

**REGIONS AS NETWORKS:  
TOWARDS A CONCEPTUAL  
FRAMEWORK OF TERRITORIAL  
DYNAMICS**

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# REGIONS AS NETWORKS: TOWARDS A CONCEPTUAL FRAMEWORK OF TERRITORIAL DYNAMICS

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## Abstract

Regions interact with multiple actors and industrial companies are one of the most important players in this interaction. By their strategic actions and relationships, companies are simultaneously present in different regions and influence a territory's dynamics and structure. Moreover, territorial characteristics are also a condition that can shape a company's action. This reciprocal influence is recognized by an emerging theoretical background of relational geography. Within the industrial network approach interest in this phenomenon is also increasing. However, the interactions between companies and regions have not been sufficiently explained. Thus, the main objective of this working paper is to produce new knowledge about the dynamics and interactions between regions and industrial networks. More precisely, the authors want to explain how companies' strategic action is reflected in territorial dynamics and structure and how such factors affect the companies' strategic action. Based on extensive research of the interactive relations between companies and regions, a model aimed at providing a better understanding of this mutual influence was developed.

**Keywords:** industrial networks, relationships, territory, regional development.

**JEL classification:** R19

# 1. INTRODUCTION

Regions are frequently identified as mere containers of activity that are confined to static territorial borders. Such an approach does not provide an accurate image of the specificities of territorial dynamics and gives rise to political management options which are extremely focused within territorial limits. The cluster concept defined by Porter (1998a; Porter, 2000) is a clear example of such regional characterisation. According to this author, clusters are groups that are geographically near associated companies and institutions linked by similarities and complementarities in a certain domain (Porter, 2000). The cluster is a strong organisational model, according to Porter, which provides efficiency, effectiveness and flexibility (Porter, 1998a). Along this line of thought, the regional or cluster development depends upon the co-localisation of competing and complementary enterprises supported by a good infrastructure network and support services (Porter, 1998b). Such a concept focuses inside the territory and is based upon a list of material resources that should be made available to the region and the companies therein located.

A conglomeration of companies within a close geographical space lies behind the success formula. Clusters are thus highly typical realities (Porter, 1998a) and invariably show some characteristics which will develop the region where they are located. However, these analyses do not include all multiple elements and compounding that, with their diversity, may help enhance development. There is not a single mechanism to explain how a dynamic region eventuates (Waluszewski, 2004). Martin and Sunley (2003) indicate a lack of clarity in the conceptualisation as well as empiric insufficiencies in the advantages attributed to clusters defining them as “one-model-fits-all”. Nevertheless, many a policy of regional development follows this guidance. Stimulus packages are handed out to regions to promote their take-off, normally under the form of subsidies, infrastructures and tax deductions. Whilst these measures have a positive impact “they are certainly problematical when they occur in a vacuum” (Scott and Storper, 2003, p. 587), i.e., when they do not take into consideration the organisational and institutional basis of regional dynamism.

An institutional reference is clearly lacking in the explanation of spatial relationships in Porter’s cluster concept (Bathelt, 2005b). Many regional developmental conditions are institutional and cultural, and are made up of “untraded forms of interdependency

between economic agents, and hence they collectively constitute the relational assets of the regional economy (...) Relational assets of this sort are not freely reproducible from one place to another, and access to them is determined at least in part through network membership". This is often called the relational capital (Storper, 1997; Camagni, 2002) and is made up of social and economic relationships in a given geographical space (Camagni, 2002). The relational capital of a certain region is often one of its most important sources of success due to its inimitability characteristics (Storper, 1997).

Part of the advantages often attributed to clusters derives from the co-localisation of companies in a contiguous area and from the exchange of ideas and co-operation between them. A basic tenet for this approach shows more cooperation and interdependence between companies located near one another (Porter, 1990). However, "the empirical evidence suggests that the prosperity and dynamics of clusters as compared to other locations may be unrelated to the co-location of firms from specific industries there, and that individual firms in clusters need not, on average, derive any unique advantages from their locations" (Håkansson, 2005, p. 450).

Giuliani (2007) in a recent study on three winegrowing clusters located in Italy and in Chile demonstrates that the interaction and knowledge transfer in the clusters surfaces in a selective manner for predetermined reasons and not randomly, whereas all can benefit and interact just by being there. When the cluster companies globally lack expertise and show low competences, the most advanced companies have no interest in linking with them and will cut off all internal interaction and connections in accordance with Coe and Bunnell (2003, p. 439) when they state "innovation should not be considered in the context of an anarchic, placeless "space of flows" (Castells, 1996), but rather in terms of situated social relations between appropriate actors, in turn embedded in particular places".

