TIMs) than in France, Italy and Germany. Since the 1990s, however, under the influence of the works of Porter, researchers at CURDS (University of Newcastle), COOKE, MORGAN and others, there has been rapidly growing policy interest in developing and sustaining economic spatial ‘clusters’ and strong current interest in Regional Innovation Models (RIMs).

These recent RIM ideas make direct use of COOKE and MORGAN (1998), but throughout the 1990s emphasis on innovation has been overwhelmingly developed within a relatively narrow conception of innovation and the way to promote it, with only a limited grasp of the institutional dynamics of ‘social learning’. Following PORTER’s extremely influential analysis and policy recommendations, the British Government published a White Paper in 1998 titled "Our competitive future: building the knowledge-driven economy". This not only promoted a cluster approach to regional development but also argued that the spatial planning system was not as helpful to the development of clusters as it should be.6 Partly in response to this criticism of planning the DETR commissioned the production of a report on 'Planning for Clusters' in 2000 (SIMMIE, 2002).

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• 4 University of Newcastle Upon Tyne
• 5 University of Cardiff
• 6 This claim has been repeatedly made, though evidence for it is not strong.
There is much ‘talk’ of learning and knowledge circulation, but in policy terms, the nature and implications of social learning remain rather undeveloped. So far, the policy response has been absorbed into the promotion of ‘partnerships’ – a very vague term for all kinds of different practices.

Nonetheless, these models of territorial development are starting to challenge the established economic development discourses embedded in many of the old manufacturing regions. Here, among firms and workers, and political culture generally, there tend to be nostalgic references to a lost world of manufacturing industry, and a persistent attachment to the chimera of ‘inward investment’ to replace it. The political significance for handling a process of deindustrialization, either through brute force (as with miners) or through neglect and subordination to the needs of the service economy (as with the rest of the manufacturing sector), has contributed to embedding a political nostalgia for ‘manufacturing industry’ and a continuing demand for substantial redistributive policies (RSA 2001).

**The limited emergence of TIMs in the British scenario**

Several UK cases have been included in comparative studies of TIM (e.g. CROUCH et al. 2001, COOKE and MORGAN 1998, SIMMIE et al., 2002). There are also many studies of regional development and local area development. The experience of the Regional Economic Development Agencies and Regional Planning Guidance/Spatial Strategies, promoted since 1997/2001, is also attracting a lot of research interest at the moment.

As regards the UK, SIMMIE (2002) argues that the available data is insufficient to identify networks and linkages within and between sectoral concentrations. A study done by Trends Business Research in 2001 identified 154 clusters in the UK. However it is difficult to know whether these are real clusters or just industrial concentrations. Using a different methodology, another research identified 12 clusters in the UK economy. Although these analyses of secondary data sources are not able to penetrate the issue of whether or not any of the identified clusters
actually do have networks and linkages of any kind, they do suggest that UK economy is not strongly clustered spatially.

A general conclusion seems to emerge from such UK analyses and comparative studies. Despite a continual flow of regional and local initiatives in area and territory development, it has been very difficult for local production systems supported by locally-integrated modes of governance to emerge in the British context (see CROUCH et al 2001). This seems to be the result of a number of factors:

• *The openness of the British economy and the dominance of large firms.* The British economy is one of the most concentrated in the World. As in France, national policies played a crucial role in accelerating the decline of British industrial districts and regional agglomerations (ZEITLIN, 1995, CROUCH et al. 2001). The British economy has also been historically very open, and open competition in the market place is a well established discourse in the British economic culture. This tradition was reinvigorated with the liberalisation agenda embraced by the British government since the 1980s. These features, along with the heavy concentration and international strength of UK trading and financial capital, has led to a widespread acceptance within all mainstream political parties of ‘globalization’ as a necessary – if not positive – mechanism of structural readjustment, whereas opposition to globalization remains on the margins of the formal political discourse – although highly visible at times. It also explains the acceptance of regional development discourse as a process of competitive repositioning in new global relations, the stress on ‘regional innovation’ devoid of its more complex social and institutional attributes, and the lasting emphasis on ‘inward investment’ as a strategy for regional development.

• *The centralisation of British politics and government.* The recent devolution processes occur into a context of overarching historical dominance of the central government, translating in a continued strangulation of regional and local governance capacity, which has limited the possibilities of institutional experimentation and innovation. This constraint is strongly argued by CROUCH et al. (2001). While regions and localities are expected to be the units of competition in the global market place, there are not enough corresponding governance

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7 The financial centre of London remains the outstanding exception.
initiatives to enable them to act in that capacity. The current devolution reforms are occurring at the broader regional scale, which may still hampers the development of ‘local’ governance processes. In the case of the English regions, as noted by CROUCH et al, “If the English regions acquire political competences, they will probably be at the expenses of the local, rather than the central level” (CROUCH et al. 2001:204). “Although there are (...) elements of informal associational governance in the British context, in the encouragement of network and co-operative initiatives (...) the capacity of local governments to play an active role in such networks seems to be increasingly weakened” (CROUCH et al. 2001:205). Also worth mentioning is the persistant dominance of ‘nationally’-articulated strategies of local development (e.g. the current ‘modernisation’ agenda), with London/South East conceptions imposed on other areas.

- The organisation of policy and policy networks into functional/sectoral divisions, rather than territorial ones. Traditionally, British government activity has been organized into functional and/or sectoral policy communities linking central and local government along vertical lines, around which are structured the lobby groups from the business sectors and the civil society. This structure limits the development of conceptions and practices of ‘integrated’ development on a territorial dimension. Such limits seem to be reproduced by the current regional devolution, with separate RDAs, sectoral policies, strategic spatial planning, etc. There is, however, also a strong emphasis on integrated, ‘joined-up’ working by the current administration, to overcome the sectoral gaps. This has been reflected in area-based initiatives, as in the work of the Neighbourhood Renewal Unit (SEU 2000). The metaphor of ‘joined-up government’, though still weak in practice, nevertheless has some power to criticise current arrangements and could promote more integration.

One major result of the above limiting factors is that TIMs and local area development models tend to emerge either through a politics of challenge and resistance (the Alternative Economic Strategy models of the early 1980s (BODDY and FUDGE 1984); ecological development models), or in marginal locations.
New directions

Generally speaking, thus, there is only a limited awareness in policy arenas of the significance of both the institutional context and the spatial dimensions of economic development processes (despite the work of MASSEY and other radical geographers on the latter point; see for example, MASSEY 1984, ALLEN et al. 1998).

However, AMIN et al.’s concepts of ‘institutional capacity’ and ‘institutional thickness’, as well as COOKE and MORGAN’s promotion of the notion of ‘associative economy’ are helping to spur substantial interest among academics and some awareness in policy communities,

Moreover, throughout the last decade there has also been a fruitful academic discussion about the restructuring of the British state and the changes of the institutional regime in the UK. These studies (see for example MACLEOD and JONES 1999), although they warn us about the romanticism of the “regional renaissance” approach, have managed to shift academic attention from a national scale to a regional, local or urban scale.

A few recent comparative studies help to assess the existence of some forms of local production system and differences in the nature of local economic relationships, as well as in modes of governance (see e.g. CROUCH et al. 2001). There are, indeed, significant differences in the type and mix of firms and their local relationships, which inhibit or promote different modes of governance and place different emphases on the significance and nature of ‘territorial innovation’ policies.

There may be new opportunities for greater emphasis on endogenous development capacity and a more ‘rounded’ view of development in the 2000s. The new political process of devolution – in Scotland and Wales, but also to the English regions – may create a prospect of territory-based institutions being given more prominence in promoting ‘clusters’ and ‘knowledge-based’ industries. A number of local initiatives, such as integrated area development programmes promoted through the English Neighbourhood Renewal initiative (SEU 2000).
Traditions and families of TIM models in the UK

Several trajectories can be identified, along which endogenous development models and models akin to TIMs have developed in the UK in the past 30 years.

The Regional Innovation Strategy model is currently the most obvious, having been taken up by the English Regional Development Agencies (RDAs) in the late 1990s, mostly influenced by the work of COOKE and MORGAN. However, the notion of innovation tends to be rather narrow, and a more enabling conception of TIM is now needed.

A more enabling and socially focused model of TIM is beginning to emerge in England through the Neighbourhood Renewal Strategy (SEU 2000). This approach promotes participative, integrated area development, addressing economic, cultural and governance issues, but it is mostly focused on deprived neighbourhoods. It is linked to concerns with social exclusion and urban regeneration. Therefore, explicit links to the RIS/TIM literature are so far limited.

Interest in local development models is also arising from an exploding academic literature on urban and regional governance. AMIN and THRIFT (1995)’s work on ‘institutional capacity’ and ‘institutional thickness’ in localities was seminal here, spurring debates on the nature and appropriateness of these concepts (see CARS et al. 2002). Here again, however, links between these theoretical debates and policy are ill-developed.

