

## **Relations between city and territory. The “territorial city” as (new) spatial pattern for the digital era**

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*Abstract.— The transformations in progress in the Italian urban system are analyzed according to three main aspects: 1) the reduction of population in the cities, because of the townspeople movement toward the ring areas; 2) the dissemination of primary urban functions from the traditional locations (the urban centers) to the surrounding territories; 3) the small authority of the town planning set of rules, that does not match to the needs of a modern society.*

*Aim of the paper is to characterize the current relationships establishing between city and territory. It argues that the attention to the territorial phenomena (and, consequently, to the territorial planning) is very important also in the actual phase of strong development of the information economy society.*

*Infact the changes in the economic paradigms of the modern society can affect on the role of the territory in order to develop its specificities and capacities. Such development, however, must not be intended as competitive with the role of the city.*

*The “territorial city”, as goal of this evolution, represents the potential synthesis of a cooperative action between city and territory.*

*Key words.— Territorial space; Urban space; Information society; Planning role, Digital city, Networks*

*Motclés.— Territoires, Ville, Société de l'information, Aménagement, Télécommunications, Réseaux*

### **1. INTRODUCTION**

The Italian territory is actually subject to a set of phenomena weighing meaningfully on it. The phenomena to notify are three:

1. the very low growing of population. This state determines a stagnation in the growing of the cities;

2. the ever-increasing extension of the constrained territory. On the one hand, it increases the protected space but, on the other hand, it causes the growing of pressure on the not protected territory;

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3. the low control of the territorial transformations. It determines a reduction of the capacity of the public administrations to manage the use of the urbanized and of the non-urbanized soil.

The result is that the territorial organization is in a continuous change; in particular, some very dynamic territorial structures are increasing their weight modifying the economical and social geography of the Italian Regions.

Because of the structural ongoing changeover, the organization of the territory is inclined to increase its complexity transforming the traditional organization (based on the dualism town / not-town) in a new organization where some new territorial forms are founded. In particular: the metropolis; the town; the territorial city; the environmental space.

The more important elements of the new territorial structure in the former classification are the metropolis, the town and the territorial city, while the environmental space is characterized as a weak element; it belongs the protected areas, for the presence of a remarkable environmental matrix, and the marginal areas not interested by the newest economical processes. Both these areas require particular enhancement policies.

It is very important to focus the attention on the role of the "territorial cities"; they are more wide (in extension) of the metropolis and their functional development seems related not on physical transformation of soil but on virtual transformation of the borders of the communications (Clementi, Dematteis, Palermo, 1996). In this meaning the "territorial cities" represent a new hypothesis of study more than a space of functional concentration but, in this new dimension, they acquire a new significance the territorial planning as support structure for the city development and for the city planning.

It is confirmed that the city is the engine and the spreader of the development, but it is possible to characterize several phases in which this role is carried out with more or less energy.

While in the growing and full maturity period of the industrial economy the city conquers a great importance for the economy of scale that it creates, in the following phase of setting of the industry - marked by the loss of centrality of the factories and by the growing of the network enterprises - it takes place a decadence of the city, owing to the loss of role in a territory more and more equal and the increasing of the negative phenomena of the urban concentration. This phase is under exhaustion and it is now a moment of great vitality of the cities, that are returned to carry out a primary role in the territorial systems.

The revenge of the cities is due to a series of reasons. In particular, in an economy more and more "virtual" - based on the information's treatment - and in a society in which the "quality" is a primary attribute of every product, the city recaptures the role of development engine and of innovation incubator. The newness it is that the city increases its cooperation with the surrounding territory on the basis of a transfer of functions out of the city and of an unalterable

changing of the previous subjection relations of the out-of-town space against the urban space.

## **2. THE TRANSFORMATION OF THE TERRITORIAL ORGANIZATION**

The changes at international, regional and local scale push to a search of new approaches to the reading and to the interpretation of the urban phenomena and, consequently, to the understanding of the cities role in the evolution of the regional territories.

The territorial systems are becoming denser and denser: physically (the growth of the mother city and of the other town centers, the localization of wide infrastructural poles, the development of new networks, mainly of communication) and functionally (the increase of the number of connections, the problems of management of the existing activities, the missing co-ordination between physical and virtual networks, the difficulty of control and of goodwill of urban authorities, the absence of suitable government instruments); moreover, they seem to be oriented towards urban and territorial structures which find reference in the physical re-configuration and in the functional re-organization of the main elements of the territorial organization.

