INTRODUCTION

Competitiveness might be defined as the success with which firms and regions compete with one another over market shares and resources. Clusters are innovative, firm, organizational forms (networks of firms, services and institutions linked in a production value chain) in way to improve regional competitiveness in flexible, highly demanding and unpredictable markets. Since the early eighties, the “region” was rediscovered and a burgeoning literature from Californian, Italian and French scholars in sociology, economics and geography offered a wide range of perspectives on the relevance of the territory and the region to economic and social life.

The concept of industrial district, a particular type of cluster, emerged during the seventies and eighties when researchers sought to explain the industrial development that emerged out of major metropolitan areas in specific economic, social and territorial contexts (Bagnasco, 1977; Becattini, 1981; 1987; Garofoli, 1983). Following the ideas of Alfred Marshall (1919) on industrial districts and his case studies on industrial development in England in the late 19th century, they found localized systems of production based on the proximity of myriad small entrepreneurs with different specializations organized in a production filière. This was a completely different organizational process opposing that of Fordist specialization, based on large firms, economies of scale and mass and standardized production that was not sufficiently adaptable to market instability.

In this new unstable and uncertain environment, firms must have the capacity to quickly adapt in way(s) that supply more adequate, innovative and differentiated goods to response to market demands. Small firms developing dense backward and forward relations and exchanging information and products with suppliers’ other firms and the market will be more prepared to face this challenge, the flexible organization of production becoming the dominant form to emerge out of the crisis of the Fordist system of production (Piore & Sabel, 1984). The cluster concept was mainly developed by Porter who defined it as “a geographic concentration of interconnected companies, specialized suppliers, service providers, firms in related industries and associated institutions (for example universities, standards agencies, and trade associations) in particular fields that compete but also cooperate” (Porter, 1998, p. 197).

Both concepts were widely diffused within academia, allowing for a discussion of their contents, limits, key characteristics, development and strategies for facing change, and among policy-makers concerned with finding ways to foster the potential of clusters and industrial districts for regional competitiveness and growth.

Besides clusters and industrial districts other terms are used to refer to geographic concentration of interconnected firms in which local institutional dynamics play a significant role (Moulaert and Sekia, 2003), includes them under the generic name of Territorial Innovation Models), among them neo-Marshalian nodes (Amin & Thrift, 1992), milieux innovateurs (Aydalot, 1988) or learning regions (Morgan, 1997; Cooke & Morgan, 1998).

CLUSTERS AND INDUSTRIAL DISTRICTS

Adopting a wider definition of clusters and industrial districts as agglomerations of firms leads us to ask why firms cluster together and what type of advantages could emerge from that geographic concentration. When discussing the role of location in the context of present global competition environment, Porter (2000) refers to a paradoxical situation. In spite of the development of transport and communication technologies that facilitate the outsourcing of resources, capital, technology, and other inputs in global markets, that is, their ubiquification, the friction of distance still plays a relevant role when choosing between locations leading to dense regional agglomerations—a trend that once initiated tends to become self-reinforcing.

Agglomerations are characterized by many additional sources of productivity gains stemming from
geographic proximity that lowers the cost of transactions and facilitates access to a large and diversified pool of labor, including specialized labor highly skilled for the specific needs of the firms, shared costs of common infrastructures and technologies, presence of business services and complementary support activities (Krugman, 1991; Scott, 1998; Scott & Storper, 2003). Agglomeration also facilitates exchange of information and local knowledge accumulation and diffusion, leading to incremental innovations. Proximity between firms will facilitate interaction and knowledge creation, mobilizing both codified and tacit knowledge, in a process of collective learning that ultimately will contribute to increased competitiveness due to its local specificity opposed to the trend of homogenization imposed by globalization (Mäkkelä & Malmberg, 1999). The same authors observe that a sustainable regional competitive advantage will occur if those local capabilities are valuable, rare, not subject to substitution and imperfectly imitated. The advantages of some places then become locked in marginalizing competitor locations in spite of negative externalities due to congestion and rising costs.

When geographic agglomeration stimulates the creation of dense, strong and interdependent relations among firms, they became part of a local network. Industrial districts and clusters are forms of local networks of firms, social actors and institutions based on flexibility and on the benefits provided by agglomeration effects.

While industrial districts are based on industrial production organized at a local scale (although local can be evasive), clusters may occur both in high-tech and traditional industries, in manufacturing as well as in service industries, and the geographic scope can range from a single city or state to a country or even a network of neighboring countries (Porter, 1998). In the modern knowledge-based economy, the prevalence of clusters rather than isolated firms reveals insights into the nature of competition and the role of location in competitive advantage, as much of it lies outside a given company, residing instead in the location of its business units (Porter, 1990; 1998; 2000).

Clusters are not only a group of firms close together in the same location. Much of their advantage correlates with a favorable environment where personal relationships and face-to-face communications develop among workers and entrepreneurs. Close linkages with buyers, suppliers, and other institutions are important, where local suppliers/partners can and do get intimately involved in the innovation process, and direct observation of other firms is facilitated. In a cluster, pressure to innovate is high due to local rivalry obliging firms to offer a different or more attractive product than other firms or to encounter new technical solutions, fostering competitiveness through productivity and innovation.

Geographic agglomeration alone does not ensure the emergence of regional networks, as explained by Saxenien (2001) using the examples of Silicon Valley and Route 128. Firms in two apparently comparable industrial districts revealed different abilities to respond to quickly changing environments with different successes and demonstrate the importance of local institutional determinants of industrial adaptation. The success of Silicon Valley was explained by the prevalence of dense social networks, the open labor market and porous functional boundaries within firms, contrasting with autarkic corporations and a regional culture that encourages stability in Route 128.

The existence of dense social relationships, interaction between all levels of intervention (economic, social and institutional), flexibility and organizational capacity and adaptability to external changes are among the main factors that explain the success of industrial districts and clusters. However, “success stories” also show that many of the sources of growth are place-specific and influenced by social and historical circumstances that made each of them a specific case and rendered the recreation of those conditions elsewhere more difficult.

In spite of their wide diffusion, those concepts are not exempt of criticisms.

In the case of industrial districts, they point to the specificity of those localized systems of production that impede generalization (Amin, 1989) and give the idea that large firms lost their economic significance although systems of production extensively based on small firms are not abundant, thereby not recognizing the importance of emerging global corporate networks and the role of the city and corporations in the global economy (Amin & Thrift, 1992; Boyer, 1992; Martinelli & Schoenberger, 1992; Veltz, 1996). Others discuss whether industrial districts do in fact constitute a blueprint for the regeneration of local and regional economies based on a heterogeneous reality where both tendencies, the emergence of industrial districts and economic concentrations and transnational networks occur, and criticize a kind of binary thinking that opposes the rigidity of the past with the flexibility of the future.