Innovation and interaction cannot be explained by mere geographical proximity and company bundling (Gertler and Wolfe, 2004; Boschma, 2005). "Neighbours might ignore or even hate one another. Local firms can be rivals and refuse any cooperation" (Torre and Rallet, 2005, p. 48). The relational component is essential to generate a distinctive element. Companies do not cooperate and interact just because someone orders them to do so. A regional success does not come out of nowhere in an automatic process, but derives from decades of interaction between different companies and

organisations located in various regions (Waluszewski, 2004). There is also a clear tendency, in the cluster concept, to focus on the internal analysis and on local elements, which results in neglected external factors (Lazerson and Lorenzoni, 1999). Conversely, “clusters can rarely be viewed as regional systems (...) because regions are strongly dependent on national institutions and other external influences” (Bathelt, 2005b, p. 204). Local initiative and its interdependence and dependence with other regions are the conditions a region needs to prosper (Sheppard, 2005). This is due to actors who are “capable of acting in real time in different places, which means that their registers of actions go far beyond their mere location” (Torre and Rallet, 2005, p. 53). In this manner, what is most relevant for the analysis is not defining where an actor is located, but to determine in which way their actions can evolve simultaneously in various geographical perspectives.

Clusters cannot be conceived solely due to their external linkages. It is imperious to recognise their external dimensions (Waluszewski, 2004; Wolfe and Gertler, 2004; Bathelt, 2005a) since local economies reflect the policies and strategies of actors located in various regions (Sheppard, 2005). The limitations associated to the traditional stand of economic geography and clusters’ theory have provided ground for a new trend within geography that reinforces the interactive and relational component. In fact “while regions (...) have been conceptualized intensively, less attention has been paid to their relation” (Passi, 2004, p. 540) and it is necessary to discover and research how interactions eventuate in different spaces (Murdoch, 1998). This relational geography modifies the understanding of territorial dynamism and puts the essence of regional economies within the dense interaction between all the various actors (Graham and Healey, 1999). The industrial network approach is also characterising space relationally. The backdrop idea is that space and resources interact and mutually affect each other (Baraldi, 2006). The relevance of entrepreneurial interaction, irrespective of company localisation, is stressed in these approaches (Waluszewski, 2004).

Due to their interactions, companies have become one of the most relevant actors in the shaping of the territories. They create territorial characteristics in the way they train workers or how they insert know-how in the region where they are implanted, and in their interacting they manage to bring to close contact different territorial contexts (Dicken and Malmberg, 2001; Baraldi et al., 2006). Although relationships and interactions established between companies and territories have become an important

area of research “such relationships need clearer articulation and understanding.” So far, “little attention has been paid to the precise nature of that relationship”, and this has led to the fact that “the relationships between firms and territories are weakly conceptualized” (Dicken and Malmberg, 2001, p. 346). Equally neglected are the interactions between companies and other organisations creating economic value in the territory (Bathelt, 2006). In fact territorial management classical systems do not provide an accurate image of the mechanisms underlying space’s relational and interactive considerations, and thus the need to create knowledge in such a domain becomes obvious. Many territorial administrators “continue to maintain the reductionist assumption” and consider regions “as single, integrated, unitary, material objects to be addressed by planning instruments” (Graham and Healey, 1999, p. 624).

Because of (1) the obvious maladjustment between reality and the theories that assume regions as airtight entities, (2) and the theoretical insufficiencies in the explanation of the dynamic and interactive relationship between companies and regions, it is necessary to develop methodological tools that enable one to approach space as a product of relationships and influences between various actors spreading far beyond their “artificial” physical boundaries. The objective of this working paper is to contribute for a better understanding of the dynamic and interactive relationship between companies and regions. For that we explore the contributions coming from relational geography concepts and the industrial network approach. We propose an analytical model that explains how companies’ strategic action is reflected upon the territorial dynamics and structure and how such factors affect the companies’ strategic action.

This working paper is divided in six sections. Firstly, we address territorial studies under the perspective of the relational geography approach that challenge the traditional vision of the territorial management and economic geography. The second section outlines, in some detail, the process of companies’ interactions from the perspective of the Industrial Networks analysis. With this strong theoretical contribution, we can understand companies’ interaction and strategic action that constitute one of the most important factors for territorial dynamics highlighted but not sufficiently explained by the relational geography. After that, in the third and fourth sections, we apply the recent industrial network approach contributions to the spatial analysis and in this way reinforce the research deriving from the relational geography. In the fifth section, based on the aforementioned theoretical approaches, we develop a theoretical model aimed at

answering what has been detected as lacking and that can constitute a base to reinforce the knowledge in this area which remains relatively unclear. The last section presents the conclusions as well as suggestions for further research.

## **2. THE RELATIONAL GEOGRAPHY CONTRIBUTION**

The concept of territory has been evolving due to the inclusion of relational elements in its characterisation, and this has originated what is currently known as “relational geography” (Storper, 1997; Dicken et al., 2001; Dicken and Malmberg, 2001; Bathelt and Glückler, 2003; Boggs and Rantisi, 2003; Ettlinger, 2003; Amin, 2004; Yeung, 2005b; Bathelt, 2006). Relational geography represents “a theoretical orientation where actors and the dynamic processes of change and development engendered by their relations are central units of analysis” (Boggs and Rantisi, 2003, p. 109). It came about as a result of traditional approaches of the economic geography being unable to explain micro dynamics which support different means of economic coordination (Boggs and Rantisi, 2003). The regions in such (traditional) approaches are considered as economic actors, and the real actors (people, companies and institutions) with the capacity to change and mould the region are often ignored. The factors explaining the decision-making process for localisation are the physical distance and cost reduction.