Furthermore, the trend to the internationalization of the economical policies promoted by the most advanced countries increases the number of subject into play in the territorial system and modifies the relations among systems and within each system and changes the internal hierarchies. For these systems, so, is requested a new role and, consequently, a new functional organization.

The research of the conditions ensuring competitiveness for the urban systems draws force from the territorial characters. In other words, in the construction of the city network, the particular functional organization can represent a competitive advantage and it pulls its root into the urban structure rather than in the local characteristics of the territory.

Beside the process of internationalization, it is to consider another relevant change factor for the spatial configuration and for the organization of the territory: the increasing speed of diffusion of the innovative technologies. Advanced telecommunication technologies affect deeply in the functional organization of the city and require policies aimed to the re-vitalization and to the international competition of the urban systems, promoted taking into account the changes in act, the balance between demand and supply and the adequacy to the changing conditions of globalization.

The city becomes, so, the hub element of the network of relations in the territory. Therefore, a new paradigm of reading and interpretation is proposed on the basis of a new definition of the processes of distribution and allocations of the activities.

The spatial and relational condition of mono-functional areas, connected by physical communication networks, stands down to a system of activity that is diffused and connected by immaterial communication networks. The city is considered as the center of the network of relations which connects the activities in the territory. This allows to state that the networked organization of the city is not under the construction of a physical or immaterial communication network but it exists in an embryonic condition, determined by the virtual network of relations existing among activities.

Therefore, the functional and physical organization of the urban systems are the elements determining the networked configuration of the city. According to the transformations that are taking place, we are looking at a progressive redefinition of the territorial hierarchy in which cities and regions assume a new role; in fact, new technologies have determined the decentralization of some activities, but they tend to increase the concentration of strategic urban activities.

In the post-industrial economy the city, no longer site of production and exchange of goods, becomes site of direction, organization and incubation of activity, of access to information and of production of know-how. Meanwhile, the decentralization of production processes expand the subsidiary area and of influence of the city, determining a more extended process of metropolitan transformation of the territory (Conti and Spriano, 1990).

The research of a competitive advantage often turns into new synergies and new forms of organization among urban entities which, in this way, become active in the dynamics of economical and social development; consequently, we need to define the main elements for a new urban and territorial design in terms of international competition.

### **3. THE EVOLUTION OF THE FORMS OF THE URBAN AND REGIONAL ORGANIZATION**

#### **3.1. The physical network**

On the international competition scene the role of the city is of element of relation's network; it requires to overtake the traditional rationalist organization based upon the subdivision of the territory into mono-functional areas. This new point of view interests the territorial and the urban level.

The rationalist organization of the territory was based upon a rigorous distribution of the tasks of every part of the territory and on a distribution of weights related to the single parts.

In particular, the monocentric territorial organization requires a central urban element, at a national dimension, including primary management activities (see figure 1). The regional and local cities depend upon this central element. The connecting flows have a prevailing unidirectional character in consequence of the high attractivity of the center.