The above current ‘models’ of local area development somewhat overlay older debates and experiments with the ‘New Left’ Alternative Economic Strategy in the late 1970s (BODDY and FUDGE 1984), the promotion of co-operative economic activity and the community business movement (see HAYTON 1996), and, more recently, Local Exchange and Trading Schemes (LETS) (DOHERTY et al 1999, NORTH 1999).

Besides the above approaches, there are two more directions from which local development models with a link to TIMs can be found in the UK experience:
- Rural development and development in peripheral areas, (for example, in the Scottish Highlands and Islands, or rural development in Northern Ireland, see MURRAY 1999), where for a long time the emphasis in policy rhetoric has been on integrated area development.

- Concepts of ecologically-sustainable development, especially models emphasising local production and consumption relations (e.g. RAVETZ 2000), which have developed more leverage since the crises in UK agriculture (Foot and Mouth, BSE, along with the CAP changes).

These different trajectories of analysis and policy co-exist, but are not too well-connected, arising from different policy and political communities and discourses.

Significance of TIM models for local development analysis and policy

Following the world economic crisis of the 1930s, in which British industries suffered severely, regional policy in the UK first focused on re-distributing manufacturing industry from the congested and prosperous South East to the industrial heartlands in the Midlands and the North. By the 1970s, it was clear that a major shift in employment away from manufacturing was occurring. Regional policy, thus, began to focus on attracting FDI through the provision of incentives, from capital grants to infrastructure investments and the provision of sites. There was also an undercurrent of concern for endogenous development, focusing on the development of a stronger small firm sector, but it was limited.

In the past twenty years, the emphasis has been on ‘competitiveness’ and ‘innovation’. This has legitimised a shift in policy attention from redistributive concerns and job creation strategies, to the overall competitiveness of the UK economy. The result has been a renewal of attention to sustaining the growth of economic activities in the South East – see for example, the Cambridge sub-region and high tech industries, or the publishing nexus around Oxford, and financial services around London (CROUCH et al 2001).

In the 1990s, the promotion of regional innovation has spread across all the English regions. At the same time, some people are arguing for a return to a more redistributive model of regional
policy, with a greater focus on attracting new firms into the regions with low employment levels and reducing levels of growth in the congested and expanding South East (RSA 2001). In all these regional initiatives, the links between the economic, the social and the environmental dimensions of territorial development have been present, but subservient to a predominant focus on ‘jobs’ or ‘competitiveness’ or ‘growth’.

**Key research issues and provisional concluding remarks**

The UK experience may provide some lessons with regard to the policy implications of TIMs. From the above considerations the following issues seem relevant and need further research:

- the emergence of a territorial development agenda from within a centralised, functionally-organised nation state;
- the evolution of development models in the context of regional devolution;
- the impact of ‘integrated development’ models in the area regeneration agenda;
- the experience of integrated area development in rural and peripheral areas;
- the models emerging in debates on ecologically-sustainable development.
- the scope for, and the limits of, the new structures which ostensibly facilitate popular participation
- the subsidiarity issues associated with the national/regional/sub-regional scales (esp the latter two, where there are big problems for the local as governance scales up to the regional level)
- the new scope for territorial rivalry in post-devolution Britain

This said, a few provisional conclusions can be drawn about the specific national context of the U.K. First, the current devolution impetus may promote more integrated ‘territorial development’ models, with a stronger emphasis on non-economic dimensions and endogenous development. The government’s interest in ‘joined-up’ government (e.g. with respect to its social exclusion agenda), the growing awareness of issues to do with quality of life and cultural resources, the
search for regional identity (as a political mobilising force, especially in the English regions), concerns about recovering active democratic engagement, and the strong moral agenda of the ecological environmentalists all focus policy attention on local area development models. The devolution impetus may also promote more awareness of the multi-dimensional and inter-related nature of development in territories, an understanding of which tends to get crowded out in the highly centralised government contexts of the UK.

Secondly, there is also a growing academic and policy recognition of the significance of local institutional and cultural contexts in shaping economic environments (see concepts of institutional capacity and social capital), and increasing awareness that the development process is not just about the state and business, but also about civil society.

Finally, there is also a real challenge ahead for the model of development which focuses on FDI. The changing geographical position of the UK in relation to an enlarging Europe could significantly reduce inward investment flows. In rural areas, there is a quite strong impetus for more locally-focused production-consumption chains, following the BSE and the F&M crisis. The ‘Cambridge Phenomenon’ is much heralded as a development model, although it needs a more rounded view of what constitutes development.

There is also much current interest in the role of ‘knowledge’ and ‘firm networking’ as promoters of innovation, economic value and area development. Yet the concept of knowledge remains rather economistic. Moreover, although “(…) certain ideas connected to networks and inter-firm co-operation in manufacturing began to enter central government thinking in the early 1990s and to produce new policies (…), the story is still unfolding (…) the policy milieu remains confused (…). Public policy seems to have decided that interfirm networks are a ‘good thing’, but there is not much awareness that their forms will depend on governance institutions” (CROUCH et al, 2001:200). Furthermore, “… There is considerable evidence of underexploitation of the potential capacity of networks (…). If one governance regime dominates, it is the centripetal power of London” (CROUCH et al, 2001:205).

Thus ideas and conceptions of integrated territorial development remain so far little developed in the UK and the institutional capacity for strategic collective action at the local and regional level is still weak. Devolution in practice is to ‘large’ regions, representing amalgams of different local
polities and economic relations. These do not relate easily to business area promotion initiatives or cultural and political identities. Although the devolution process in Wales and Scotland is encouraging richer, more coordinated development models, strongly backed by politics of identity, whether these models will succeed in being less ‘economistic’ is still an open question.

References


2. ITALY

by

Pasquale De Muro8, Flavia Martinelli9 and Serena Vicari10

Introduction

Italy is the cradle of the Industrial District (ID) model in its post-Fordist version11. The model, initially conceptualized on the basis of studies of specific regions in the country, was developed and refined by a small group of academic sociologists and economists, between the end of the 1970s and throughout the 1980s (BAGNASCO 1977, 1981, 1988; BECATTINI 1979, 1987, 1989; BRUSCO 1980, 1984, 1989; GAROFOLI 1983, 1987; TRIGILIA, 1986, and others). Foreign scholars within the international debate on flexible manufacturing systems and post-fordist restructuring later took it up also. It has since become an idealized paradigm of “local”, “endogenous”, “innovative”, “competitive”, “successful” regional development, adopted in left-wing, as well as right-wing discourse, to be emulated and applied in every region of the world. In this process of “vulgarization” and diffusion it has lost its original multifaceted, institutional and historical dimensions, to become in many cases a purely economic approach. This simplification is particularly evident in the policy applications of the model, which in the Italian case also involve significant political ambiguities.

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•8 Università di Roma Tre (section: From IDs to “local development”).
•9 Università di Reggio Calabria (section: “The vulgarisation of the ID model).
•10 Università di Pavia (section: The ID model).
•11 The concept of Industrial Districts was first developed by Marshall in the early 20th Century.
The Industrial District model

The Industrial District (ID) model stresses the innovative capacity of SMEs belonging to the same industry and local space. The industrial district is commonly defined as a geographically localised system, based on a strong division of labor between small firms specialised in different steps of the production and distribution cycle of an industrial sector, or of a dominant or limited number of focused industrial activities (BECCATTINI 1987, BRUSCO 1986).

The starting point of the model can be traced back to the seminal work of BAGNASCO (1977) *Tre Italie* (“Three Italies”), where he identified a specific socio-economic formation, the “Third Italy”, characterizing some Central and Northeastern regions of the country (Tuscany and Emilia Romagna, Veneto). Bagnasco emphasized that this “third” Italian model was distinctly different from that of the old industrialized Northwest and that of the underdeveloped *Mezzogiorno*. In parallel, BECATTINI (1975, 1979) had started to develop his analysis of the Tuscan IDs (the Prato textile district in particular) and BRUSCO (1980, 1982) his work on the Emilian model.

In the Third Italy strong rates of economic growth have been sustained by this territory-based social system of production: industrial districts developed particularly in the late 1970s and throughout the 1980s and continued to thrive in the 1990s, even though their performance has been out-paced by newer forms of local production systems (BURRONI and TRIGILIA 2001).

Industrial districts are characterized by a strong horizontal and vertical integration among firms, which relies on co-operation in sharing information on technological innovation, solving organizational problems and producing specific know-how. More than from technology, it is from these co-operative relationships that such systems of SMEs derive their flexibility in response to market changes and their capacity to innovate. Formal and informal processes, through articulated institutional settings, provide information and expertise, training, services and infrastructures. Informal reciprocity arrangements, which rely on trust and strong community ties, are as important as the more formalised co-operation between workers and entrepreneurs, achieved through negotiations with trade unions, employers’ associations and local governments.