The relational approach is based upon the interactions occurring at a micro level because of diverse territorial processes. Space is analysed in a continuous relationship with the economy and in sharp contrast with previous positions that take it as a separate entity which is truly independent from economic actions (Dicken and Malmberg, 2001; Bathelt and Glückler, 2003; Yeung, 2005b). Thus, “economic actors and their action and interaction should be at the core of a theoretical framework of economic geography (Bathelt and Glückler, 2003, p. 123-124) since the “economic action and interaction are the central object of knowledge in the analysis” (Bathelt and Glückler, 2003, p. 125). The conceptual basis for relational geography are based upon an institutional perspective (Amin and Thrift, 1994; Amin, 1999). In such scenario, actors’ actions and objectives are not previously defined in order to conform to maximisation and rational

logic. Instead, they are moulded by specific social contexts of the area where they are located at and which shape their actions. “We cannot understand economic geographies outside a set of formative, if perpetually changing and challenged, social relations” (Lee, 2002, p. 339).

There are three consequences of actions and economic interactions in the relational conceptualisation (Bathelt and Glückler, 2003; Bathelt, 2006): (1) The relevance of the context – agents are inserted in specific contexts of social, cultural and institutional relationships which create formal and informal relationships. On the other hand, theorists of relational geography try to frame the companies’ actions within a specific space context and time framework (Murphy, 2003). (2) A *path-dependence* – a geographic place has “a memory which shapes the path of subsequent developments” (Maskell and Malmberg, 2007, p. 603). Past decisions shall influence future paths. (3) The contingency – notwithstanding the importance of the past, economic processes are not predetermined seeing as the individual and collective strategies are contingent and may alter the existing structures. These characteristics imply that the general laws of economic action do not exist and so the generic policies of territorial development cannot be developed as an ever-successful recipe that works every time the ingredients are available (such as postulated in the cluster theory). Instead they must be based upon an evolutionary and contextual understanding of economic action (Bathelt, 2006).

The relational view of the territory does not assume local, national or global spheres as different components from the organisation and from social action. Indeed, it promotes a relational understanding of each of those as a “nexus of multiple and asymmetric interdependencies among and between local and wider fields of action, organisation and influence (Amin, 1998, p. 153). This point of view makes the network perspective an excellent way to approach the relational space. The main advantage of a network approach is that it can transcend all those scales without falling into the conceptual trap of preferring any one of those (Dicken et al., 2001). Geographical lenses can be used to allow focusing on specific localised representations of the economic processes (Bathelt and Glückler, 2003) taking into consideration that any scale is co-maker of a dynamic and complex geographic reality in its entirety (Howit, 2003).

The network approach allows us to pinpoint various interactions between actors located in various territories but whose results show up in specific places (Dicken et al., 2001).

“Space is bound into networks and any assessment of spatial qualities is simultaneously an assessment of network relations” (Murdoch, 1997, p. 332) given that most of the dynamics of a territory may lie in actors localised in other geographical spaces (Dicken et al., 2001; Amin and Cohendet, 2005; Yeung, 2005b). Reinforcing this point, Malecki (2000) states that some territories or places are capable of creating and attracting economic activities just because they are able to establish links with other spaces.

Progressively, regions become part of a global network witnessing connections and influences from multiple actors afar (Amin, 2004). It becomes, then, harder to distinguish between local and global relationships since there is a growing interdependence between them (Amin and Cohendet, 2005). These networks can be more localised when they mainly depend upon local or global competences or when the major actors are physically distant (Dicken et al., 2001). According to Murdoch (1997) we should concentrate on the links, chains, networks and associations and not simply on dualistic geographical visions between local and global. Locales are places of meeting and intersections of dynamic influences and not closed or restricted spaces (Lee, 2002). This local meeting of diverse fluxes and interactions is responsible for its heterogeneity (Gibson-Graham, 2002), and consequently no two regions are exactly the same.

Within the context of relational approaches, companies are noteworthy territorial actors (Schoenberger, 1999; Taylor and Asheim, 2001; Bathelt and Glückler, 2003; Martin and Sunley, 2003; Yeung, 2005a) because decision-making at a company level moulds the territory and its development process (Giuliani, 2007). Consequently, to understand the development trajectory and territorial dynamics, we need to focus on companies and their interactions. During their activity, companies instil characteristics in the regions that welcome them and resources from various origins establish contact. Simultaneously, their activity is influenced by territorial configurations. Acknowledging this role played by the entrepreneurial actors, relational geography proposes an approach between spatial and economic management. Space and economy are interlinked and cannot be analysed separately (Dicken and Malmberg, 2001; Bathelt and Glückler, 2003; Yeung, 2005b).

The relationships between companies and the territory where they are located are obviously reciprocal (Glückler, 2007). Such reciprocal influence is well demonstrated in a paper by Schoenberger (1999): “The Firm in the Region and the Region in the Firm”.

Such relationship reflects the way in which companies' specific characteristics mingle with the specific characteristics of the territory. "While networks are embedded within territories, territories are, at the same time, embedded into networks" (Dicken et al., 2001, p. 97), and that is the reason why such authors call companies "networks within networks". The dynamics and interactions associated to a region are referred by the relational approach as essential for their development. "The tangible and intangible flows between the actors function as a blood circulation system in the region, enabling the system to meet the changing needs of the business environment" (Smedlund, 2006, p. 207). The regions need their companies to have privileged links with internal or external actors capable of providing them with their dynamics. The external sources of knowledge are especially important to stimulate growth within that region (Bathelt et al., 2004).

