

# The Dynamic Concept of Territory in a Globalized World

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### The Dynamic Concept of Territory in a Globalized World

or

#### the Contribution of Ethology to the Understanding of Space

#### **Revised abstract**

#### *a)* Subject of the article

Space has long been studied in relationships with Geography, Economy, and Management. These sectors pay attention to the influence of space in their own analysis and some effort has already made to define space. This lack of definition is becoming crucial in a world where spatial actions are more and more global and not only local. This shift complicates human environment where relationship with space is no longer just reducing distances but trying to propose the right conditions for the emergence of proximities. To present a structured view of space taking into account this new scale of spatial action, we propose to adopt a new methodology based on ethology studies. The territory and its dynamic management are at the centre of this new way of thinking what space is.

#### b) Key message of the article

Changing the way of thinking space. Not just as a variable or just the envelope of the action.

#### *c)* Original contribution of the article to the scientific debate

The importance of proximity in the way of acting on space and its link with the concept of territory.

#### *d)* (*Planned*) *structure of the article*

- 1. The neighbourhood space (classical works in economy, geography and management about space).
- 2. The importance of a new methodology.
- 3. The Ethology contribution.
- 4. A problematic methodology : from a quantitative space to a qualitative space.
- 5. Towards a global world: the economic and social reasons.
- 6. Towards a global world: the importance of proximity
- 7. The Concept of Territory.
- 8. Applications and interests.

#### The Dynamic Concept of Territory in a Globalized World

#### or

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In 1986, Barney<sup>1</sup> wrote a popular article where he was thinking about culture as a source of sustained competitive advantage for the organization. His works fitted into the wake of the *Resource-Based View* Theory developed by Penrose<sup>2</sup> (1959) and Wernerfelt<sup>3</sup> (1984). In this article, Barney evoked other topics than culture which could be considered as a resource for the organization. One of them, the "unique geographical advantage" (p. 659), sets up space as an organizational resource. His way of thinking space was very innovative at that time and his remark passed quite unnoticed.

Indeed, it is only in the nineties that space will really be taken into account as a resource in the management and organizational literatures with Krugman (1991 $a^4$ , 1991 $b^5$ , 1995<sup>6</sup>), Thisse<sup>7</sup> (1992), Cox<sup>8</sup> (1997) and Porter<sup>9</sup> (1999). This phenomenon is not an "oversight" of researchers but just the consequence of a lack of definition.

Henri Lefebvre<sup>10</sup> in 1974 was the first to denounce this major deficiency. To supplement it, he proposed an explanation of the "production of space" which is still used nowadays (for example, Harvey<sup>11</sup>, 1989). Henri Lefebvre has left two essential contributions. Firstly, he emphasized the unity between physical space, mental space and social space. Secondly, he noticed that every society produces its own space, which is declined in three dimensions of spatial practices: "experienced", "perceived" and "imagined".

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### A foggy concept

This underestimation of space has long been due to the way of using this concept in economic and social researches. Economic and social sciences have been interested in space for a long time. But they were not embarrassed about a lack of definition because space was just considered as a variable to test economic theories. Richard Cantillon<sup>12</sup> in 1755 is the first to take into consideration social and physical space through a study of rural conditions. He makes a distinction between the city, place of the exchange and capital, and the villages, places of the labor. He proposes different assumptions to explain the geographical organization of villages around the city. These concepts will be develop later by Von Thünen<sup>13</sup> in 1826 who will devote many works to explore the influence of economic considerations in the choice of a localization. Cantillon and Von Thünen have built the "ABC knowledge" of basic relationships between space and economy but they have never taken into account the importance of organizations in this process.

We have to wait until 1890 with Alfred Marshall<sup>14</sup> and his "industrial clusters" to benefit from a strong analysis of the influence of organizations but not in space in general but only in a neighborhood space. We are here in the situation of one organization or one group of organizations in one specific location. Hotelling<sup>15</sup> in 1929 will improve this analysis by comparing two organizations in competition on the same location.

From these main contributions, different research movements are going to follow, always studying space in a specific economic condition. Hirscham<sup>16</sup> in 1958 will be interested in the localization of the main centers of economic growth and industrial relationships upstream / downstream in the production process, opening a later research field about technopoles. Weber<sup>17</sup> (1929) and Lösch<sup>18</sup> (1954) will be at the origin of the specificities of the

"Economics of Agglomeration" developed later by Goldstein and Grondberg<sup>19</sup> (1984), Rivera-Batiz<sup>20</sup> (1988), McCann<sup>21</sup> (1995), Ciccone and Hall<sup>22</sup> (1996), Fujitsa and Thisse<sup>23</sup> (1996). A specialty will underline the "Urban and Regional Economics" with Glaeser, Kallal, Scheinkman and Schleifer<sup>24</sup> (1992), Glaeser<sup>25</sup> (1994), Henderson<sup>26</sup> (1994), Henderson, Kuncoro and Turner<sup>27</sup> (1995), Henderson<sup>28</sup> (1996), Derycke, Huriot and Pumain<sup>29</sup> (1996), Huriot<sup>30</sup> (1998). This specialty going recently up to speak about a "Regional Science" with Giarratani<sup>31</sup> (1994), Markusen<sup>32</sup> (1995), McCann<sup>33</sup> (1995). Others like Amin and Thrift<sup>34</sup> (1992), Storper<sup>35</sup> (1997), Storper and Salais (1997a<sup>36</sup>, 1997b<sup>37</sup>) try to reverse the use of space by economy for a use of economy to improve the knowledge of space and affirm the existence of an "Economic Geography". But the space concept is still foggy.