Specific governance structures are at work in the Third Italy’s industrial districts. For these structures BAGNASCO and TRIGILIA (1985) coined the term “neolocalistic regulation”, i.e. “a particular division of labour between the market, the social structures and, increasingly, the
political structures, a division which allows a high degree of flexibility in the economy and rapid adjustments to market variations, but also a redistribution of social costs and real benefits from development within the local society”.

Economic sociologists and political scientists have devoted considerable attention to the formal and informal ways in which co-operation is achieved, to the formation and functioning of networks based on reciprocal trust and shared culture (BAGNASCO 1988, MUTTI 1998). Alongside market and organization, community is the complementary mode of coordination, which is activated in support of local development. Social structures, such as social networks, norms and cultural orientations and traditions, contribute to minimise opportunistic behaviours, to implement transactions that would otherwise be too risky, to lower transaction costs and to share “tacit knowledge”. They also form boundaries against the most negative effects of the market and, through the political system, they articulate the demand for regulative and redistributive policies.

The “vulgarization” of the ID model and its transformation into a normative paradigm.

The wide international popularity of the Industrial District model occurred in a time when small and medium firms (SMEs) were “rediscovered”. Eclipsed by the domination – both in the economy and in the literature – of large firms and generally considered an “interstitial” phenomenon (at worst on its way to extinction or at best as a temporary phase in the growth of the firm), SMEs were reappraised during the crisis of large Fordist firms\(^{12}\). Italian industrial districts, as well as other forms of SME clusters (e.g. Silicon Valley in the U.S.) captured the attention of economists and geographers – especially in radical and progressive circles – also at the international level. In some academic works they were even portrayed as prodromes of a

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\(^{12}\) It should be noted that already in the early 1970s the Italian Comunist Party and the Unions had started to investigate the phenomenon of SMEs, particularly in the context of the “productive decentralisation” process initiated by large firms after the “hot autumn” of 1969: in order to circumvent labor rigidities and shop-floor resistance in the large manufacturing plants of the North, large firms had begun to externalize phases of the production process to small and medium “satellite” firms (see PEGGIO 1974, GARAVINI 1974, TESINI et al 1974). But it is BAGNASCO, BECATTINI and BRUSCO, who first identify autonomous systems of SMEs, i.e. firms not significantly related to large subcontractors.

Together with the increase in popularity, however, the model was progressively “vulgarised”. The Italian Industrial District, as portrayed by BAGNASCO, BECATTINI, BRUSCO and a few others is a rather region-specific and historically determined phenomenon in which social, economic and institutional factors are strongly interdependent. This original evolutionary and institutional approach was progressively lost in the subsequent diffusion of the model as a “catch-all” category, encompassing all kind of SME clusters, often quite diverse in structure and relationships (see BRUSCO and PABA 1997 for a survey of Italian “Local Systems of SMEs”).

The stress was increasingly put on the economic aspects of the IDs’ success: competitiveness based on agglomeration economies, transaction economies, flexibility in factors management (i.e. labor), etc. It is thus hardly surprising that the model was increasingly promoted in conservative circles as well, where SMEs were presented as a healthy reaffirmation of competitive behavior and market mechanisms, in contrast with “big” government and “big” firms (“small is beautiful”).

Most importantly, in the course of the 1980s the ID was transformed from a descriptive model into a “normative” paradigm for policy. It was automatically associated with the concepts of “endogenous” and “local” development. In Italy, this shift in policy discourse appears particularly ambiguous, because both the left and the right heralded it. Among other things, this new policy discourse legitimized the termination of “national” regional policy for the depressed Mezzogiorno.
From ID to “Local Development”

In the early 1990s the Industrial District as a “local development” strategy began attracting attention from Italian politicians, the central government and the economic press. Interest in the ID developmental approach had in the meantime continued to spread at the international level (e.g. GOODMAN et al 1989, PYKE et al 1991, UNCTAD and DZ 1994).

Today, local development is a very popular approach. It has, indeed, become a true catchword. Its popularity has at least four sources. First, the local development model described by the ID scholars came at a time when the post-Keynesian regional development policies that had dominated the scene for 25 years (1950-1975) had entered a deep and irreversible crisis. Secondly, at that time the centrifugal forces of capitalism following the crisis of Fordism (decentralisation, de-localisation, vertical disintegration) joined with centripetal forces at work in some Italian regions (the “Third Italy”, or North-East-Centre), giving birth to peculiar development processes that were strongly territorially embedded, although not all of them of the ID type. Third, the local approach was strongly supported and legitimised by the European guidelines in the management of Structural Funds. Last but not least, a relevant role was played by the ideological ambiguity of the local development concept. This ambiguity has been amplified by the parallel diffusion, at the international level, of other new approaches that evoke similar development mechanisms: bottom-up development, grassroots development, endogenous development (often confused with endogenous growth). 14

Following the demise of the Christian Democratic party at the beginning of the 1990s, every subsequent Italian government has paid great attention to local development. Before the 1990s “local” development as such was not on the government agenda: some attention was given to

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13 Especially from the moderate left and some trade unions (BRUTTIE e RICOMERI, 1988).

14 Endogenous development theory refers to development factors that are endogenous to a territory (e.g. local entrepreneurs, tacit knowledge), while endogenous growth theory refers to formal economic models that generate growth endogenously (e.g. because of increasing returns), i.e. by variables that are endogenous to the model. In the endogenous growth theory territory does not play any role.
SMEs, but as single enterprises, not as territorial systems of small firms. Previously, policies had been designed for “regions” – like the Mezzogiorno – not for “local production systems”.

Already with the National Law N. 317 of 1991 (Measures for innovation and development of small firms), local development policy received some attention the government agenda. This is the first policy explicitly oriented to “local development” rather than industrial investment or regional development, because for the first time Industrial Districts — considered the archetype of local development — were officially recognized and considered eligible recipients for government support at the national level.

The following year, 1992, can be considered an epochal divide: the previous post-Keynesian approach to “regional development” was dismissed – with the termination of the special national development measures for the Mezzogiorno – and a new wave of local development policies and programs was progressively enacted. In the second half of 1990s, several important economic policy documents produced by the Italian government evidenced its “faith” in local development. In 1998, the Italian Minister of Labour, Bassolino, declared to the Parliament that in designing policies «we should not forget the strength and the centrality of territory, (...) catching-up with development should find in the territory its major force, considering that development comes from below and is based on the territory». Soon after that declaration, the Patto Sociale (Social Pact), a strategic agreement between central government, trade unions and entrepreneurs’ organisations about general principles of national economic policy, officially acknowledged the fundamental role of concertazione territoriale (local negotiations) in promoting development and new employment at the local level. Furthermore, the Patto Sociale identified the patti territoriali (Territorial Pacts) and contratti d’area (Area Contracts) as the foundation of such a local development strategy.

The political emphasis on local development policies stands out even more forcefully in another important document of national development planning: Cento idee per lo sviluppo (One hundred ideas for development), presented in the same year by the then Minister of the Treasury, Mr. CIAMPI. The document singled out five strategic axes for public investment: one of these axes was, indeed, the “development of local productive systems”. «Only by referring to the territory—wrote CIAMPI—is it possible to conceive a consistent planning design». 
As noted earlier, this national discourse on development found significant support and legitimation in the EU. LEADER initiatives and EU-supported Territorial Pacts can be mentioned as good examples, as well as a number of common slogans: local partnership, local actors participation, bottom-up approach, and so on.

Nonetheless, in Italy the implementation of local development policies suffers from a number of serious drawbacks that reveal the gap between the theory and practice of local development. This is where the ideological ambiguity mentioned earlier comes in. In fact, local development has at least two different versions. One version – based on the analysis of the ID model by BAGNASCO and the others – is socially and institutionally rooted in the interplay among local government, community and entrepreneurs. The other version – the one applied through local development policies – is a new way to implement a form of “social dumping”, through the introduction of so-called flexibility in the labour market and in regulations. According to the authoritative Bank of Italy, the few contratti d’area implemented in the Mezzogiorno allow a widespread use of “training labour contracts” and other flexible contractual forms, which legitimises a marked reduction of the cost of labour (Banca d’Italia, 1998a). Moreover, most contratti d’area, as well as patti territoriali, do not involve any credible and consistent vision of local development (Banca d’Italia, 1998b).

Concluding remarks
The contemporary Italian debate on TIMs appears somehow caught up in a paradox. On the one hand, this is the country where the ID model was born – both in reality and in terms of scientific elaboration – and where numerous IDs still prosper in Central and Northeastern regions, although many have evolved considerably, undergoing processes of hierarchization and internationalisation. On the other hand, it is also the country where the model has been most uncritically used to launch a discourse on “local development” policy, which in many instances overlooks the institutional and societal dimensions needed for success.