A region must be linked to the outside world in what Owen-Smith and Powell (2002) call *pipelines* to avoid declining due to entropy (Camagni, 1991). Such a concept is linked to knowledge originating in the outside world through a relationship between its diverse actors. However, when a region is linked to global production networks, such a fact does not automatically warrant a positive development since local actors may generate value in a manner that does not maximise the economic potential of that region. Local actors in a region may not be able to keep much of the value therein created (Coe et al., 2004).

Local companies must develop the capacity to assimilate the information and to efficiently apply it in order to create value. Cohen and Levinthal (1989) calls "*absorptive capacity*" the capacity of a company to identify, assimilate and exploit the knowledge deriving from its surroundings. To assimilate and benefit from new data, in a way that can create and develop new practices and activities, the companies must have the capacity to recognise, find and understand them. Such acknowledgement demands the existence of previous knowledge. Territorial actors might not acknowledge this unless they have such previous knowledge. Accordingly, the benefit from this external knowledge depends upon local company actors' level of current knowledge, with the implication that any knowledge acquired in this manner is fully dependent on the existing knowledge base (Cohen and Levinthal, 1990). In the larger companies, such knowledge derives from their research and development activities, but in the smaller companies such knowledge is less formalised (Muscio, 2007). The capacity to absorb

such knowledge in these smaller companies depends upon more tacit forms like learning by using and by doing, and it also depends upon their organisational configuration and the capacity to establish close relationships with various actors and the implementation of good practices in human resources (Huselid, 1995; Vinding, 2004; Muscio, 2007).

Relational positioning emphasises the interdependent evolution between organisations and territories. However, it is imperious to possess a broader understanding of the processes which lie behind the interdependent actions that develop at a micro level (Lee and Saxenian, 2008). Many are the challenges to solve in order to clarify the relationship between companies and the territorial dynamics. Namely, how to make theoretical connections between micro events at a company level and their spatial repercussions normally only observable at a regional level (Lee and Saxenian, 2008). The interactive relationship between companies and regions is not totally explained although the company is pinpointed as the key element of the relational space (Bathelt and Glückler, 2003) since such approach does not entirely describe the company's organisation nor does it specify the basis for their interactions.

Authors of relational geography "are concerned with geographical space. Although they briefly refer to institutions, it is not made clear where (...) these fit in and how firms and institutions interact." (Lane, 2007, p. 5). Existing publications reveal that one "has tended to have a naive view of the spatial character of firms and of the ways in which firms relate to territory" (Dicken and Malmberg, 2001, p. 355). Moreover, this gives birth to simplistic conceptions that are not adjusted to the interactive wealth of reality (Dicken and Malmberg, 2001) and make it necessary to elaborate a broader analysis of the company and individual agents (Boggs and Rantisi, 2003). As far as the network approach is concerned, and notwithstanding numerous references and the relevance attributed to networks by the relational geography ideologues, seldom are such references made in an explicit manner (Staber, 2001; Murphy, 2003; Grabher, 2006). "Much of the use of networks in economic geography has been rather selective, often metaphorical and little formalised" (Glückler, 2007, p. 620). The relevance of interlinking the local and outside worlds is stressed, but this process of connection and input of knowledge from outside is not entirely described.

Although there has been many current trends discussing the relational component of the regions, there is not yet a robust conceptual corpus capable of making operational the conception of a region socially constructed based upon various dependencies. Indeed, one of the questions frequently asked and not yet properly answered, due to the limitations of relational geography, is: “how do firms interact with one another and what are the consequences for localised processes and structures?” (Bathelt and Glückler, 2003, p. 138). According to Waluszewski, “in order to investigate how companies co-evolve over time, including how local and non-local interaction contributes in this process, we have to use a tool that allows us to investigate the interactive features of industrial development” (Waluszewski, 2004, p. 133).

The industrial network approach, analysed next, has, for the past thirty years, focused on the study of the interaction between companies. At the same time, it shows a notable adjustment with the characteristics conferred to the regions by relational geography and has made the interaction phenomena between companies and regions operational.

### **3. THE IMP GROUP PERSPECTIVE**

The approach to industrial networking begun developing as “a tool to investigate relationships that connected dyadic counterparts not only to each other, but also to a larger structure”: the network (Håkansson and Waluszewski, 2002, p. 30). This is characterised by the interactions that evolve from relationships established between the different actors who have access to resources and develop activities (Mattsson, 2003). These three variables appear together (actors, resources and activities) in structures which have a distinctive trace in the way in which they interact. Such structures are called relationship networks. *Lato sensu* this concept is used to mean the grouping of all relationships developing in a given economic sector, and in a strict sense when it refers to those relationships belonging to a given actor (Brito, 1997). One of the most important research objects in industrial network research becomes the long-term relationship, its origins, characteristics and effects (Henneberg and Mouzas, 2006). A clear-cut rupture between the positions that defined borders between organisations and

their environment is also a common characteristic for this approach. Due to the relationship's links, the organisations do not adopt the environment in a unchanged manner, but as an element with which they interact in a specific way (Astley, 1984; Thorelli, 1986; Håkansson and Snehota, 1989). As a result of the interdependence between the units in study (Easton and Håkansson, 1996), the behaviour of a company should be understood in the global context of their relations with others (Anderson et al., 1994).