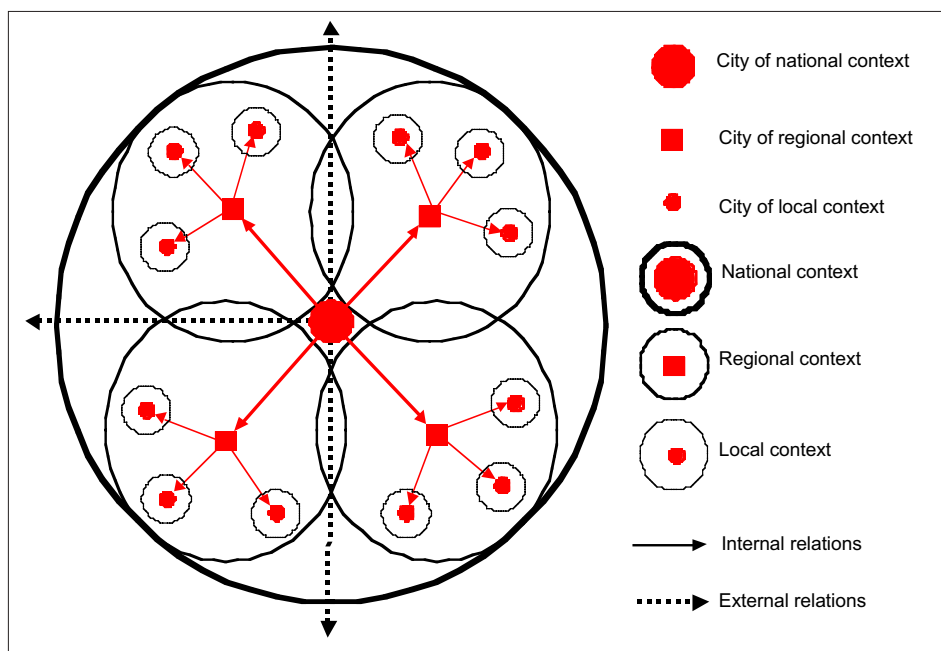


Figure 1.— *The physical network of a territory*

*In the phase of industrialization of the western countries a rigid subdivision of tasks assigned to the cities took place. These were organized according to a functional distribution: consequence of internal hierarchization.*

### 3.2. The “virtual network”

The transition from a monocentric organization of the territory, well described by Christaller (1968), to an economical and territorial polycentric organization - functionally subsequent - requires a complete review of the roles and of the connections among the hub elements of the territory.

The emerging organization, in fact, is characterized by a system of relation with a central element that assumes new characters. In particular, the strategic tasks and the guidelines for the urban management take place of the planning of every aspect of the associated life. A similar innovation of roles tends to be repeated at a regional level, too. The new organization involves a modification of the system of relations on the territory, with reference to specific conditions leading to economic advantage in the relations with other territorial operators and to the weight taken on by some functional and physical strategic infrastructures. Reference is made in particular to universities, research centers, advanced industry and infrastructures.

The territory tends to be organized in a casual way, at a first glance (see figure 2); it follows an economical model responding to the conditions of each region. In the development of such structure is determined a transition from mono-directional to bidirectional relations. Furthermore, the transformation of the old

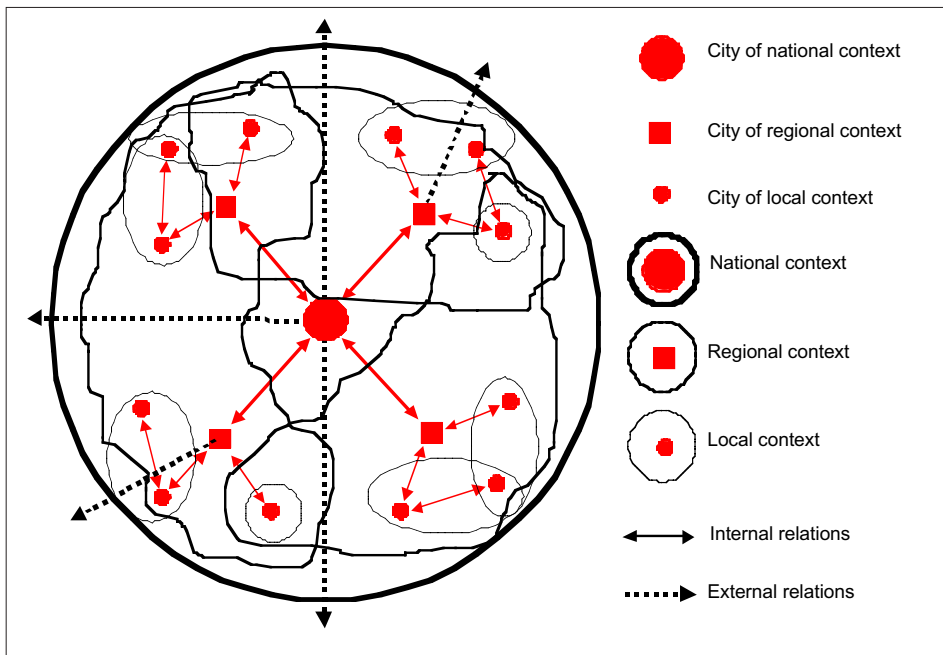


Figure 2.— The “virtual network” of a territory

*In the networked organization a central element of the territory has the function of strategic direction. It causes an increase in the stronger entities and the setting of connections and networks which seem to be longer bound to the territory.*

structure into the new requires an enlargement of the territorial dimension invested by political resolutions. Thus, the relative weight of the regional territory increases in comparison with that of a single city, even if the functional structure of the territory needs a particular attention to the problems of urban re-organization and to the role that the city acquire as a hub of the system (Mauguen, 1993).