In particular, the “local development” discourse, merging with the recent process of Italian administrative decentralization, has been used to legitimise the overall cuts in Central government redistributive policies (especially policies in support of the Mezzogiorno), to
introduce greater regulative flexibility (especially in the labour market), and, more importantly in the case of the Mezzogiorno regions, to decentralize the management of a persisting underdevelopment crisis.

Local development models have been successful in regions and areas where local governance, civil society and entrepreneurship were strong and co-operative interaction could build on a tradition of collective action (it should not be overlooked that Tuscany and Emilia Romagna were traditionally left-wing regions, with strong civil mobilisation and good local governments; also worth remembering is that North Central regions and areas, even rural ones, were geographically close to the Italian and European nodes of capitalist accumulation). In the case of more peripheral regions, such as the Mezzogiorno, where such a tradition of local governance does not exist, trust among institutions, citizens and local entrepreneurship is weak, and the mechanisms of dependent integration in the national and European economic systems still strong, the strategy of local economic development may take a long time or even fail.

This is the main ambiguity hidden in the local development strategy as it is currently applied in Italy. In order to better assess the significance of TIMs in this country, further research would be needed on the following aspects:

• The evolution of the ID model in North-central Italy (in particular its hierarchization and transnationalisation).

• A more accurate review and taxonomy of existing SME clusters and their distinctive features.

• A greater focus on the “innovative” capacity (not only in terms of technology, but in terms of “social innovation”) of such local systems.

• An evaluation of the various local development initiatives launched in the Mezzogiorno in the context of the European Structural Funds (Patti territoriali, Contratti d’Area, Progetti Integrati Territoriali).
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3. AUSTRIA

by

Elisabeth Hammer, Andreas Novy and Vanessa Redak

Introduction

Chronologically speaking, the turn to a more local approach in regional science and politics in Austria can be found at approximately the same time as in other countries, namely in the late 1970s and early 1980s. At this time, also in Austria traditional regional development policies came to an end. These traditional policies stood mainly in a Keynesian tradition, enhanced by the social-democratic government of Chancellor Bruno KREISKY since the beginning of the 1970s. Regional policy in the KREISKY era had focused on encouraging large firms via investment incentives and the provision of infrastructure to set up subsidiaries in peripheral and rural areas. Regional development was basically viewed as an exogenously led development process, the relevant stimulus for economic take-off coming from external sources and being strongly guided by the national state. At the same time the social democratic government was keen to reduce regional disparities in living standards, thereby implementing welfare in these peripheral regions, a policy which had been rather neglected by the former conservative government.

In the late 1970s the crisis of social democracy and, more generally speaking, of the fordist regime of accumulation led also to the erosion of the above described regional development policies. It was not only from the SME sector and some academic circles that “strong voices rose to reassert the value of the local and regional development potential as an alternative to State-led regional economic policy” (cf. Part I). Within the crisis of the fordist model, in Austria voices for a different development were raised also by social groups who had been on the margin during fordism: the ecological, feminist, peace movements emerging in the late 1970s very often focused
more on local policies than on national ones. Citizen’s movements, urban action groups, small scale ecological experiments contributed to an upgrading of local level politics.

Within the social-democratic party some politicians and activists felt rather close to these new movements, trying to capture their spirits, attitudes and ideas in order to modernize and rejuvenate the party. Politicians interviewed for this paper included, for example, Alfred DALLINGER, minister for social affairs in the mid-1980s, and Egon MATZNER, coordinator of the party programme in 1978.

At the same time a number of academic evaluations of regional policies had appeared in several European countries (e.g. Germany, United Kingdom, France, Sweden, see STÖHR and TÖDTLING, 1978: 33), arguing that the model of exogenous regional policies and in particular the practice of supporting the location of subsidiaries in peripheral regions did not lead to sustainable economic development or to structural improvements in these regions15.

Beginning in the early 1980s, a group of scholars, reflecting on international and Austrian regional development experiences, started to propagate new approaches in regional science. From an international point of view, Walter STÖHR, professor at the Interdisciplinary Institute of Urban and Regional Studies (IIR) at the Vienna University of Economics and Business Administration, and Franz TÖDTLING, assistant professor at the same institute, were the most prominent scientists in developing regional development models which insisted on the importance of local and endogenous factors, thereby generating an Austrian strand of TIM. Other scholars that can be included in this approach are Hans GLATZ and Günter SCHEER (GLATZ and SCHEER, 1981).

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15 In his dissertation TÖDTLING observed a highly cyclical behavior of investments and employment: in times of economic growth, investment and employment did rise in peripheral regions, whereas in times of recession such regions were the first to experience economic downturns. Regional aid by itself was, therefore, not the relevant variable explaining the economic development of those areas.
TIM in Austria: Walter STÖHR and “endogenous regional development”

Departing from the insight that the “results of these (exogenous) policies on the whole have been poor, sometimes counterproductive” (STÖHR and TÖDTLING, 1978: 33) STÖHR began to develop a model of “endogenous regional development” (STÖHR 1981, 1983, 1984). STÖHR’s approach combined several elements of political developments of that time:

- The aspirations of local political movements, their protest against exogenous, large scale development projects and their struggle for a more self-determined development. These aspirations can be qualified in broader terms as the struggle for democracy, participation and empowerment.

- Coming along with the rising discomfort about the dominance of external influences was also the critique of development patterns at the international level, especially the so-called international division of labor and the activities of TNCs (MUEGGE and STÖHR 1987).

- The well-being of a population was no longer defined as only material, but also in terms of other more qualitative factors (nature, culture …). STÖHR thereby focussed upon the discussion of basic needs and on the diversity of social groups.

- The rise of an informal or third sector in Austria. Regional theory started to pay attention for the first time to the non-market based sector of an economy.

The approach of STÖHR (and TÖDTLING, see STÖHR and TÖDTLING, 1978) differs, thus, from the mainstream TIM paradigm, insofar as it was based on a political vision. The rather technocratic approach of several TIM, concentrating heavily on economic competitiveness, is clearly much narrower than the political, social and democratic concerns of STÖHR. STÖHR’s anti-economist attitude, clearly aimed against neoclassical theory, sometimes reminds us of a “romantic anti-capitalism”. The idealization of non-market activities and the ideological closeness to the “small is beautiful” discourse bears shades of an anti-capitalist critique. At the same time it is not free from conservative elements, as for example the emphasis on small scale
and informal activities, including family and neighborhood relations, which are often far from progressive.

**Regional policies during the 1980s: putting endogenous development theory into practice**

Politicians with rising interest and consent met these first theoretical considerations of STÖHR, TÖDTLING and others. Endogenous development strategies found political support especially in the person of Alfred KOHLBACHER at the Federal Chancellery of Austria (*Bundeskanzleramt*). In 1979 research on the agricultural structure in Austria (KRAMMER and SCHEER, 1978) provoked a first attempt to put the theoretical approaches of endogenous and self-sustained regional development into practice, via a policy to strengthen underdeveloped rural areas. A group of academics around the *Institut für Höhere Studien* (Institute for Advanced Studies, IHS) developed together with the Chancellery a policy called *Sonderaktion zur Stärkung entwicklungsschwacher Räume in Berggebieten*, which institutionalized a self-centered, endogenous regional development policy (GLATZ and SCHEER, 1981). Alongside with straight economic aims to secure employment in rural areas, this programme intended to stimulate self-help and self-management among broad parts of the population. These attempts of implementing endogenous development were enriched by approaches of community work which had gained ground in the course of the 1968 movement (GERHARTER, 2000). Thus aspects like participation, empowerment and an innovative project culture, also emphasized in the theoretical work of STÖHR and TÖDTLING, played an important role in these policies. Apart from aiming at improving the local environment, community work focused on innovation in social relations and paralleled the aims of endogenous development especially with a view to participative goals (NOVY, 1991).

In 1983, a number of scholars engaged in the above theoretical discussion founded the Austrian Working Group on Regional Development (*Österreichische Arbeitsgemeinschaft für eigenständige Regionalentwicklung, ÖAR*). They started to employ activists and consultants in the field of endogenous development with the aim of putting into action a wide variety of

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*16 See also the critique on the Third Italy in terms of child labor, informal precarious work conditions, and so on in: MORONI, 1994, REDAK, 2000.*
projects, mostly in rural areas, with maximum participation of the population (DEISSENBERGER, 1988). Also in 1983, the grassroots movement called Österreichische Studien und Beratungsgesellschaft (ÖSB) was nominated by the minister of social affairs, Alfred DALLINGER, as the prime instrument to support local employment initiatives in the third sector, aiming at the formation of self-managed firms (NAGEL and ZEHETNER, 1984). Thus, both associations integrated economic, political and social goals, putting forward ideas of industrial democratisation, self-management and community work.

The relations between research and politics were thus very close at that time:

“regional development practice challenged the formulation of theories of regional growth which confirmed its initial policy approaches; on the other hand the body of theory emerging in this process reassured regional development practice of the correctness of their initial steps. In this way they reinforced each other by circular causation” (STÖHR and TÖDTLING, 1978: 38).