Due to the broad network magnitude, the actors have only a limited cognitive capacity of the networks they belong to. They are restricted to a horizon, which confines the reality they know. When the interacting companies have differentiated network horizons, the visualisation of new opportunities for interaction is vastly improved (Lundberg, 2008). To overtake such limited knowledge of the network, the companies create diverse cognitive structures depending on the interactions occurred in the network that result from the interpretation of past experiences (Johanson and Mattsson, 1992) which have the capacity to shape their actions in the future. These network theories are described by Mattsson (2003, p. 417) as “the actor's set of systematic beliefs about market structure, processes and performance and the effects of its own and others' strategic actions”. They not only affect the strategic action of the actor which formulate them, but also that of others as they can be transmitted to counterparts (Johanson and Mattsson, 1992; Brito, 2001). “Interaction with others is a major source and factor in the continuous adaptations in the cognitive structures guiding their behaviours” (Snehota, 2004, p. 26).

Through the relationships, maintained actors exhibit to counterparts their theoretical formulations, and depending on their position have the capacity to influence them. Thus, changes in actor network theories, and consequently in the dynamism associated to the network, can occur, and result from the emergence of new relationships or from the interactions of already existing ones. Actors who interact with a company give it a position that depends on the set of relationships it has (Johanson and Mattsson, 1992). Any organisation occupies a position in the network. Companies' network position is, however, a relative concept that is externally endorsed. Thus, there will not be two equal positions given by different actors to the same focal organisation (Håkansson and Snehota, 1989).

A company network position can be understood as a resource, an intangible asset that influences its action capacity and simultaneously, as any resource, supports and restricts its strategic action (Turnbull et al., 1996; Duysters et al., 1999; Wilkinson and Young, 2002). According to this perspective, Turnbull, Ford and Cunningham (1996, p. 47) define position as “the company’s relationships and the rights and obligations which go with them”. Companies with a central position will have benefits resulting from the access to more information and opportunities comparatively to peripheral actors (Gulati et al., 2000). Network position also influences the network theory considering that it is largely formed by the information resulting from relationships between actors (Johanson and Mattsson, 1992). The development of new relationships by the company changes the way its identity is perceptible in the network: i.e., its position. Due to relationships’ dynamic character, companies’ position is not definitive, and constantly changes with time (Henders, 1992; Snehota, 2004). As all the companies are connected and the positions are relative and conferred by each individual actor, the change of a company position will affect the position of other companies (Low, 1997). Thus, positions may be positively or negatively connected, and the strength of one actor position may, according to the situation, conduct to the strengthening or weakening of the position of other companies (Johanson and Mattsson, 1992). However, the company can influence its position; albeit, this is a task that requires relationship management, the choice of preferred counterparts and the development of ties between resources (Low, 1997).

The industrial network approach is sceptical about the direct control over resources a company can obtain since a substantial part of the resources available to the firm are under the direct control of other actors and can only be accessed by the interactions and relationships in the network (Ford and Håkansson, 2006b; Baraldi et al., 2007). Araújo, Dubois and Gadde (1999, p. 498) refer that “no company controls all the resources they require,” and the competitive advantage of the companies is not only inside the borders of what it has and controls, but in all the interfaces it develops with others (Gadde et al., 2003). Resources are used together and in interaction with other resources and their features are created through these combinations (Håkansson and Waluszewski, 2002). Nevertheless, in order to act, companies need to know how to interact, connect and make their resources grow. The external competences’ access does not make itself

available in an automatic manner, it requires a specific range of competences and relational efforts to come out (Araújo et al., 2003).

Companies do not prosper only by their individual effort, they also depend on the relationships maintained with others and on the direct and indirect relationships' nature developed with them (Wilkinson and Young, 2002). An organisation's results largely depend on how and with whom it interacts (Håkansson and Snehota, 1989; Baraldi et al., 2007). A company alone cannot build up its strategy (Håkansson and Snehota, 1989; Snehota, 1990; Ford and Håkansson, 2006b) since such a strategy derives from interactions and it is indexed to relationships. In this manner, the interactions and the relationships become as important, or even more important, as management, in order to influence the company's strategy (Håkansson and Snehota, 1989). It is of the utmost importance to invest in relationships and the strengthening of these so that companies are able to strategically perform and adjusting most of their competitive advantages to a proper alignment with the surrounding environment (Jüttner and Schlange, 1996). In such a perspective, strategy is defined by the way "in which a firm achieves exchange effectiveness in relation to other firms in the surrounding network that is, how a firm initiates and reacts to changes in the network in such a way that the firm keeps on being valuable to the network" (Holmen and Pedersen, 2003, p. 409). The strategy is, thus, the result of a joint process where many companies take part (Ford and Håkansson, 2006a). Consequently, most strategic activity revolves around influencing others and managing relationships within a context built upon interaction.