Within the regional context, the city can be read as a subsystem with some characters of the higher system (McLoughlin, 1973); on the basis of a systemic approach the city can be considered an element in which many of the factors that are determinative for competition at regional level (functions, activities, networks, connections) are concentrated. It is possible to think about the city as a social and economical construction structured in a form of “network” and, in particular, of a “virtual network”.

The attention to the urban phenomena requires an approach that allows the connection of social and economical phenomena on a regional scale and on an urban scale. In fact, in a context of regional development, the city behaves more like a towing element of change than like an element towed.

The features of the re-organization process of the urban functional system into a network of the urban systems is represented by the overall system of

exchange upon national and international territory. This assumption puts to the forefront the traditional way of thinking formed by the phases of reading, project and start of the evolution of the system, putting the physical and functional organization of urban areas into the form of "virtual networks" like one of the conditions for the triggering of internationalization.

Within the limits of the network of relation on a regional and super-regional scale, the evolution of the city is done on the basis of specific characteristics which can be defined as preconditions. Such characteristics have been deduced by some international case studies of emerging international metropolis (King, 1991).

### **3.3. The network of the "virtual networks"**

The presence of new systems of communication lowers the distances and empties the concept of "border" - represented by the administrative system, by the urban concentration and by the physical distance with other urban realities, more or less distant - of all meaning.

The exchange of informations creates virtual networks among elements of different physical realities which are connected only thanks to a specified net. Out of this network the other elements of the two territories can also ignore between them.

The specialized networks therefore creates a kind of "virtual kingdom" in which the informative exchanges are free and they happen only on the base of the mutual convenience. It is evident, then, the danger of the creation of new rigidities founded on the formation of closed virtual fields.

Paradoxically, in fact, they can recreate to international level "closed" systems of relationship that trace typical structures of the local anthropical organizations. The prevention of such danger is effected developing a network system more great and more open in which it is possible to transfer itself from the specialized network to a general network of the relationships among territorial realities.

In this perspective the network organization of a territory can be seen in the in the eyes of the relationships with other territories in which the inside relationships are equally organized. The relationships among distant territories are developed creating virtual networks, every with one prearranged purpose (political, economic...) and every with a defined whole of objectives. "... globalization consist of multi-layered processes. We agree that globalization theories are right in pointing to the interdependence of different levels of social change. Yet, the interconnection of the different levels remains ambiguous" (Immerfall, 1998, 9).

## **4. PLANNING AND TERRITORIAL PROMOTION**

It is now important to analyze the role of the physical structure that subtends these virtual urban and territorial realities.

The assumption is: the physical structures do not become useless; rather, the social strength and the stratification of the inside relationships contributes to