Policies of endogenous regional development had substantial success in some regions. But they also evoked distrust, especially in regions where the social democratic strategies of the red chancellery were opposed by conservative regional governments. Social democracy itself used these strategies as one of its diverse efforts to incorporate protest movements, owing to the fact that the 1968 movement in Austria was rather lukewarm compared to other countries.

After the enlargement of the programme in 1986 (Förderungsaktion eigenständiger Regionalentwicklung) and the entrance of the conservative party in a coalition with social democracy at the federal level, the ÖAR’s as well as the ÖSB’s ideological base changed from social democracy to social liberalism. As a result social goals (and thus community work) were increasingly justified in economic terms. The market – and no longer participative democracy – was seen as the main tool for implementing innovative processes at the local and regional level.
The 1990s: innovation, networks and clusters

Endogenous development policies, although successful in peripheral rural areas, had problems in old industrial areas. In these regions, with sometimes huge industrial plants lying idle and enormous economic problems like widespread unemployment, the endogenous approach reached a limit. Bringing new impetus to these economically downgraded areas could not simply be done by reverting to local factors, but implied in the eyes of politicians and scholars the need for greater knowledge about industrial reconversion, industrial innovation, and so on.

At the end of the 1980s the notion of ‘innovation’ made its entrance in the political and academic discourse on regional development in Austria as well. Questions such as “How to foster innovation in firms? How to encourage new technologies?” became central for the debate, not only in Austria, but also in Germany and Switzerland. Joining the discussion in these neighboring countries, GLATZ and TÖDTLING published a study in 1988 on innovation-oriented regional policy for the Federal Chancellery of Austria. The Austrian Institute for Economic Research (WIFO), a research institute engaged heavily in policy consulting, worked out two innovation policy programmes which were then implemented by the government: the so-called Top-Aktion and the Regionale Innovationsprämie (regional innovation premium), both rewarding companies for innovating (AIGINGER, 1989, HUTSCHENREITER, 1993).

In the late 1990s the academic debate on innovation was enriched by the notions of innovative milieus, networks, systemic innovation, clusters, and theories like evolutionary economics, institutional economics, and so on. The theoretical developments in Austria followed the international paths as described in Part I of this report. Austrian researchers STÖHR and TÖDTLING did work together with the GREMI group around Philippe AYDALOT and the notion of milieu innovateur (AYDALOT 1986) and later with Roberto CAMAGNI of the same group (TÖDTLING and KAUFMANN, 1999). Endogenous growth theory in the sense of BARRO and SALA-I-MARTIN (1992) is not widespread in Austria, although some researchers do refer to this model (e.g. MAIER, 2001).
**From empathy to technocracy**

All these theories and concepts of regional development depart from neoclassical economics, being rather part of heterodox economic thinking. This is not surprising, as in neoclassical theory itself space is absent. During the last decade, however, anti-mainstream regional development theories seem to have lost a lot of their critical and progressive, sometimes even anti-capitalist, impetus openly displayed in the 1970s and early 1980s. Regional theories and policies have become more pragmatic and technocratic. The original “societal approach”, as Franz Tödtling termed it in our interview, transformed into a “business oriented model”.

This change does reflect the general political turn from a social democratic model of development to the neoconservative and neo-liberal politics beginning with THATCHER and REAGAN in the 1980s. But liberal ideas regained momentum not only at the higher levels of politics and the academy. Local initiatives themselves helped to make liberal ideas hegemonic by emphasizing the role of private ventures and by criticizing the state.

In the end the relationship between academy and politics has changed profoundly: in the 1970s many researchers had very close relations with social movements, engaging in a process of mutual recognition. Later, when regional science was no longer a theory organically linked to a social and political movement, it became part of the elitist discursive and organisational field of *governance* and *public-private partnerships*. TIM in the 1990s turned, in Austria as well as in other European countries, into pragmatic economic consultancy for regional competitiveness.

From a theoretical and political point of view a lesson which can be drawn from this evolution would stress the need for a new *rapprochement* between critical and empirical researchers, on the one hand, and social movements, on the other.
References:


**Interviews and discussion partners:**


Anton ROHRMOSER, political scientist, December 18th, 2001.


4. GERMANY

by Hartmut Haussermann and Julia Gerometta

Introduction: the compartmentalization of spatial research in Germany

In Germany the spatial dimension of social and economic development is the subject of two relatively close disciplines: urban and regional sciences. These disciplines not only have two different loci (the city and the region), but also different foci: urban studies, above all, focus their research on the importance of urban civil society, on problems of social exclusion and segregation, and on the structures of social reproduction; in contrast, regional studies concentrate on the reasons and conditions of successful economic development in the wider context of regions, nations, and the global economy. Both research traditions converge in their main goals: to ensure an equal and just development of labour as a precondition of a balanced spatial development. However, regional studies focus on the demand side of labour, whereas urban studies emphasise the supply side. In addition, regional studies point out structures and processes inside the working society (Erwerbsgesellschaft), whereas urban studies concentrate on the consequences of the exclusion from this working society.

These different perspectives on spatial development imply two different conceptualisations of space in general, which are typical of each research tradition. Regional research considers regional structures as active and activating – but also as binding – dimensions of development, whereas the urban research tradition considers the city as a space “under influence”: whether new technologies, lifestyles, or the consequences of globalization are discussed, the city is usually considered as a passive context, which loses its integrative force under the influence of various external processes.

These striking differences in the understanding of the structure and processes of spatial development are rarely discussed. Both research traditions are too much concentrated on their
specific scientific horizon. Urban studies are dominated by political and social sciences and regional or urban planning studies; regional research is dominated by economists and geographers. Such a compartmentalised reading of the city and the region also reveals the shortcomings of both research traditions: the economists’ and geographers’ view of spatial development neglects the fact that economic development does not automatically stimulate adequate social development, whereas the sociological focus on the poor and excluded is not sensitive enough to market related self-organising and self-sustaining structures. Consequently there is a strong need to look simultaneously at both sides of economic and social development, in dynamic and successful spaces as well as in fragmented spaces characterized by exclusion mechanisms.

Regional sciences in Germany

Regional sciences in Germany

Until the late 1970s German regional policies, as elsewhere in the Western world, belonged mainly to the Keynesian tradition, trying to encourage enterprises to invest in peripheral regions by investment incentives and support of infrastructure (BIEHL 1975). During the 1960s and early 1970s, at the climax of economic growth, these policies could indeed stimulate investments in peripheral regions. But from the mid 1970s onwards, economic decline and the erosion of former leading sectors and branches made the success of those regional development policies come to an end.

The changing economic structure also forced regional scientists to reconsider the role of cities, beyond the self-sustaining growth machines of post war industrialism. Traditional prospering industrial centres like the “Ruhrgebiet” or Northern port sites like Hamburg and Bremen were facing huge decreases in employment – and thus a decline of their regions in general. In contrast Southern regions and cities like Baden-Württemberg or Munich in Bavaria appeared more successful in compensating employment losses by developing new technologies and new growth branches and sectors. The German 'South-North divide' began to show a new pattern of spatial development: cities did no longer work as centres and engines of economic growth (HÄUSSERMANN and SIEBEL 1986, LÄPPLE 1986, BADE 1987).
Inspired by PIORE and SABEL work on the ‘second industrial divide’ (1984) and a wealth of case studies in other countries that shifted the focus of scholars to the regional and local, also the German debate has experienced a change as regards the meaning of “region”. Regions are no longer considered as indifferent and passive grounds for economic development, but as active and activating structures and social and economic constellations that by themselves enhance or hinder regional development. Whether or not globalisation processes strengthen new forms of regional agglomeration becomes an important issue. KRÄTKE (1995), for example, states that the “geography of deindustrialisation has been replaced by a geography of re-agglomeration”. Stimulated by the works of PORTER (1991) about industrial clusters, also in Germany a branch of research has begun to work on the conditions, the functioning, and the success of regional cooperation networks.

Networks, clusters and regional development initiatives

Since the diversity of regional decline and success stories is great, any detailed classification of case studies is bound to fail. It makes more sense to limit the discussion to some of the broad categories of regional network research examined in the literature, as well as the criticisms they provoked. Four main strands of research can be identified:

First, there are the approaches that examine regional networks as a consequence of the reorganisation of industrial structures (e.g. SYDOW 1995, BATHELT 1992). They put the emphasis on the transaction cost minimizing effect of networks, stressing the firms' abilities to organize their networks according to the needs and conditions of global players. Yet, they pay little or no attention to the question of the regional embeddedness of inter-firm networks.