Amongst this research literature around space and economy, the main studies, which put the spatial practices of organizations at a central point, are not numerous. We can distinguish three different contributions. We can quote the "National Innovation Systems" with works by Bengt-Ake<sup>38</sup> (1992), Dosi, Giannetti and Toninelli<sup>39</sup> (1992), Nelson<sup>40</sup> (1993), Cimoli and Dosi<sup>41</sup> (1995), Rogers<sup>42</sup> (1995). The analyses about the "Industrial Districts" by Piore and Sabel<sup>43</sup> (1984), Harrison<sup>44</sup> (1992), Pyke and Sengenberger<sup>45</sup> (1992) pay also a particular attention to the spatial role or organizations. Last but not least, the "Social Networks" of Granovetter<sup>46</sup> (1985), Perrow<sup>47</sup> (1992), Burt<sup>48</sup> (1997), Harrison and Weiss<sup>49</sup> (1998), emphasized the social dimension and immateriality of space.

In these different studies around space and organizations, we find all the classical controversies about space: the several ways in which we can think about it (Harvey<sup>50</sup>, 1973), the problem of its nature, the difference between social and physical space (Haegerstrand<sup>51</sup>, 1967)... But without a strong definition of the concept, we think that it is difficult to answer some of these questions. Which is why Henri Lefebvre's works are so fundamental.

However, beyond these different ways of research, we notice that most of them dealt with space in a particular condition. They only deal with a neighborhood space, which is an undefined conception by nature. This is not going to help us in our need for a definition. Indeed, all these works in Economy, Geography or Management firstly ask some questions about a particular action – here is the core of the reflection – and then try to situate the space (and not space in general) around this action. In such a way of thinking, the conception of space can only be approximate. This method cannot help us in our understanding of space; it is not really its objective. We are still in an imprecise and incorrect conception of space.

#### The importance of a new methodology

Nevertheless, despite this relative ignorance of space, the need of a good knowledge in the concept is more and more imperative with the progress of technology and globalization. Human actions are more and more global and the methodology to localize space around one action is more and more complex and less and less efficient to explain phenomena. To solve this problem, we propose to reverse the methodology: not take some action to study space around it but start from space to understand the action. To do it, not only we need a definition of space but also a structured space.

#### The Ethology contribution

Ethology works can help us to adopt that new way of thinking. Ethology is the science that studies the behavior of animal species in their natural environment. To do it, ethologists use a particular concept, the Territory, which structures space as the localization of actions, a sort of spatial framework of every activity.

Territory is defined in ethology as "an area of the surface of the earth on which the set of individuals of a same species lives" (Esser<sup>52</sup>, 1971). This territory is managed for Vertebrates by an authority that gives the rules to delimit the social structures. These social structures evolve under pressure of two complementary requirements (Ruwet<sup>53</sup>, 1995): on one hand, *a maximization of interactions* (Rabaud<sup>54</sup>, 1929; Picard<sup>55</sup>, 1933; Grassé<sup>56</sup>, 1946) by the multiplication of contacts and the cooperation between individuals to seek food, to use shelters, to reproduce, to protect the young; and on the other hand, *the optimal use of space* by the dispersion of individuals in the habitat so that population is always in accordance with the limited resources of the environment.

Inside these more or less structured social groups in agreement with these two requirements, contacts between individuals are based on the fact that every subject keeps around himself a "security space" where no intrusion of other people are tolerated. This individual distance is due to the double trend to approach other fellows and to move away from them again. This distance determines the spacing between subjects. It varies according to the species, the seasons, the time, the place, what is at stake, the circumstances. It reduces in front of a common menace and on the contrary increases if there is competition for the same object. It is bigger towards a foreigner than beside an other member of the group. It depends on the individual knowledge of characters (Richard<sup>57</sup>, 1970).

This principle of the "critical distance" governing the relationships between individuals expresses by two main forms in Vertebrates: hierarchy and territoriality.

In social hierarchy, – a very common system in nomadic Vertebrates – relationships between the different members of the group are regulated by subordination and domination roles. Some characters dominate others according to variable modes (hierarchical rank, social class...) every time there is competition for the choice of a route, the access to females, or the share of the food. This hierarchy reduces and canalizes aggressiveness between the members of the group. In this system, everybody knows exactly its rank and role.

In territoriality, one subject, a couple or a group of people set up in a place where they defend the access from other individuals when they are from the same species and almost from the same physiological state. Territoriality has the advantage over hierarchy that every subject is dominant at home. He knows perfectly every part of his environment and can profit from its resources better than his neighbors. On the other hand, as soon as he goes away from his domain and enters his neighbor's place, he loses his domination and finds himself in a position of inferiority.

Human societies are generally a mix of these two principles in the organization of their relationships between different subjects within a place surrounded by boundaries. We think that ethology works with territory concept, critical distance, hierarchy and territoriality principles, form a structured and complete cognitive system about space that should be in the mind of every researcher interested in analyzing human actions in space: direct human actions like relationships between subjects in the same place, but also indirect human actions through organizations. This cognitive model not only respects the unity between physical space, mental space and social space (Lefebvre, 1974), but also allows us to take into account the

representation of organizational attributes such as foreignness<sup>a</sup>, and at least to get a structured definition of space in which all actions will be produced<sup>b58</sup>. We do not meet all these characteristics at the same time in others methodologies, but only a parceled knowledge. In particular in the "neighbored space" models which consider space like an absolute entity, "where space is like an empty container", what Sundeep Sahay<sup>59</sup> (1997) calls and denounces the "Newtonian view" (p. 231).

The "neighbored space" around the action is here replaced with the "critical distance" in the heart of every decision making (before or during the action, which improves the heuristic of the model). This new way of thinking gives us a new "theoric system" which raises the "falsification degree" – as Karl Popper<sup>60</sup> said –, but also makes more complex the study of space. That is maybe why studies in ethology are not greatly used in management.