#### **4. THE TERRITORIAL SIDE OF INDUSTRIAL NETWORKS**

The conceptual research strength, from the authors identified with the industrial network approach, is today so extensive that it surpasses the limits of industrial relationships that were at the centre of its origins. Indeed, valuable contributions to the understanding of the territorial dynamics appear from authors related with these approaches (Cova et al., 1996; Johnston and Araújo, 2002; Mota and Castro, 2004; Waluszewski, 2004; Baraldi, 2006; Baraldi et al., 2006; Baraldi and Stromsten, 2006; Håkansson et al., 2006;

Lundberg, 2008). These approaches “instead of approaching place as a one-dimensional entity, as an object of analysis in itself, (...) allows us to investigate it as a multidimensional and embedded phenomenon interrelated with other variables” (Håkansson et al., 2006, p. 232). The territory definition resulting from these studies is similar to those coming from the relational geography approaches: greatly dynamic, interactive and relational. Johnston and Araújo (2002, p. 10) suggest that “territories are environments in which organisations are directly active and have a presence at a point in time, and are configured through relationships formed on the basis of activities and resources found within that specific environment”. Resulting from this territory vision, the understanding of the same as a simple container of economic activities is banished and it is viewed rather as a structure of relations dependent upon specific resources.

Apart from the attribution of a dynamic characteristic to the regions, these authors also recognise the relevance of history for further development of the territory since they consider that regions should not be seen as individual entities merely linked at a distance with other geographical entities. Regions have different historical ancestries and dynamics which have diverse resource inflows and outflows that are capable of changing the spatial form and the relationships within such area (Johnston and Araújo, 2002). This point of view is also shared by Waluszewski (2004). The author refers to territorial development as a process that is being incrementally built and not instantaneously just happening overnight. More than looking into the current characteristics, it is essential to understand the historic patterns of the combination of resources available in the various regions.

Furthermore, according to Håkansson, Tunisini and Waluszewski (2006) space is recognised as a heterogeneous phenomenon; it is something simultaneously created and differently used by organisations with a large dynamic component that changes with time. Accordingly, space will be considered “as something that not only affects the individual company, but also the way the individual company interacts with other companies” considering that “the companies’ interaction creates the place” (Håkansson et al., 2006, p. 231). In the authors’ perspective, when territory is regarded as an organisation, each company inside it should be considered as a particular combination of resources that is part of a larger constellation. Thus, the social and institutional relationships characteristics that develop and originate in a territorial context are unique,

inimitable, and affect the potential and attractiveness of the region where they are located.

Mota and Castro (2004, p. 263) conceive industrial conglomerates as “territorially based networks” and state that “the dynamics in connections internal to those networks affect and are affected by local institutions as well as connections external to the territory”. Territorial dynamics depend upon a network of connections resulting from the structure of relationships between companies since they are all involved in networks that outflow the regional boundaries. Hence, the dissemination of knowledge and network learning derives from a relational pattern and not only from physical proximity between actors (Mota and Castro, 2004). Spatial proximity is just a mere factor that may be able to influence the relationships and network patterns. Other factors capable of influencing the relational pattern are social, technological and organisational proximity (Ford, 2002).

Baraldi (2006) reinforces the interdependence between companies and territories previously recognised by the relational geography by considering that “places are central to the life of every company, from the moment when it is born and throughout its various developmental stages”. According to this author, such dependence is bidirectional: “companies interact constantly with various places, even without being fully conscious of doing so. Places affect companies’ lives, but companies, alone or in interaction with others, also affect places” (Baraldi, 2006, p. 297). Consequently, there are two levels (regional and industrial) in simultaneous and permanent interaction.

Regional interactions are based upon the interaction between the various actors belonging to those regions. Not all actors will become winners in the space interaction, some of them might even lose power, since such interaction exposes them to competition from other places and actors (Baraldi et al., 2006). Multinationals are privileged actors in promoting the interaction of spaces and objects, and are defined by Baraldi, Hjalmar and Houltz (2006) as place-connectors. In order to eventuate, interaction needs some form of relationship which becomes an important bridge to overtake spatial distances as well as cultural and competence distances (Baraldi, 2006). These, may overtake various places and create network configurations. In this manner, a space may be intimately dependent upon developments that are happening in another and vice versa (Baraldi and Stromsten, 2006).

In short, the network approach proposes a vision that stresses the power of interaction and gathering of resources in order to promote regional development. Companies' horizon, position and competences interaction are more important than their mere localisation. The territorial dynamics are created according to the way in which companies value their resources, in how they add/accumulate value and in how they relate to each other (i.e., by what they do and how they do it) and not merely by existing. The potential for the interaction between space and companies' explanation revealed by the industrial network approach, is not yet sufficiently developed and focused to regions in a way that makes it possible to understand how such interaction occurs. Specifically, it is not explained how changes resulting from the company's strategic action reflect in the dynamics and territorial structure. Consequently, this gives origin to a research opportunity: to clarify the interaction between companies' action and territorial dynamics.