A second strand of research focuses on territorial networks as a means for facilitating information exchange, for developing firm contacts, and for increasing factor mobility, within the boundaries of a local area. These approaches stress the role of agglomeration economies – in their most economic dimension – and they end up discussing the importance of regional clustering for successful economic development (KILPER and REHFELD 1992, REHFELD 1999). In some cases, they also tackle the question of how innovation can occur in non-innovative regional milieus (HÄUSSERMANN and SIEBEL 1994). Other studies, in contrast, stress the
ambivalences of clusters and cluster policies, for example dismantling the "myth" of the Baden Württemberg’s “industrial district” (especially BRACZYK 1997). GRABHER (1990), in particular, illustrates the ambivalent role of inter-firm relations in the decline and reorganization of the Ruhr. He argues that a rigid streamlining of intra-regional relationships and the consequent strategies for minimising transaction costs according to a narrow economist logic may undermine a region’s adaptability to the broader economic development trends. Regions, in fact, may get stuck in a “rigid specialisation trap” if they fail to promote their adaptability to different development paths (GRABHER 1993).

In a critical attitude against clusters and the enthusiasm about cluster policies are studies related to the concept of the ‘normal region’ (Normalregion). This approach tries to find a balance between the shortcomings of regional success stories, on the one hand, and stories of regional decline and erosion, on the other (KRUMBEIN 1999). Other approaches, that mainly stand in the tradition of analyzing and promoting “endogenous” potentials, try to come to an understanding about the specific problems and challenges of regions with a heterogeneous economic structure or without mentionable potentials to create complex industrial clusters. In the 1990s the most prominent example of a comprehensive approach to revitalize a devastated industrial area was the “Internationale Bauaustellung Emscher Park” (IBA Emscher Park) in the Ruhr-Region. This approach combined grassroots activities as well as political programmes and investment strategies of regional enterprises and it impressively showed the importance of the “re-territorialization” of economic and social activities in order to carry out regional development strategies (FÜRST and KILPER 1993).

Finally, a fourth strand of research deals with the problem of East German regions. Besides the Ruhr-Region, in fact, also the recently integrated Eastern regions of Germany were plagued with economic decline and high unemployment rates. But, whereas development studies and policies usually dealt with the problem of how weak regional economies could become internationally competitive by strengthening their intraregional connectivity, the research concerning Eastern German regions stressed the fact that international competitiveness is not necessarily associated with employment growth and a general upgrading of the region (e.g. ZIEGLER and HOFFMANN 1995). Also in contrast with the dominant examples of cluster studies, these studies try to integrate the unions’ points of view into regional development strategies and the whole
variety of civil society's potentials (e.g. IWER and REHBERG 1995, KREIBICH 1995). Especially profiled in analysing, conceptualizing and monitoring regional development initiatives is, for example, the IMU-Institute in Munich. By mandate of the government of some Bundesländer like Baden Württemberg, Bayern or Thüringen, this institution tries to improve the conditions for various actors – firms, unions, the administration, the scientific community – to join “regional dialogues” and carry out regional cooperation initiatives. Several experiences endorse the importance of such a type of initiative (see also DÖRRE 1999), showing that every region has its own specific problems and problem solving resources, and that it is almost impossible to transfer successful models as “best practices” to other regions.

Urban studies, local development and endogenous potentials in Germany

In contrast with regional studies, which focus on interregional polarisation processes (e.g. KRÄTKE et al. 1997) and/or intraregional networking as a feature of successful development, urban studies in Germany concentrate on the inner-urban processes of unemployment, exclusion and pauperisation. During the 1980s they contributed significantly to the dismantling of the unquestioned connection between economic and employment growth. Urban studies opened people's (and researchers') eyes to the dark side of economic modernization. Through the comparative studies of different German cities it became obvious that there is “poverty within wealth“ and that this phenomenon does not only concern “old industrial” regions, but also prospering cities like Munich, Stuttgart or Frankfurt (BLANKE, EVERS and WOLLMANN 1986, HÄUSSEMANN and SIEBEL 1987, BRECKNER, KRUMMACHER et al. 1989).

German research on local politics focuses, therefore, on the question of which options remain to the “local state” to combat unemployment and poverty. In the face of limited public budgets, both research and local politics have concentrated on “endogenous” potentials and the chances for local self-aid and self-organization. In this respect, one of the most profiled research schools puts the emphasis on the analysis and promotion of “local economies” and on a community-based social-oriented development (ILS 1996). Meanwhile, this approach has evolved from its grassroots origins and has become a Federal-Länder-Programme: “The Socially Integrative City”, launched in 1999 by the Federal Government and the Länder. The new project includes various
experiences of Länder and cities in urban renewal programmes and local development strategies and provides a comprehensive approach to urban renewal policy. It is designed to pool resources (policies in the fields of employment, economy, ecology, social affairs, youth, culture, education and urban development) and to counteract the growing socio-spatial disintegration in German cities. It is based on model conceptions of urban "social integration" and of a new "civil society" (WWW.SOZIALESTADT.DE/).

Although the programme aims at integrating the promotion of local urban economies in a comprehensive approach to local development, reality shows little success up to now. Market-related economic activities mainly stay outside of projects and initiatives. It seems as if local urban development remains a matter of the state and the civil society. Apart from a few exceptions, the impression dominates that urban studies and local urban development initiatives take the responsibility for the reproduction of human life, whereas regional studies and even regional policies are concerned with the problems of production.

**From the economy in the city to the economy of the city**

Neither the economists’ and geographers’ view of the city nor the sociologists’ analysis consider the interdependencies between the economic and the social, not to mention the spatial dimensions of development. The starting point for LÄPPE’s approach to the urban economy deals, therefore, with the “economy of the city, not in the city” (LÄPPE 1998). LÄPPE lays the emphasis on the “embeddedness” of economic action in the social, cultural, and specific spatial context of a city and its historical development. Three central features play an important role in his understanding of the city: “productivity”, “reflexivity” and “contingency”. “Productivity” is more or less derived from urbanisation economies, whereas “reflexivity” means the embeddedness of the urban economy in a “specific institutional and cultural context”: the milieu. Because the milieu generates both catalytic effects and lock-in-effects, an “antitoxin” is necessary, i.e. “contingency”, which provides the city with a:

“specific openness to future development, which, so to speak, combines the ‘not-necessary’ with the ‘not-impossible’. Big cities can therefore be considered as
manifestations of a plurality of development options and, thereby, a contingent openness to the future(s)” (LÄPPLE 1998: 204).

This understanding of the city entails a specific empirical approach, i.e. the need to integrate different economic realms within the urban context, as well as different economic activities, away from a conception of the city as merely a site of exchangeable, quasi neutral locations (ibid.: 205). The rich empirical work that follows LÄPPLE’s theoretical conceptualisation allows for a differentiated view on the various realms of economic activity and their interdependent connection to the city. Some of these analyses were integrated in the formulation of Hamburg master plans for the development of the city.

Conclusions
On the one hand, the social integration of excluded groups, the revitalization of urban space and politics, and the conciliation of economic and social priorities are increasingly found to be in tune with integrated local and regional development strategies. On the other hand, however, in Germany these strategies are still characterized by a dichotomy – in disciplinary focus, if not in terms of geography – between the production and the reproduction sides of the local society.

German regional studies mainly concentrate on the conditions of success and economic competitiveness of localities, while neglecting the social conditions and the consequences of economic actions for the local society. German urban studies, in contrast, are mainly interested in the social consequences of current economic processes, such as globalisation, deindustrialisation etc. The local development strategies, which stem from the latter view of the city, address the state and the civil society as the main engines for social integration and revitalisation. The few exceptions that try to promote local urban economies together with social integration have limited access to market-related economic activities, because they are normatively oriented to the values of a community-based development.

In conclusion, there is a strong need to look simultaneously at the economic and the social dimensions of local development, both from a scientific and from a policy perspective. Furthermore, such a merging of analytical and political approaches should involve both dynamic successful spaces and the fragmented spaces subject to exclusion mechanisms.
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5. BELGIUM

by

Etienne Christiaens and Johan Moyersoen

Introduction

What are the peculiarities and novelties of Territorial Innovation Models (TIMs) in the Belgian literature? Regional development in Belgium is influenced by the institutional context wherein such models emerge. Development strategies in Belgium are, in fact, highly fragmented, due to the federalization of the country. The latter process created different institutions in the three regions, each responsible for regional development. This regional “separation of duties” is poignantly illustrated by the design of the Belgian Pavilion during the World expo in Sevilla. The pavilion staged three stands to promote Belgian economic products: a Flemish, a French and a Brussels one. Moreover, the competition between the regions stimulated the different governments to seek collaboration for regional development with neighboring countries – for example with France in the region including Kortrijk, Doornik and Lille – rather than collaboration between the different Belgian regions.

Paralleling this trend, the academic literature on Territorial Innovation Models has evolved from a “national” rhetoric to three “regional” discourses. The federalization induced academia to build up separate `new` regional development analyses. The result is a wide variety of case studies in the diverse disciplines of the national and international literature.