#### A "problematic methodology"

The "neighbored space" methodology was imprecise about space but could be appreciated quantitatively with topological structures<sup>c</sup>. With territory concept, space can be defined precisely but "critical distance" at the center of the problematic, cannot be analyzed quantitatively. It is impossible to measure and fix a good critical distance. It depends on the situation and changes continually. As a matter of fact, the nature of problematics is transforming with the methodology and becomes qualitative.

This new way of thinking is in accord with the worldwide evolution about space where local worlds are more and more replaced with a unique global world. In such a system,

<sup>&</sup>lt;sup>a</sup> What makes the synthesis of the three general parts of this EGOS Sub Theme.

<sup>&</sup>lt;sup>b</sup> And to realize the convergence of time and space as Carlstein, Parkes and Thrift (1978) shows it. But here is not the subject of our topic.

<sup>&</sup>lt;sup>c</sup> Annex A presents the mathematical demonstration of neighborhood.

reducing the distance to maximize interactions (Bailly<sup>61</sup>, 1998) is not enough. We can perceive a "death of distance" (Cairncross<sup>62</sup>, 1997) which emphasizes the end of the absolute domination of local over global in the spatial human decision process.

#### Towards a global world: the economic and social reasons

The emergence of a global world is not the consequence of political decisions, or any decisions in general. It is simply the consequence of a double process, economic and social, where technological progress is at the center of the evolution. In economics, technological progress has allowed improvement in the productivity of the production process with economic scales in volumes that create increasing returns that encourage big production. This big production of the offer will find outlets on a worldwide scale with the decrease of transport costs due to technological progress again (Krugman, 1991b). But if technological progress has encouraged the widening of the offer on a worldwide scale, the demand has to share this perspective to end up in a globalization system. Here is the social phenomenon. At the same moment that production structure was transformed, the nature of the demand – thanks to technology progress appliances – was changing in its conception of space in daily life to be in accordance with this new offer. This social part of globalization is in general disregarded.

"White goods" (household electricals) have democratized free time in the everyday timetable thus bringing about the conditions to interrupt the domination of "experienced space" on the "perceived space" and "imagined space". People are no longer tied by the obligations of household tasks. They now have time to think about and to look away from their own local space. "Brown goods" (Hi Fi, TV, video, etc...), in particular television, are going to use this free time to present them with a new perception of an attractive staging (mise en scène) reality (Baudrillard<sup>63</sup>, 1968). TV proposes one of the first virtual products for mass-

consumption (Simon<sup>64</sup>, 1996). It is the beginning of the domination of "perceived space" on "experienced space".

The telephone is going to strengthen the comfort (Le Goff<sup>65</sup>, 1994) of this domination by allowing interindividual exchanges beyond the distances, so weakening at the same time the interest in local world. Telephone gives everybody the choice of social interactions (Goffman<sup>66</sup>, 1974) and creates a new relationship with action through machines: the remote control.

The automobile, different from other technological appliances, acting on "experienced space" and not "perceived space", confirms this new remote existence by giving people the individual choice to affirm their difference in this connexionist world (Boltanski et Chiapello<sup>67</sup>, 1999) through two new social classes: nomad and sedentary instead of the classical rich and poor distinction.

Computers, by facilitating the rational way of thinking, becomes essential in the rational perception of world by offering not just virtual products like TV or Hi-Fi but complete virtual reality. The interest of these virtual realities is that it maximizes individual choice by offering some alternatives to reality, and also particular links between virtual and real reality (Simon<sup>68</sup>, 1977). Computers reinforce the well-being of a perceived rational global world (Scitovsky<sup>69</sup>, 1978; Cotta<sup>70</sup>, 1998) where everybody chooses not only his products but also his reality.

Lastly, Internet lays the final stone of this evolution by proposing not virtual products or virtual realities but packaged virtual worlds where choice is total: you decide what you do, where you do it, when you do it, when you want to stop it but also with whom you do it. Here

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we acknowledge the contribution of Internet, it brings network dimension to virtual realities. The last element to build a new world. All these technologies bring to common man the absolute real liberty, but in virtual worlds.

In conclusion, globalization is this double evolution, economic for the offer and social for the demand. Both are due to the technological progress and its appliances. It improves productivity (for the offer) and access to comfort (for the demand). It is transforming our civilization with a double reduction: from reflection to a technical rationality and from society to a simple way of disposing of goods as Schelsky<sup>71</sup> (1963), Marcuse<sup>72</sup> (1968) or Habermas<sup>73</sup> (1973) condemned it. Schelsky, Marcuse and Habermas criticized a lot that evolution that reduces free will of people. They believed that this shift would be in favor of political power. They made a mistake. Contrary to what they were thinking, it is not politicians who have made profit from this technological evolution but international organizations. By being the reference structure for international exchanges, international organizations for profit benefit the most from globalization both in the production department for the offer and in the marketing and commercial department for the demand. They encourage this movement to make money. Thus it accelerates the implementation of this new way of thinking space where distances disappear as much as borders.

Conversely, politicians need borders. At least a physical border since they express their power only inside their national territory. This loss of control of states and politicians in the appreciation of space has and will have huge consequences for everyone: individuals, organizations, and states. To understand what new relationships are going to be drawn up between these actors, the understanding of space is essential. In particular, we need a common paradigm, which explains spatial actions to individuals, organizations and states. The Territory concept of space should bring us the solution.