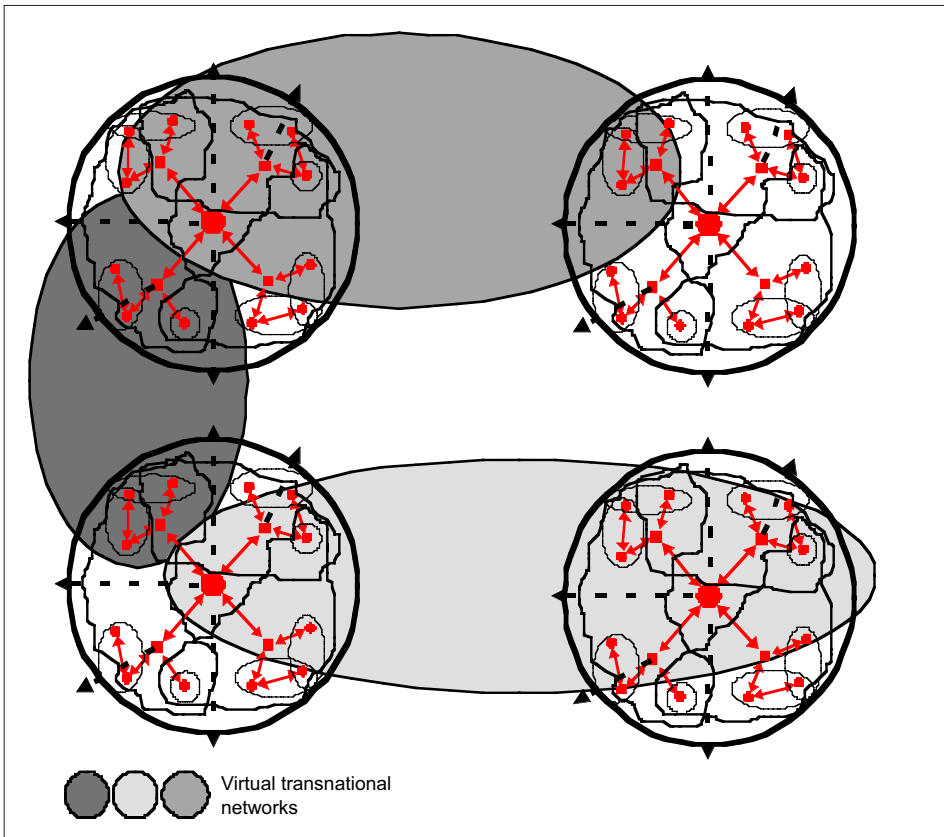


Figure 3.— The network of the virtual (transnational) networks

*The virtual networks also contain distant territories between them. They are specialized networks and they extend to be closed. The challenge is to open these virtual networks creating a real transparency between them.*

create more dynamic and more ready realities and to move them on the international productive and cultural horizons.

“... We do not assume from the outset that territoriality will evaporate as an organizing principle for social life. Territory means bounded and marked social space. Territoriality refers to human behavior as it is spatially organized or oriented. It works as a resource control strategy, proscribing and prescribing specific activities within spatial boundaries. Space, boundaries, boundary control and boundary transgression are the key words of the territorial approach. It is important to emphasize that none of these are naturally given. The territorial approach is about both the increase and the diminution of the importance of boundaries and about power as well as identity. Territory both constrains and impacts movements. Territory enables far-flung contacts as it symbolizes protection and community” (Immerfall, 1998, 7).

To this goal it is useful to wonder the role of the planning, of the interventions programming and of the territorial promotion.

The planning acts on the dwelling forecasts, on the use of the territory and on the distribution of the activities; it has the aim of the rationalization of the system. The role of planning in this scenario is:

- to work on the physical system of the services;
- to work on the urban quality;
- to favour the opening of the planned territory to the exchanges with the outside;
- to census the nets of outside connection and to extend its meaning.

Aim of a town plan or of a territorial plan is to organize a hierarchical network system that can strengthen a model of development of the town/territory or that can impose new models. The classical territorial model (the polycentric territory) represents a planning model with a particular attention on the dwelling matrix and on the infrastructures of the territory.

This model is no more sufficient to explain the social and the economic changes in progress. To strengthen and to rationalize the system it is necessary a particular attention on a series of fields, or (Galuzzi, Vitillo, 1999):

- the mobility;
- the networks and the technological and energetic equipments;
- the system of the structural functions;
- the system of the dwellings and of the infrastructure.

Such represent the mostly involved elements in the definition of the characteristics of the relationship between city and territory. Beginning from a correct balance between them, it is possible to consider the economical development as a result of political and infrastructural choices because a productive economic system selects and rewards a territory thanks to a superior organization in comparison to others (see figure 4).

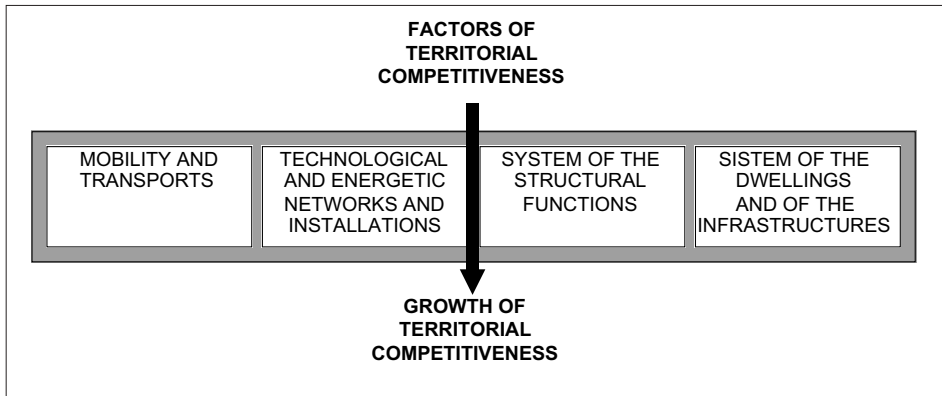
In this hypothesis the plan defines the application field of the possible solutions; it must be compared with the possible alternative tendencies to territorial level. They can be so summarized:

1. the city exports only the functions enable to remain in it; it maintains inside the compatible functions and, in particular, the functions with an high value added in terms of innovation;

2. the city exports in the territory also functions with high rate of innovation. It is consequently forced to modify the correlation with the territory (from a non democratic to a more democratic relations);

3. as in 2, but the city maintains its strong urban role (non democratic relations).