At the same time the federalization made the government, through the greater proximity of decentralized governance, more efficacious in dealing with confined areas. This is witnessed by the ongoing, fascinating, academic discussion on territorial innovation policies that are implemented in targeted and confined Belgian areas. Due to this micro-focus there is a particular interest in Belgium over the issue of diversity and intermingling of functions within the region,
the location of TIM development projects, and the required scale to reach optimal results in terms of regional development.

The Belgian literature survey that follows has three parts. The first part briefly reviews the traditions and families of Territorial Innovation Models in the Belgian literature. The second part briefly describes the concepts and policies of TIMs as applied in the Belgian urban (versus regional) planning traditions. The third part digs into three key questions that have provoked animated discussions within academia and added further issues to the Belgian TIMs literature. Different Belgian case studies enrich both parts and highlight the importance of empirical analysis in Belgium.

**The main families of TIM applied in Belgium**

As already mentioned, the Belgian literature contributes significantly to the debate on Territorial Innovation Models. However, the Belgian literature does not stem from an original tradition of TIM analysis, but has rather further developed existing lines of thought in the international literature.

**a) The Innovative Milieu model**

According to Claire NAUWELAERS (NAUWELAERS, 1995), the resources of a firm’s environment take a particular importance in the structuring of an interactive system. In the "Innovative Milieu" the set of structured relations between the components of the environment becomes pivotal for the global performance of the territory that hosts the milieu. In fact, the innovative capacity of an area is seen as essentially dependent on the capacity of its actors to constitute networks that develop processes of learning among them and with the exterior. Claire NAUWELAERS argues that those network processes are more important than the endowments in infrastructure or in R&D. Michel QUEVIT (QUEVIT 1992, 2000), on his part, stresses the paradox of the “rupture/filiation” which is typical of the milieux innovateurs portrayed by AYDALOT (1986). This issue is particularly felt by the government of a region of old industrial tradition, such as the Walloon region. Here, there is a need to conjugate the filiation to his values of social progress and democracy and the necessary rupture with the obsolete industrial
paradigm, in order to reconstruct the knowhow accumulated during more than one century of economic progress on the foundations of a new culture of creativity and innovation.

b) The Industrial District model

Belgian interest in clusters of small and medium enterprises has been especially prompted by the economic success of the Kortrijk and Ypres areas in West-Flanders, which are generally considered Industrial Districts.

SCHMITZ and MUSYCK (SCHMITZ and MUSYCK, 1993, 1994) identify several factors that engendered the success of the economic development of Kortrijk and are typical of an Industrial District. They include geographical proximity of firms, sectoral specialization, predominance of small and medium firms, close inter-firm collaboration, inter-firm competition based on innovation rather than low wages, a socio-cultural identity which facilitates trust relations between firms and between employers and skilled workers, active self-help organizations, and active regional and municipal governments, which strengthens the innovative capacity of local industry.

In their description of the metamorphoses of the Yperian area, through the so called Flanders Language Valley initiative17, WINTJES and COBBENHAGEN (1999) emphasize the importance of “regional identity”, using Krugmans’ concept of a region’s “first nature” (KRUGMAN, 1993). The entrepreneurial spirit, the availability of venture capital in the area, and

17 This campus of 25 hectares near the city of Ypres, shaped as an ear, is conceived as an incubation-centre giving business-support and services to several firms related to operations of Lernhout and Hauspie Speech Product (LHSP), an enterprise of speech, artificial intelligence and language technology. The objectives of the development of this incubator are formulated by the founder, Jo Lernhout, referring to the metaphor of a pond:
“You need a great deal of oxygen (i.e. capital) and a great deal of light (skilled personnel). Of course, you also need some fish in the pond (new start-up companies) and you must make sure that they are able to multiply. What this really means is that you must provide an infrastructure where people can meet, exchange ideas and get some cross-fertilisation. All this we have now achieved in the Valleye in Ypres” (SAIL Magazine, November 1999). Four success-factors are mentioned: a) the collaboration between different enterprises towards a collective aim; b) the presence of highly-skilled labor force; c) the importance of venture capital support not only in terms of financial assistance but also for advice and follow-up; d) a strong education system and the support of public authorities.
the multi-lingual aspect can be regarded as the “first nature”, key to the success of the Flanders Language Valley. Building on the “first nature” advantages, the Flanders Language Valley initiative created “second nature” advantages by establishing a broad set of instruments geared to increase “receptivity” and “connectivity” and to root the internal and external codification processes into the region. The exchange of codified knowledge in the form of licence agreements contributed to create a highly localised learning process. The need for face-to-face contacts in order to better interact and exchange both tacit knowledge and codified knowledge contributed to attract in the area other firms with similar and complementary technologies. These firms are transforming the region by creating a localized innovation system that sets in motion the cumulative causation process of increasing returns. The argument stressing the richness of local cultures for regional development is especially important in the discussion about how far an endogenous strategy should go (see the international literature survey in Part I of this report, chapter 3.2.).

On the Walloon part of Belgium, Bernard SURLEMON (SURLEMON B., 2000) did a similar but broader research on ‘identity’. THYSSE (1996) and NICOLINI (2000) attempted to introduce an econometric approach to the Industrial District debate. Rosella NICOLINI, in particular, draws attention onto the role of local industrial networks in a regional development process. She constructs a one-region model for investigating the conditions under which local networks arise, distinguishing between spontaneous and sustained networks. Sustained networks are associations of firms which are created and supported by local authorities, while spontaneous ones are free forms of agreement among firms. Sustained networks are established where market conditions do not allow for the rise of spontaneous ones. Their start-up relies on the choices of a social planner who takes his/her decisions evaluating regional welfare. Accounting for the difference between incomplete and full coordinated agreements among firms, she identifies the premises that condition the rise of each type of network. Finally, she argues on the positive effects that the rise of local networks yields to the regional internal product, as a reliable support for the regional economic take-off. Both types of networks, in fact, account for positive variations of regional internal product. From this point of view, thus, all policies that support these organizations with the purpose to foster local development seem to be successful. Nevertheless, local authorities must pay attention to the way in which these forms of activities are coordinated (or organized) according to their final purpose. Sustained networks, in fact, succeed in helping the local
development (measured in terms of an increase in the internal product) under conditions that are often unacceptable to market agents. In any event, the benefits carried out by spontaneous networks are higher than those of sustained ones.

c) The Learning Region model

A comparative research involving 40 innovation policy instruments in 11 European regions, described by NAUWELAERS and WINTJENS (1999) claims the importance of the regional dimension of innovation. The authors develop the thesis that proximity linkages can be instrumental in developing not only “learning firms” but “learning regions”. Broadening and extending the concept of “clusters” towards the one of “development coalition” leads to a broader scope for innovation policy as well, i.e. that of supporting the social and cultural aspects of innovation, thus enhancing “social capital” as a key element of well-functioning regional innovation systems. Developing collective capacities and network practices at the local level logically follows as a policy aim. But the latter should also be complemented with support to the development of linkages at national and international levels – i.e. at higher political scale levels – in order to avoid being trapped into too strong local ties, possibly leading to lock-in situations. Therefore, NAUWELAERS and WINTJENS introduce the importance of governance in the Belgian debate and stress the importance of integrating different scales in the development coalition.

The main TIM concepts and policies as applied in Belgian urban (versus regional) planning

In the sphere of urban planning, some innovative concepts and policies are applied with different accents according to the different Belgian regions, such as the mixity of urban activities, the “A-B-C” location policy and the corridor concept.

The mixity of urban activities

Especially in the Brussels Region (since the approval of the first Regional landuse plan in 1979 – Plan de secteur de l’agglomération bruxelloise), a major tendency has emerged, in opposition to the “zoning” approach leading to monofunctionality and to the consequent fragmentation of the city, advocating the “functional mixity” (or integration) of urban activities, at the level of the
building block, as well as that of the neighbourhood. This policy of proximity aims at a rational use of the spatial, economic, social and environmental resources of the city (CHRISTIAENS, 1996). The principle is to mix as much as possible what can be mixed and to separate only those activities that are not compatible with the housing or residential qualities of an area, for environmental reasons (i.e. noise, pollution, danger, etc.).

A great gamut of regulation tools can be used to induce mixity, such as land control for specific mixed projects, urban charges or compensations (for office buildings), limitation of some activities in landuse plans, monitoring of the functions, fiscal and financial incentives for more fragile functions, dynamic and transparent concertation between actors, co-ordination between the different policies (territorial, economic, environmental, mobility, cultural, social, etc.).

The market-mechanisms are considered a major constraint to mixity. In particular, they do not take into account the social and environmental costs of the generated movements and they overlook some of the advantages due to a concentration of economic activities (economies of agglomeration), the important differences in land value between the residential and the non-residential sector, the proper needs of each sector in the market in terms of size, image, location, accessibility.