#### Towards a global world: the importance of proximity

Before presenting the territory concept, we need to understand the spatial behavior of different actors in this new world. If men are now living in a perceived global world, can they think it through? Are they really aware of it and how do they make decisions in this context? The same question arises for organizations and states. With the "death of distances", what is the dominant spatial behavior? It is no use reducing the distance now, so what does every agent demand from spatial environment? "Death of distance" is nothing other than the domination of the economic distance over all the other distances since technological progress has a price. So, all constraints in this world are concentrated in economics and the agent wants to avail himself of maximal choice. This choice in space is materialized by proximities. As much as reducing the distances was essential in a local world, enjoying proximities is fundamental in a global world. But what is proximity?

Proximity is a value judgment on distance. It is a qualitative interpretation of the perception of distance<sup>d</sup>. Differing from the conception of neighborhood, a mathematical definition of proximity does not exist (Lamure<sup>74</sup>, 1998; Largeron and Auray<sup>75</sup>, 1998). Proximity cannot be seized up quantitatively: you do not measure a distance and decide upon a proximity but you do judge a distance as a proximity.

#### The new difference between distance and proximity

Proximity and distance are thus in two different ways. This difference was not in evidence in a local world where it was possible to "declare proximity" only on short distances. Proximity was then "mechanical" (Virilio<sup>76</sup>, 1995). Today, in a global world, this distinction appears. From now on, a proximity is not necessarily a short distance and a short

distance a proximity. Spatial human action is going to be different according to whether one chooses to act on either distance or proximity.

About distance, human actions try generally to reduce distance through a service (transport, communication, utilities...). The diagram below presents this generic human action on distance.



It is a common service, most of the time collective, to act only on distance d and not on the realities A and B. The range of services is the same for everybody for the distance. The quality of the service depends on the perceived reduction of d.

About proximity, it is much more complicated. You do not know what criteria do a proximity in the cognitive representation of space of the character. So you cannot just act on d with a generic service that is the same for everybody. You have to act on the set: A, B and d, to try to put conditions for the emergence of a proximity for each individual agent. The diagram below represents this process.

<sup>&</sup>lt;sup>d</sup> This is in accord with this modern global world where « perceived space » is so important.



The emergence of a proximity depends on every character. But criteria are not determined and fixed. So the provider of the service can never be sure that he has succeeded in this. With proximity, you cannot play directly on the perception (whereas with distance it is possible), you have to act on reality as a whole, hoping that you will change for the better the perception of the agent.

Aware of this differentiation of judgements about distance and proximity, some researchers, initiated by E.T. Hall (1959<sup>77</sup>, 1971<sup>78</sup>) and the Proxemy movement – for example Goffman<sup>79</sup> (1973) –, studied the cognitive representation of space, in the aim of understanding psychological mechanisms that « create » a proximity. These studies concentrate on the use of distance in daily life (at what distance do we greet somebody, for what distance do we need a car, at what distance do we feel secure, and so on…). All these studies endeavor to emphasize the normalization of distance appreciation in a specific situation, but do not give a generic explanation of the meaning of proximity and why people have the desire to "declare proximity". Nevertheless, all studies note the same thing: the existence of a proxemic "law". "All other things being equal, what is close (here, now) is more important for me than what is faraway (foreigner, somewhere else, in the past, in the future)" (Bailly<sup>80</sup>, 1998). So, the idea of importance is associated to proximity.

We believe that proximity declarations have a social function. It allows an agent to emphasize to other people what beyond the distance is important for him. Which means giving somebody the possibility to mark his territory by language like animals do with their hormones or dejections.

Consequently, "to declare a proximity" on something means that we want to make known to other people that this thing belongs to our territory. This does not mean that we own materially this thing (ownership is a way of reducing distances, or we have seen that it is not enough to create a proximity), it can have no link at all with us from any nature (family, property). For instance, the landscape of the daily commuter can belong to the territory of an agent if he declares a proximity about it. Only the agent can declare this proximity. He alone has the key to his proximity. We cannot set up a typology of criteria that create a proximity. Even for family links, we cannot decree family relationship links as a proximity<sup>e</sup>. For instance, a father may not take care of his child and may not pay attention what he does. Consequently, the child is not in the territory of the father who does not declare any proximity towards the child. All the more so if the father does not see his child frequently in his everyday life. But if he sees the child everyday even so he does not care about him, the child could be however in the territory of the father as a simple element of his daily life, on condition that the father declares a proximity towards the child. And family relationship links will not play any part in the determination of his choice.

As well a proximity is not always chosen. The action to declare a proximity is always chosen but not the object. For instance, a home can be in the neighborhood of a discotheque and the character cannot sleep at night. Then he declares a proximity to express his

<sup>&</sup>lt;sup>e</sup> Even if the word « proximity » etymologically comes from Latin *proximitas*, *proximus* that means « resemblance, affinity, family relationship ». In 1479, it was used only in legal vocabulary in inheritance deeds to emphasize the relationships. The use of this word has been gradually vulgarized over the centuries. From 16<sup>th</sup> century, it qualifies also the position of goods in space. Recently, it characterizes events in time.

dissatisfaction about the fact that the discotheque is unfortunately in his territory. The declaration of proximity is chosen, but not the discotheque. In this situation, the agent does not denounce the geographical closeness of the discotheque but only the subjected proximity where he cannot do anything.

As a conclusion, we have to make a distinction between "Subjected Proximity" and "Chosen Proximity" according to the appreciation of character on every kind of objects. Both are parts of the territory of the character.

This deduction helps us to understand why the territory concept is presently so important. In our modern world where all distances are disappearing or all are reducing to economic considerations, the ultimate border of local disappears also and it becomes essential for every actor to declare proximities to perpetuate their territory. In the old system of neighborhood this was not essential due to the limited scale of distances: everybody knew everybody, the rules of the game were clear as well as the definition of the territories. In every action, the "critical distance" was framed.