The programming and the promotion act on the characteristics of the territory; they are related to the opportunities of development with the plan forecasts and offer certainty of long term in the result of the investments (see figure 5).



*Figure 4.— Factors of territorial competitiveness.*

To this purpose it is necessary, before everything, to master the “product” of the area localizing the “clusters”; in other words the operators and the economic activities whose competitive advantage is increased by the interrelations and by the bonds that they develop.

In a cluster that want to have a chance of success it is possible to found four factors, mutually related among them:

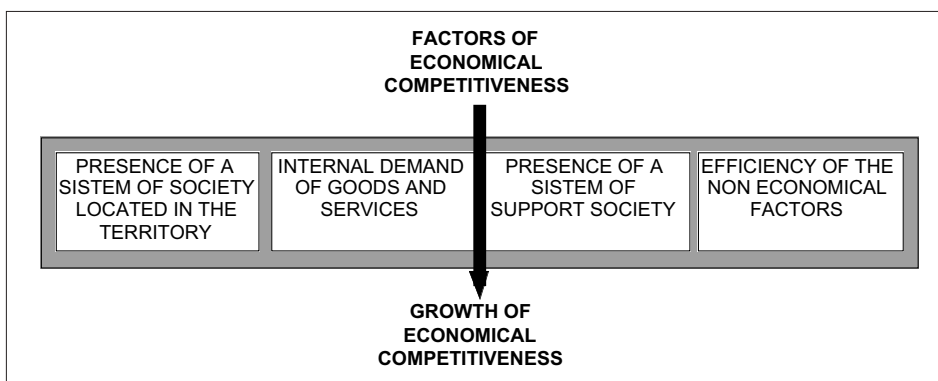
1. a group of firms operating in a fixed sector, making competition and producing innovation;
2. a strong and choosy inside demand;
3. a system of efficient connected firms;
4. a series of exogenous factors (capitals, natural resources, infrastructures, research centers, university, public administrations) whose quality engraves on the quality and on the quantity of the productions.

## 5. CONCLUSIONS

The attention to the territory and to the territorial planning remains essential in a moment that the city reinforces as the most important subject of a development connected to the growing of the information networks. In fact, a new tidiness and a new meaning of the territory around the city is a condition for its development. It is now more necessary than ever to begin considering this assertion in our treatment of the political and economical changing of cities.

The city is one of the high-powered motor of the development, the knot for excellence in which functions and primary activities are assembled, the place in which new relationships - from the economic to the racial - are experimented, the place in which the informations are picked up, manipulate and sold.

This constant role (even if with alternate phases of fortune) cannot transcend from the role of surrounding territory: in fact, the development of the physical,



*Figure 5 - Factors of economical competitiveness.*

communicational and economical networks widens the territory of influence of a single city with an increase of the quantity of interactions and a more and more “complex” overlapping of areas of influence.

For this reason the analysis of the territory cannot be more founded on the subdivision of the same in cells (the Christaller model), but it has to wake up that the phenomena of the overlapping upset the apparent homogeneity of the territories founded on the affiliation.

It appears therefore incongruous to use the different territorial levels (Region, Province, Town, zone) as autonomous fields of planning, because the differentiation among levels had a sense when it was necessary to plan territories in which the physical distances were comparable to the cultural and to the historical and economical distances.

Today such distances are only one of the elements defining a territory and their relative weight is decreased thanks to the presence and the exploitation of other factors. At the same time the interrelations can not to be defined only according to the physical characteristics of the territory, but also according to the virtual exchanges among non adjoining territories.

The planning becomes therefore the moment in which the pushes on the territory are individualized and governed.

City and territory evolve for physical and functional characters, for physical and informative movements, for ability of presence on the national and international markets. For this body of elements the planning is affirmed as a “strategic guide” in the evolution of a territory and the plan as a “dynamic driver”, able to change its own actions when some characteristics of the reality change and, contemporarily, to protect the strong points defining the structure of a territory.

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