Although one of the indisputable advantages of functional mixity are the social animation, the social control, and the feeling of security induced by a multifunctional use, in space and in time, of the neighborhood and its facilities (public places and infrastructure), some authors (VANDERMOTTEN, 1994) argue that the theory in support of the proximity of housing, workplace, shopping and leisure is a nostalgic concept of the “village around the church” in a period where everybody is “zapping” in the cities according to his/her preferences and uses.

Some authors such as REMY (1966) have established the link between functional and social mixity by analysing the problem of the “ghetto” or “founding neighbourhood”. It concerns especially the freedom to choose one’s residential environment or the condition of being prisoner of one’s own neighbourhood.
The A-B-C location policy

Especially in the Flemish region (by combining the spatial and the mobility plans on each decision level: region, province or municipality), the Dutch theory of “the right enterprise on the right place” (A-B-C location policy) is applied in different planning instruments. This theory aims at an articulation of the accessibility profile of an enterprise (the mobility supply) with his mobility profile (the mobility demand). An A-location is a location with a high level of supply of public transport facilities (i.e. railway-stations, metro, etc.) and a low level of supply for car-facilities (less parking facilities) and must host economic activities with A-mobility demand, i.e. a firm characterised by a high concentration of commuter employment and/or of visitors (i.e. public administrations). On the other extreme a C-location is badly accessible by public transportation and near a highway node, and is preferable for activities where the use of private cars is a necessity (i.e. a shop for furnitures).

This approach tries to conciliate the economic exigencies with the environmental imperatives of a sustainable mobility.

The corridor policy

Especially in the Walloon region, the SDER (Schéma de Développement de l’Espace Régional Wallon) stresses the “corridor” concept, which is also applied in the SDEC (“Schéma de Développement de l’Espace Communautaire”) or the BENELUX structure scheme. This concept on a more macro-regional level, underlines the new time-distance geography established by the highways system and the high speed train between the big European capitals, generating huge flow of products, information and persons, and highlights the concept of “deconcentrated junction” of activities.
Three key questions in the Belgian debate about TIM

Throughout the fragmentation of policies and the focus on micro-regions, an underlying discussion on regional development features can be appraised in the Belgian literature. We will point in this essay to three key elements of this debate.

i) Is endogenous growth possible?

WINTJENS and COBBENHAGEN (1999) identify several Belgian authors (MUSYCK, 1993; VANHAVERBEKE, 1998) who characterize the economic development in the southern part of West-Flanders as “endogenous growth” or “autonomous industrialization”, since it originates from new start-ups and growth of indigenous single plant firms. Accumulated family capital and strong entrepreneurial spirit are the critical factors behind the success of this part of West Flanders. MUSYCK (1993) identifies the regional specificity and embeddedness of capital and labor as contributing factors. Small and medium sized enterprises dominate the economy, while the main expansion strategy of firms is autonomous growth, keeping ownership and control in the same local hands. Like the Marshallian districts type of regime described in the international literature, these SMEs are export-oriented, but compete locally. The most competitive “clusters” can be classified as traditional or skill-intensive industries like construction, textile, wood and metal-working industries. Industry- and firm-specific skills are said to be based on experience and learning by doing. Thus tacit knowledge and skills are embodied in “pools” of labor that make relocation difficult.

Besides the above advantages, however, VANHAVERBEKE (1998) also mentions some disadvantages and limits of such an endogenous growth pattern. First of all, because of the family capital structure and autonomous growth strategies, the size of firms remains limited. More importantly, the mentality to solve technological problems internally, “to keep it in the family” so to speak, hampers the use of external sources of innovation and makes it more difficult to transform the area into a system of “networking” firms within a the broader knowledge economy (see section 3.4 of Part 1).
In addition to this inherited local business culture, there is a relatively poor knowledge base in the region, due in part to its peripheral location – there is only a medium sized university in Kortrijk, mostly for undergraduate studies. After graduate education gained elsewhere, young people may want to go back to their home-region, but there are not many jobs that require an academic degree. As a consequence, there is a “brain-drain” from West-Flanders towards the economic and scientific core of Flanders: the “Flemish Diamond” (or *Vlaamse Ruiť*, a losangle constituted by the cities of Gent, Antwerpen, Brussel, Leuven). Thus, by focusing on the region itself, the endogenous growth model does not take in account the competition between different regions and the limits to endogenous innovative capacity.

**ii) How should the different scale levels be integrated in a territorial innovation process?**

In between the globalization of the economy, on the one hand, and the fragmentation of government institutions entitled to sustain territorial development, on the other, the politics of scale is a rather important issue in the Belgian discourse. The slowly hollowing-out of the nation state due to the federalization and the unification of Europe has transformed Belgium, and especially Brussels, into a multi-scaled place (BAETEN, 2001). The Brussels region is at the same time the capital city of Europe, of Belgium and of Flanders, and is split up in nineteen powerful municipalities. This fragmentation of governance emphasizes the need for collective action for territorial development between the different levels of governance.

However, we can see a discrepancy in views about how initiators of territorial development should optimally address the different scale levels in their policy. Some authors advocate an inclusive approach where the negotiation process for development simultaneously operates at all the different scale levels. Others prefer a process, which starts first at the local level and subsequently, after agreement is reached, involves the higher levels.

The importance to think simultaneously at the local and at the global level is considered as one of the key factors for a viable development strategy (VAN LOOY B, DE BACKERE and ANDRIES, 2001). According to VAN LOOY, a strategy for regional innovation can only work if a critical mass of experience and knowledge is present at the local level and this expertise is competitive on the international market. SWYNGEDOUW develops the idea of ‘glocalization’ to emphasize precisely the importance for a development coalition to be able to interact
simultaneously at the global and at the local scale, so as to engender true change (SWYNGEDOUW, 1997).

Many scholars, in contrast with the simultaneous approach, advocate a community based approach where the innovation program should first be negotiated with local scale, and then involve other parties at other scale levels (HAUTEKEUR, 1997). Whereas the development strategy is constrained to the particular territoriality under scrutiny, the outside actors involved in the development coalition have perspectives that do not always limit themselves to that particular territoriality. For example, a neighbourhood group might base its decisions on the neighbourhood problems, but the government is more likely to take a broader perspective based on a larger scale. As a result, actors at a larger scale could be biased and opt for a policy that harms the locality in favor of another place. To empower the local scale against the larger ones, it is crucial that local actors are the first to engage in the negotiation process. Moreover, the actors at the local levels are the best initiators because they know the areas’ issues best.

A bottom-to-up approach is, thus, probably most effective in terms of fully involving the local levels in the negotiation process. On the other hand, such an approach provides no guarantee that the process will end up with the most efficient result. In fact, building up from bottom to top determines a path dependency in the negotiation process, by which the negotiation space in each step becomes tighter, due to the previously made compromises. When the negotiation process comes to the higher scale levels the negotiation space may be so tight that creative and innovative solutions are inconsistent with the earlier agreements and therefore impossible.

**iii) Which institution should be the pivot for regional development?**

In the literature there is a lack of clarity on what should be the appropriate unit of observation – hence, the appropriate focus of policy – for assessing regional development. Especially in the network literature we can identify several views. Some scholars argue that regional development should be assessed at the firm level; another group takes the well being of the individual as the most appropriate indicator. Both groups regard territorial innovation from a systemic approach.

For Wim MEEUSEN (CAPRON and MEEUSEN, 2000), the appropriate unit to measure territorial innovation is unambiguously the firm. The firm holds a central position in the systemic approach. Building an innovative culture, on the other hand, is not only a task for the private
sector of the economy, but also for all other components of the system. Hence, an interdisciplinary approach at the system level is of vital importance. In the end, adequate and proficient cultural, educational and family policies will benefit the innovation system network and thus the firm. Also, the government should be actively involved to promote cluster formation of innovative firms, by removing barriers to inter-firm co-operation and alliances. Finally, the challenge for Belgium as a small country is to form a dense network of universities, firms and research centers in order to achieve scale economies that would otherwise be impossible (CAPRON and MEEUSEN, 2000).

Other groups advocate a systemic approach where it is the *individual* that assumes a central position. The firm is seen as an intermediate institution, among others, that can further fuel the building of regional well-being. This approach supports simultaneous and consistent policy in many fields of society — i.e. education, health, creativity, employment, housing, etc. — so as to increase the human capabilities of each individual (HAUTEKEUR, 1997). In the end, it is the individual with his/her increased capabilities who will be the *pivot* for a sustainable and innovative development of the region.

The discussion on the unit of observation is not just a methodological discussion, but is also a matter of basic political choice. Which institution should be the “pivot” for regional development policies? If the government wishes to empower the firm it will provide resources and infrastructure that favor business needs. The firms’ preferences for such resources, however, may not wholly reflect the citizens’ concerns. As Noreena HERZ has brilliantly shown, such preferential treatment of firms by the government may lead to a situation wherein the firm ‘silently’ takes over the driver’s seat of the region at the expense of the government. The choice of who will be the catalyst of the development process is fundamentally a question about who controls the public realm (HERTZ, 2001).
References