Now, everything is different. The complexity is bigger in a global world than in a local world due to the increasing number of different actions by an increasing number of different actors. All the more so as this world is not only bigger but changing in its nature with a "perceived" world associated to the development of virtual universes, in competition with an "experienced" world, the real one. So we need new tools. Not just to understand the complex dynamic of this new conception of space but to draw up the maps of these modern spatial actions (Jacob<sup>81</sup>, 1992).

#### **The Territory Concept**

This idea to reduce complexity of a specific variable by a representation is not new in management literature. In the eighties, the technological progress itself was at the center of every reflection about strategy (GEST<sup>82</sup>, 1986; Dussauge, Ramanantsoa<sup>83</sup>, 1987) with its representation through "Technological Grapes", sort of map of its dynamic evolution in a specific industry (in particular MIT works). Here, through Territory concept, we try to do the same thing to reduce the complexity around spatial actions. Michael Porter<sup>84</sup> (1999) by the localization study of geographic industrial concentrations did it already, but he used space as a variable to explain the evolution of a value chain (an economic phenomenon) and not the evolution of human actions in space.

We define the territory of an agent as "the space of the life". It comprises the whole realities which ones the character interacts in his daily life actions. The territory does not exist in itself, it is just a "perceived space". It simply materializes the perception of the agent making the distinction between what belongs to the field of "mine" and what belongs to the field of "others".

We have seen that ethology establishes the difference between individual and collective territory through critical distance between people from the same group. We are going to introduce this specificity in our model. The same, by studying proximity declaration, we have seen that some parts of the Territory are chosen and others are subjected. This difference has also to be included in. If we cross these two properties, we have got four different domains that are a segmentation of Territory. The table below presents them.

	SUBJECTED	CHOSEN
INDIVIDUAL	<b>Constraints</b> Domain	<b>Wishes</b> Domain
COLLECTIVE	<b>Sociality</b> Domain	<b>Community</b> Domain

The objective of this table is not to detail every domain inside the territory or to give a list of activities that could be more "Wishes" than "Constraints". This generic classification could not be exhaustive and fake the free choice of the character. This table is just an analysis support to make a picture of reality perceived by an agent at a precise moment.

The agent has the natural will to develop chosen domains (Wishes and Community) and to reduce subjected domains (Constraints and Sociality). If we represent this willingness by a diagram, subjected territory will be included in chosen territory. To maximize his satisfaction, the agent would try to extend permanently the perimeter between the circumference of chosen territory and the one of subjected territory.



Then every spatial service in this global world where proximities dominate has the objective not to act on the whole territory or a domain of this territory (the territory and the domains do not exist in themselves, they are just "perceived" objects) whereas a service can act on one element inside this territory. This element links up with a reality (virtual or real) to which the service can apply.

#### Some management applications of territory concept

#### Outsourcing

Let's take an example of the application of this concept to management. More and more companies are concentrating on their "core competencies" (Hamel and Prahalad<sup>85</sup>, 1995) and practice outsourcing. But what is outsourcing? Is it just facility management? What activities are or not outsourcing? Outsourced activities for a company are generally not the same for another. Some companies may decide to structure their worldwide assets geographically and try to choose by region what they want to outsource. This is a classical way of thinking assets in space. But this local decision process risks raising the question of the global structure of the organization. It can also in a top / down process decide for every subsidiary what activities have to be outsourced. But top management risks creating conflicts with operational management. However, if the company draws up the map of activities that are "subjected" or "chosen" according to its core competencies, it can facilitate its decision making in the choice of outsourcing. This decision will not only include a spatial and economic / social dimension but also the logic of the firm in its core competencies. Here, space is not just a variable of the decision process, it is integrated in the decision process.

The territory concept waives making a choice of the nature of space (physical, economic, social...), it is conducive to the decision process.

### Service delegation

It can be the same for a collectivity. Does it have to manage by itself energy, water, waste services or is it preferable to delegate some activities to private sector? But which ones? By what criteria? The map of the territory of the collectivity – not necessarily just physical, with economic constraints, as the collectivity can include social obligations such as "Wishes Domain" that the company has to take into account as a "Constraint Domain" – should help it to obtain a good agreement.

#### Individual services

Nevertheless, it is in supplying individual services that the Territory concept is the most useful. Indeed, with the progress of technology, individuals are more and more demanding about their comfort but their tastes are more and more inconstant. New techniques in marketing (Godin<sup>86</sup>, 1999; Peppers, Rogers, Dorf<sup>87</sup>, 1999) give a follow-up on customers in their desires, but the service offer still has to be reactive. With the Territory concept, the provider of the service can be in advance on other competitors because he identifies immediately the needs of the customer. Moreover, beyond that choice of the offer he can manage the customer relationship not just by asking him what he wants, but by listing all the customer "bursary" tasks in his daily round by following his life-style. This improves the potentiality of "proximity declarations" from customer.

This ability that can seem just anecdotal is essential in a global world where every company from everywhere is trying to acquire customers just by reducing prices, the last economic distance. To avoid succumbing to a price war (d'Aveni<sup>88</sup>, 1995), the competence to propose the right service for the requirement at the right moment, will be increasingly an essential competitive advantage.

To conclude, space in the globalization world can no longer be considered as an ordinary variable. All the more so because the nature of space is becoming more and more complex: physic, economic, social, politic, virtual... To understand and build efficient actions in the space of this global world, it is essential not to retain a local view for any particular point. The network of interconnections is too important and so diverse in its nature (economic, technological, ethical...) to think of making a good decision just by concentrating on the problem. It is essential first to have a global view. To reach it, new tools are essential to be able to pass from a local world to a global world and back again with ease. We believe that the Territory concept can facilitate this new way of thinking and acting in space.