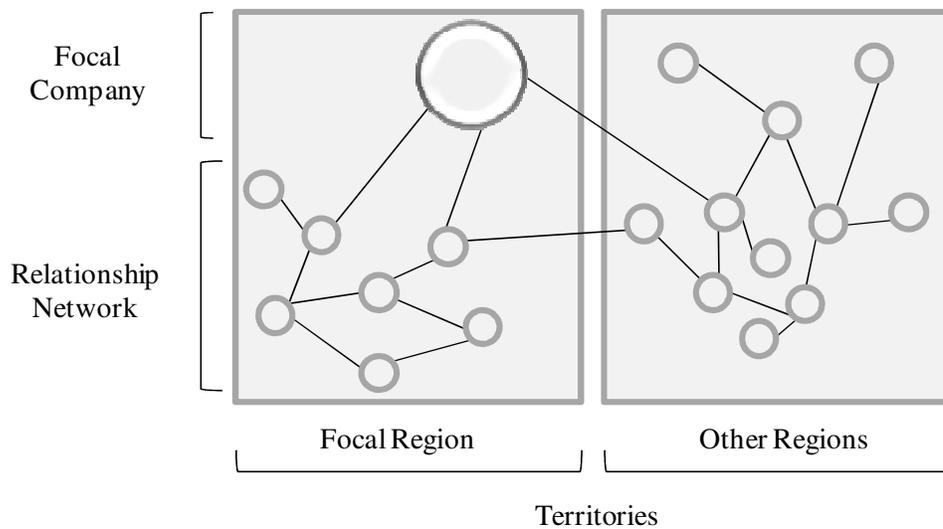
## **5. CONCEPTUAL FRAMEWORK**

Publications about relational geography as well as those about industrial network approaches question the generic and mechanic point of view that makes territorial development and dynamics of the replication one of the general factors of success. From the research conducted it is obvious that territories are entities with a specific history. Deriving from such a factor they have their own specificities, which make them heterogeneous and imply a continuous interaction with other organisations, namely, the companies. Such connection between companies and territories is a phenomenon both beguiling and complex and its study should be the central focus of research (Dicken and Malmberg, 2001).

There are questions yet begging for an answer and they relate to the influence and interaction between territories and companies and how they interact, shape and mould reciprocally (Håkansson et al., 2006). Therefore, the central focus of the research model developed is to explain how companies' strategic action is reflected in the dynamics and territorial structure and how such territorial factors affect the companies' action. Thanks

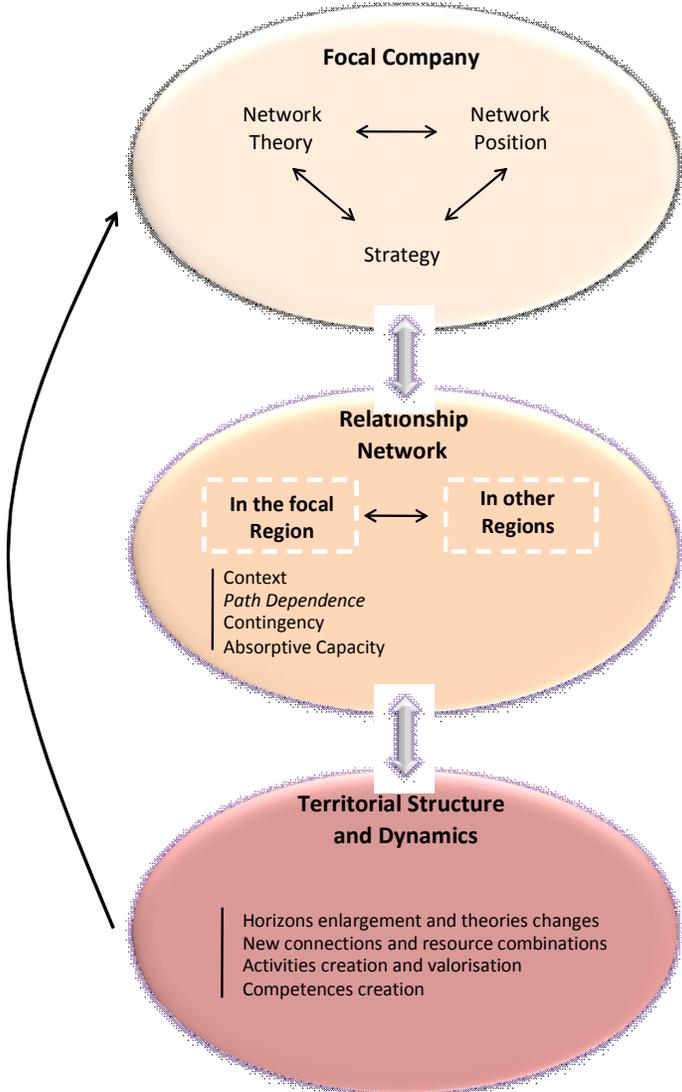
to the theoretical approach followed, the answer to this question might lie not only in the company's dyadic relationships, but in the sum of its links enabling the company to belong to networks that are far beyond local scales. This implies that the model must be centred in three differentiated levels of analysis (Figure 1): the company, its relationship network and the territories where the company's network interacts.

**Figure 1 – Levels of Analysis**



The analytical model described in Figure 2 shows a structure both synoptic and integral where the various levels of analysis being taken into consideration can be seen.