In this article, we have emphasized the reason why this concept is important and the demonstration of its presentation. We have not developed the applications of its heuristic qualities, just giving a few examples concerning management. But the main interest of this concept is not really in an "organization to organization" relationship or "individual to individual" relationship, it is in the combination of every sort of relationship between the three main actors: individuals, organizations, states.

A "Globalization World" is a new world and nobody yet knows how it really does work and where it is going. The only thing of which we can be sure is that globalization has a future (and so it will be a success) but only if relationships between these three actors keep a good balance<sup>f</sup>. For this very reason, we think that papers on management around the Territory concept are important. We hope that this short article will incite the reader to some further thought on this exciting prospect.

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<sup>&</sup>lt;sup>f</sup> Or at least the same good balance that could exist in closed economy before the internationalization process.

### Annex A: mathematical definition of neighbored space and distance

Neighborhood definition

Let x be a point of E set, V(x) is a family of neighborhoods of x, and V is an overset of E.

 $\forall V, V \in V(x), \forall W, (W \supset V \Longrightarrow W \in V(x))$   $\forall V, V \in V(x), x \in V$  $\varnothing \notin V(x).$ 

If these three conditions are fulfilled then V(x) is what mathematicians call a « stabilized structure » for the overset that gives a first mathematical definition of neighborhood.

 $\forall V, V \in V(x), \forall W, W \in V(x), V \cap W \in V(x)$ 

This property "stabilizes" the finished intersection inside V(x) and so explains the definition of neighborhood. We have then a pretopologic structure of V.

 $\forall x, x \in E, \forall V, V \in V(x), \exists W, W \in V(x), \forall y, y \in W, V \in V(y).$ 

This property "stabilizes" relationships between oversets inside V(x). This last property precises again the definition of neighborhood by giving us a topological structure of V.

If these five conditions are fulfilled then V(x) is a neighborhood of x.

Distance definition

Given two distinct points x and y, and an application d.

 $d : ExE \rightarrow R^{+}$   $\forall x, x \in E, \forall y, y \in E, d(x,y) = 0 \Leftrightarrow x = y$   $\forall x, x \in E, \forall y, y \in E, d(x,y) = d(y,x)$  $\forall x, x \in E, \forall y, y \in E, \forall z, z \in E, d(x,z) \le d(x,y) + d(y,z)$  (triangular inequality)

If these three conditions are fulfilled then the application d is a distance.

#### References

- <sup>1</sup> Barney J.B. (1986), «Organizational culture : Can it be a source of sustained competitive advantage ? », *Academy of Management Review*, vol. 11, pp. 656-665.
- <sup>2</sup> Penrose E. (1959), *The Theory of the Growth of the Firm*, John Wiley.
- <sup>3</sup> Wernerfelt B. (1984), « A Resource Based View of the Firm », *Strategic Management Journal*, vol. 5, n° 2, p. 171-181.
- <sup>4</sup> Krugman P. (1991a), « Increasing Returns and Economic Geography », *Journal of Political Economy*, vol. 99, n° 3, pp. 483-499 (trad. fr. in Rallet A. et Torre A. (1995), *Economie industrielle et économie spatiale*, Economica).
- <sup>5</sup> Krugman P. (1991b), *Trade and Geography*, Cambridge (Mass.), MIT Press.
- <sup>6</sup> Krugman P. (1995), *Development, Geography, and Economic Theory*, Cambridge (Mass.), MIT Press.
- <sup>7</sup> Thisse J.F. (1992), « Espace et concurrence », *in* Derycke P.H., *Espace et dynamiques territoriales*, Paris, Editions Economica (Bibliothèque de Science Régionale), pp. 113-135.
- <sup>8</sup> Cox K.R. (1997), Spaces of Globalization : Reasserting the Power of the Local, New York, Guilford.
- <sup>9</sup> Porter M. (1999), « Grappes et concurrence », pp. 205-280, « Renforcer son avantage concurrentiel grâce à une stratégie mondiale », pp. 303-341, *in* Porter, *La Concurrence selon Porter*, Paris, Edition Village Mondial (English : Porter (1998), *On Competition*, Boston, Harvard Business School Press).
- <sup>10</sup> Lefebvre H. (2000), *La production de l'espace*, Paris, Edition Anthropos, Collection Ethno-Sociologie, 4<sup>ème</sup> édition, 1974.
- <sup>11</sup> Harvey D. (1989), *The condition of postmodernity*, Oxford, Blackwell.
- <sup>12</sup> Cantillon R. (1755), *Essai sur la nature du commerce en général*. Londres, chez Fletcher Gyles dans Holborn, pp. 3-23. On line text: http://panoramix.univ-paris1.fr/CHPE/Textes/Cantillon/ESSAI.html
- <sup>13</sup> Von Thünen (1994), *Economie et espace*, Paris, Edition Economica (sous la direction de Jean-Marie Huriot), 1826.
- <sup>14</sup> Marshall A. (1971), *Principes d'économie politique*, Paris New York, Edition Gordon & Breach, 1906.
- <sup>15</sup> Hotelling H. (1929), « Stability in Competition », *Economic Journal*, n° 39, pp. 41-57.
- <sup>16</sup> Hirschman A. (1958), *The Strategy of Economic Development*, New Haven, Yale University.
- <sup>17</sup> Weber A. (1929), *Theory of the Location of Industries*, Chicago, University of Chicago Press.
- <sup>18</sup> Lösch A. (1954), *The Economic of Location*, New Haven, Yale University Press.
- <sup>19</sup> Goldstein G., Gronberg T. (1984), « Economies of Scale and Economies of Agglomeration », *Journal of Urban Economics*, vol. 16, n° 1, pp. 91-104.
- <sup>20</sup> Rivera-Batiz F. (1988), « Increasing Returns, Monopolistic Competition, and Agglomeration Economies in Consumption and Production », *Journal of Regional Science and Urban Economics*, n° 18, pp. 125-153.
- <sup>21</sup> McCann P. (1995), « Rethinking the Economics of Location and Agglomeration », Urban Studies, vol. 32, n° 3, pp. 563-577.
- <sup>22</sup> Ciccone A., Hall R. (1996), « Productivity and the Density of Economic Activity », *American Economic Review*, vol. 86, n° 1, pp. 54-70.
- <sup>23</sup> Fujitsa M. & Thisse J.F. (1996), « Economics of Agglomeration », *Journal of the Japanese and International Economies*, vol. 10, n° 4, pp. 339-378.
- <sup>24</sup> Glaeser E., Kallal H., Scheinkman J., Schleifer A. (1992), «Growth in the Cities », Journal of Political Economy, vol. 100, n° 6, pp. 1126-1152.
- <sup>25</sup> Glaeser E. (1994), « Cities, Information, and Economic Growth », *Cityscape: A Journal of Policy Development and Research*, vol. 1, n° 1, pp. 9-47.
- <sup>26</sup> Henderson V. (1994), « Where Does an Industry Locate? », *Journal of Urban Economics*, vol. 35, n° 1, pp. 83-104.
- <sup>27</sup> Henderson V., Kuncoro A., Turner M. (1995), « Industrial Development in Cities », *Journal of Political Economy*, vol. 103, n° 5, pp. 1067-1090.
- <sup>28</sup> Henderson V. (1996), « Ways to Think About Urban Concentration: Neoclassical Urban Systems versus the New Economic Geography », *International Regional Science Review*, vol. 19, n° 1-2, pp. 31-36.
- <sup>29</sup> Derycke P.H., Huriot J.M., Pumain D. (1996), *Penser la ville Théories et modèles*, Paris, Collection Villes, Edition Anthropos Economica.
- <sup>30</sup> Huriot J.M. (1998), *La ville ou la proximité organisée*, Paris, Collection Villes, Edition Anthropos Economica.
- <sup>31</sup> Giarratani F. (1994), « Nurture the Symbiosis Between Economics and Regional Science (it's Worth the Trouble) », *International Regional Science Review*, vol. 17, n° 3, pp. 343-346.
- <sup>32</sup> Markusen A. (1995), « Growing Pains: Thoughts on Theory, Method, and Politics for a Regional Science of the Future », *International Regional Science Review*, vol. 17, n° 3, pp. 319-326.
- <sup>33</sup> McCann P. (1995), «On Regional Science: Some Thoughts From a Recent Observer», *International Regional Science Review*, vol. 18, n° 2, pp. 249-252.
- <sup>34</sup> Amin A., Thrift N. (1992), « Neo-Marshallian Nodes in Global Networks », *International Journal of Urban and Regional Research*, vol. 16, n° 4, pp. 571-587.