**Figure 2 – The Conceptual Framework**



**5.1 Companies**

Whilst the relevance of companies and the entrepreneurial relationships for territorial dynamics is obvious, the relational geography approach does neither clarify the mechanisms in which it originates nor does it describe its motivational processes. The companies, considered an instrumental territorial actor, are superficially characterised and this is indeed a major limitation. Equally notorious is the lack of knowledge about

the reasoning behind the strategic action of the companies and the relevance of their relationship structure for their own development. Such omission is even more important when the relevance of the relationship structure for the interlinking between various regions is well known.

The interaction and network approach characterises in detail the entrepreneurial actors, their interaction processes and the reasoning for their strategic actions, and helps shed light on one of the most obscure areas of relational geography. Thanks to the interaction and network approach the companies lose their homogenous and anonymous characteristics, and acquire their own personality which grants them with specific characteristics (Huemer et al., 2004; Ford and Håkansson, 2006b). They are linked to the surrounding environment, depend upon it and influence it (Thorelli, 1986; Håkansson and Snehota, 1989).

Companies have a network theory, which guides their actions and leads the decoding of the behaviour of all actors surrounding them. They are positioned in the network of companies they are part of according to their relevance and the relationship with their counterparts. The access to resources from third parties, which are essential to add value to their internal resources and their activities' development, depends on the position they occupy. The theories and differentiated positions in the network lead the companies to specific strategic actions. Such strategic action definitely influences the choice of counterparts they establish relationships with and the way in which such relationships occurs.

## **5.2 Relationship Network**

With an approach based upon interaction and networks, we have been able to establish a great deal of knowledge on the concept of networks classified as vital in relational geography, but not sufficiently described. Networks are disassembled in three major elements: actors, resources and activities (Håkansson and Johanson, 1992; Håkansson and Snehota, 1995), and great relevance is given to the external component of each of those elements. The importance of the external analysis results from the connectivity of relationships. Relationships are connected (Mattsson, 2004). The changes in any given relationship cause some network effects (Hadjikhani and Thilenius, 2005). Any changes

in the way the activities are coordinated and resources are used show up in a larger scale (Håkansson and Waluszewski, 2002). As a consequence, any change in a local network of relationships affects various other regions throughout the network. The same happens with the company's external links, which inevitably reflect upon the territory.

According to the company's strategic action, its relationships may be more localised or spread outside the region. The pattern of a company's relationships with a region is also dependent upon the territorial characteristics. For these, one has to take into consideration various factors such as the context, path dependence, contingency and the absorptive capacity towards the company's actions that the territory reveals.

### **5.3 Territory Structure and Dynamics**

Territorial dynamics are influenced by local connections and connections with external actors. Each organisation can be seen as a combination of resources from a constellation existing inside the territory (Håkansson et al., 2006). Such constellation is a dynamic one that can be influenced by interaction (Waluszewski et al., 2008).

According to the focal network interaction with the region through the companies and installed organisations, various factors may occur which will have an impact on the territorial dynamics such as: horizons enlargement and a change of theories in the companies locally installed and, consequently, the visualisation of new chances of interaction (Lundberg, 2008). The development of new links between local companies can result in different combination of resources. The creation of new activities, the valorisation of existing ones, and the creation of competences are also possible effects of company network and region interaction.

### **5.4 Effect on the Focal Company**

Changes in territorial structure and dynamics will lead to an effect in the focal company theory, and a readjustment of its strategy which may affect its relationship network and, consequently, all its relationship process with the territory.

## **6. CONCLUSION**

Companies are fairly diverse. Even within the same economic sector their way of acting is different and such difference is reflected upon the way their relationship network articulates in various regions. On the other hand, territories are also fairly heterogeneous in their characteristics and have specific development paths that condition the companies' activities. In this way, the relationship between companies and territories will always be specific and impossible to replicate. Such specificity renders fragile the current literary trends which point to generic thesis of development based upon the combination of various material factors inside a geographically delimited space.

The model developed based upon relational geography trends and industrial network approach suggests that the territorial dynamics are mostly dependent upon intangible factors and an interaction at various scales and not on circumscribed material components. From a specific knowledge of a company based upon a specific relationship network, one can put into focus the interaction of this network with the territorial characteristics. From such interaction some effects result in changes to the territorial structure and dynamics.

Territorial configurations of company relationships may be more concentrated or dispersed in regional terms and create interaction in various spaces. It is not enough to have a substantial number of local links to create territorial dynamics. It is indeed essential that such links create competences that lead to the creation and rating of activities, which in turn originate new links and gather resources or contribute for a change in theories and a broader horizon for the interacting parts. Such effects depend, on a large scale, upon the capacity of absorption by the territory. It is the interaction between the diverse organisational networks of the companies installed in a territory and the territorial characteristics that may create obstacles or advance the said effects.

The essential question to solve by territorial administration is not subjected to physical boundaries since all relationship networks may be connected to diverse spaces. In this manner, territorial managers must enhance the companies' internal links as well as

develop the links to external networks where they will garner dynamic factors. In order to do so, they must create a great deal of knowledge about companies' needs and strategies. Such knowledge will allow for the identification of companies which may be attractive and strategically compatible with organisational networks already established in the territory. The knowledge of entrepreneurial actors will allow for the development of efforts by territorial administration in order to make closer the relational distance between companies present in the same space.

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