- <sup>35</sup> Storper M. (1997), *Spaces of Globalization: Reasserting the Power of the Local*, New York, Guilford Press.
- <sup>36</sup> Storper M., Salais R. (1997a), *The Regional World: Territorial Development in the Global Economy*, New York, Guilford Press.
- <sup>37</sup> Storper M., Salais R. (1997b), *Worlds of Production: The Action Frameworks of the Economy*, Cambridge (Mass.), Harvard University Press.
- <sup>38</sup> Bengt-Ake L. (1992), *National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning*, London, Pinte.
- <sup>39</sup> Dosi G., Giannetti R., Toninelli P. (1992), *Technology and Enterprise in Historical Perspective*, Oxford, Oxford University Press.
- <sup>40</sup> Nelson R. (1993), National Innovation Systems, A Comparative Analysis, New York, Oxford University Press.
- <sup>41</sup> Cimoli M., Dosi G. (1995), «Technological Paradigms, Patterns of Learning and Development: An Introductory Roadmap », *Journal of Evolutionary Economics*, vol. 5, n° 3, pp. 243-268.
- <sup>42</sup> Rogers E.M. (1995), *Diffusion of Innovations*, New York, Free Press.
- <sup>43</sup> Piore M., Sabel C. (1984), *The Second Industrial Divide*, New York, Basic Books.
- <sup>44</sup> Harrison B. (1992), « Industrial Districts: Old Wine in New Bottles? », *Regional Studies*, n° 26, pp. 469-483.
- <sup>45</sup> Pyke F., Sengenberger W. (1992), *Industrial Districts and Local Economic Regeneration*, Geneva, International Institute For Labour Studies.
- <sup>46</sup> Granovetter M. (1985), « Economic Action and Social Structure: The Problem of Embeddedness », *American Journal of Sociology*, n° 91, pp. 481-510.
- <sup>47</sup> Perrow C. (1992), « Small-Firm Networks », *Networks and Organizations: Structure, Form and Action*, Boston, Harvard Business School Press.
- <sup>48</sup> Burt R. (1997), « The Contingent Value of Social Capital », *Administrative Science Quarterly*, vol. 42, n° 2, pp. 339-365.
- <sup>49</sup> Harrison B., Weiss M. (1998), *Workforce Development Networks*, Thousand Oaks (Calif.), Sage.
- <sup>50</sup> Harvey D. (1973), *Social justice and the city*, London, Edward Arnold.
- <sup>51</sup> Haegerstrand S. (1967), *Innovation diffusion as a spatial process*, Chicago, University of Chicago Press.
- <sup>52</sup> Esser A.H. (1971), *Behavior and Environment. The Use of Space by Animals and Men*, London, Cambridge University Press, 1971.
- <sup>53</sup> Ruwet J.C. (1995), article « Territoire » in *Encyclopaedia Universalis*.
- <sup>54</sup> Rabaud E. (1929), « Phénomène social et sociétés animales », *Bulletin Biologique Français et Belges*, n° 63, pp. 377-398. Et Rabaud (1937), *Phénomène social et sociétés animales*, Paris, Alcan.
- <sup>55</sup> Picard F. (1933), Les phénomènes sociaux chez les animaux, Paris, A. Colin.
- <sup>56</sup> Grassé P.P. (1946), « Sociétés animales et effet de groupe », *Experientia*, n° 2, pp. 1-16.
- <sup>57</sup> Richard P.B., « Le Comportement territorial chez les Vertébrés », *in* Richard G. (1970), *Territoire et domaine vital*, Paris, Presse Universitaires de France.
- <sup>58</sup> Carlstein T., Parkes D., Thrift N. (1978), *Timing space and spacing time*, London, Edward Arnold.
- <sup>59</sup> Sahay S. (1997), « Implementation of Information Technology: A Time-Space Perspective », Organization Studies, vol. 18, n° 2, pp. 229-260.
- <sup>60</sup> Popper K. (1973), *La Logique de la Découverte Scientifique*, Paris, Edition Payot, (1959) pp. 80-82.
- <sup>61</sup> Bailly A.S. (1998), « Maîtriser les proximités », *in* Bellet M., Kirat T., Largeron C., *Approches multiformes de la proximité*, Paris, Editions Hermès, p. 342.
- <sup>62</sup> Cairncross F. (1997), The Death of Distance: How the Communications Revolution Will Change Our Lives, Boston (Mass.), Harvard Business School Press.
- <sup>63</sup> Baudrillard J. (1968), Le Système des Objets, Paris, Editions Gallimard, p. 196.
- <sup>64</sup> Simon H.A. (1996), *The Sciences of the Artificial*, London, Third Edition, MIT Press, 1969.
- <sup>65</sup> Le Goff O. (1994), *L'invention du confort : naissance d'une forme sociale*, Lyon, Presses Universitaires de Lyon.
- <sup>66</sup> Goffman E. (1974), *Les rites d'interaction*, Paris, Les Editions de Minuit, p. 32 et suivantes.
- <sup>67</sup> Boltanski L. et Chiapello E. (1999), *Le nouvel esprit du capitalisme*, Paris, Editions Nrf Gallimard, pp. 231-238.
- <sup>68</sup> Simon H.A. (1977), « What computers mean for man and society », *Science*, n° 195, pp. 1186-1191.
- <sup>69</sup> Scitovsky T. (1978), L'Economie sans joie, Paris, Edition Calmann-Lévy, pp. 157-165
- <sup>70</sup> Cotta A. (1998), L'Ivresse et la Paresse, Paris, Fayard, pp. 563-588.
- <sup>71</sup> Schelsky H. (1963), *Einsamkeit und Freiheit*, Hambourg, p. 299
- <sup>72</sup> Marcuse H. (1968), *L'Homme Unidimensionnel* : essai sur l'idéologie de la société industrielle avancée, Paris, Editions de Minuit, 1964.
- <sup>73</sup> Habermas J. (1973), *La technique et la science comme « idéologie »*, Paris, Edition Gallimard, 1968, p. 3-25.
- <sup>74</sup> Lamure M. (1998), "Proximité(s), voisinage et distance", *in* Bellet *et al.*, *Op. Cit.*, p.9-12.
- <sup>75</sup> Largeron C. et Auray J.P. (1998), "Mesures ou voisinages : que choisir pour évaluer une proximité ?", *in* Bellet *et al.*, *Ibid*, p.41-63.
- <sup>76</sup> Virilio P. (1995), *La Vitesse de Libération*, Paris, Edition Galilée, pp 65-74.

- <sup>77</sup> Hall E.T. (1984 new edition), *Le langage silencieux*, Paris, Edition Le Seuil, Collection Points Essais, 1959.
- <sup>78</sup> Hall E.T. (1978 new edition), *La dimension cachée*, Paris, Edition Le Seuil, Collection Points Essais, 1971.
- <sup>79</sup> Goffman E. (1973), *La mise en scène de la vie quotidienne*, tome 2, Paris, Editions de Minuit, Collection Le Sens Commun. (English: Goffman (1971), *Relations in Public: Microstudies of the Public* Order, NY, Basic Book).
- <sup>80</sup> Bailly A.S. (1998), « Maîtriser les proximités », in Bellet et al., Op. Cit., p. 342.
- <sup>81</sup> Jacob C. (1992), *L'empire des cartes*, Paris, Edition Albin Michel.
- <sup>82</sup> GEST (1986), Grappes technologiques. Les nouvelles stratégies d'entreprise, Paris, McGraw-Hill.
- <sup>83</sup> Dussauge P. et Ramanantsoa B. (1987), *Technologie et stratégie d'entreprise*, Paris, Edition McGraw-Hill, chapitre 6.
- <sup>84</sup> Porter M. (1999), *Op. Cit.*, pp. 205-280.
- <sup>85</sup> Hamel G., Prahalad C. K. (1995), *La conquête du futur*, Paris, Editions InterEditions.
- <sup>86</sup> Godin S. (1999), *Permission Marketing: Turning Strangers into Friends, and Friends into Customers*, New York, Simon & Schuster Books.
- <sup>87</sup> Peppers D., Rogers M., Dorf B. (1999), Le One to One en pratique. Mode d'emploi, Paris, Edition d'organisation.
- <sup>88</sup> d'Aveni R. (1995), Hyper Compétition, Paris, Edition Vuibert.