

CITIES IN A RELATIONAL WORLD: LIMITS AND FUTURE PERSPECTIVE FOR PLANNING THROUGH THE NETWORK PARADIGM

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This paper aims to discuss the formation and reproduction of social and institutional networks via planning practices and to critically explore the limits and opportunities for the future. It will describe how the process of spatial reconfiguration provided by the ‘network society’ views several interconnected territorial dimensions: major cities acting as global players in the international market place and their relationships with their regional surroundings; the relationships among enterprises and institutions within local production systems; and the strategic cooperation between urban players from the perspective of the city as a ‘collective actor’. The final section of the paper will provide some critical considerations on some ways in which the concept of ‘network’ has been experimented with and put into practice in the planning field.

Keywords: network paradigm, planning theory, strategic planning, local development, urban policy

1. The Network Society: Technological developments and new geographies in a relational world

It is not easy to identify a metaphor that has been as successful as ‘network’ in describing the spatial relations and organizational structures of societies. If it is true that, on other occasions, the social sciences have employed rhetorical figures to support their definitions of space and relations – for example, the use of ‘machine’ or ‘organism’ for alternative models of development – it is also true that these concepts are far from describing, as the networking metaphor does, our daily life and our relations with the surrounding world.

According to many people, the reason why the concept of the network is so incisive is linked to the technological conditions which are at its base. New technologies, mainly those associated with the spreading of information, have changed the attitudes and organizational forms of current societies (among people, in institutions and in the economy) in such a structured and penetrating manner that, by now, the logic governing their functioning is also a unique

model with which to exert influence on their change through specific planning or government actions.

In the contemporary world, the idea of the 'network society' is a key notion for understanding the new relational dynamics between spaces and cities.

The Dutch sociologist Jan Van Dijk (1999) was among the first to define the idea of the 'network society'. In his view, it can be defined as a new form of society based on a compound of social networks and networks of communication which slowly aim to replace the traditional relations occurring between people, and public and private bodies. Although his analysis is mainly focused on the communications media and, voluntarily, he does not closely examine the spatial consequences of the current technological revolution, he states that the new computer infrastructures, on which the 'network society' is based, are meant to acquire an even greater strategic importance than the role played by networks in transporting goods and people throughout the history of industrial civilization (Van Dijk, 1999).

The studies of Castells (1991; 1996; 2004) can be seen as the main sociological contributions aiming at analyzing the effects of the strengthening of the 'network society' on spatial organization. According to Castells, the elements at the base of the rise of the 'network society' are:

- the development of telecommunications and new media;
- the Internet, to be considered as the platform on which the communications services tend to merge and integrate up to the point where they act in different technological networks;
- the development of systems of high speed transport, which have productive effects more visible at inter- and intra-metropolitan levels.

Recently, the growth of such elements has reshaped the balance between global and local. Their mutual interactions create a process which is, at the same time, both of spatial concentration and decentralization, able to generate a new geography made of networks and urban nodes spread at a worldwide level. Obviously, the quality and the intensity of these interconnections vary according to the nature of network they are able to seize. There are networks linking the cities hosting the headquarters of the main stock exchanges and others linking the main research and high-tech centres. Some networks link the main political capitals while others, as Castells states in a provocative manner, the 'mafia or criminal' networks which operate at a global level (Castells, 1996).

These inclusion/exclusion processes do not always generate positive sum games. For example, Castells suggests that the suburbs of the great metropolitan areas or the rural areas tend to be excluded from these processes, while other places can be considered real 'hubs' of networks spreading information and financial flows in order to enhance the processes of economic

development. As for these networks, Sassen has coined the successful expression, 'global cities' (Sassen, 1991). He affirms that, at a worldwide level, paradoxically the globalization and the redistribution processes of the productive systems have increased the concentration of the leading functions in a small circle of urban centres where the main strategic and financial functions of the post-industrial economy are developed or controlled: finance, tertiary services, scientific and technological innovation. These main controlling functions of the global economy (Sassen gives these characteristics to cities such as Tokyo, London, New York, Paris or Frankfurt) are similar to those that have shaped the profile of the metropolis emerging from the industrial revolution (mainly centres of commercial control), changing, substantially, their social structure and their political and economic actions (Sassen, 1994).

Nevertheless, the networks which structure the 'network society' at a global level are not so selective as to produce breaking effects only in the small circle of the global metropolis. Dynamism and flexibility give space to a geography that evolves continuously, that is ready to raise and consolidate other nodes up to the level of global city (we can think of the cities of the Arabic Peninsula or South-Eastern Asia), or intermediate metropolitan gatherings which, thanks to their specific functions, have dialectic interactions with more consolidated urban networks. For example, there are urban systems and sub-regional contexts that, due to the processes of global re-distribution of the productive functions following the decline of the industrial Fordist model, and thanks to their ability to become specialized in certain industrial sectors or technological niches, have acquired a prevailing position in the new globalized context (Veltz, 1996).

During the eighties and nineties some interesting areas of research on economic geography and the political-economic analysis of regional development (Storper, 1997), have shown how these local productive systems in their different relationships and definitions – from industrial districts, to innovative milieu, to learning regions – are based on some organizational conditions which can be easily connected to networking morphology.

The first of these conditions is still technological and comes from the capacities of the new computer technologies to alter the structure of the traditional model of enterprise, based on hierarchy and centralization, to a 'networking enterprise' characterized by the flexibility of its functions and their spatial connections (Pichierri, 2002). Within the enterprise, the high-tech infrastructure gives the possibility to spatially disconnect the functions of financial control from the leading functions – from the productive centres of innovation to those where the products are really produced – building in this way a geometrically flexible system that moves according to its convenience

and which is able to look for specific endowments such as human capital or cognitive infrastructures, advantageous tax regimes or jobs at low cost.

From the networking enterprise's point of view, this attitude establishes the need to interact with the local societies and institutions where these nodes are based. The networking enterprise takes its advantage from cooperating with local universities or research centres in improving its attitude to innovation, from cooperating with local learning structures in improving the qualification of human resources, or from cooperating with local public authorities in obtaining infrastructures that are strategic to its development (Perulli, 1998). In exchange, it offers work places, economies of agglomeration connected to the productive *linkages* and, not the least important, the possibility for the local authorities to enter the networks within which the enterprise is solidly linked.

To sum up, as the financial and multinational control centres 'carry' within the global network the great capital cities of the global economy, in the same way, the local productive systems and the industrial districts carry out the same function for different spatial gatherings, such as small innovative cities, city networks and multi-polar urban systems, and regional territorial systems. The geography of the global networks intersects a great number of spaces which are, at the same time, interlinked with a spatial geometry with great variability and flexibility.

In the last decade, the consolidation of these phenomena, along with the growth of the European Union (EU) as an actor able to change the balance and the relations among the levels of government at different scales, has been a great source of inspiration for political studies (Le Galès, 2001). Castells had already pointed out the inadequacy of the idea of the Nation-State inherited from Western tradition, to which he opposed the idea of a 'network state', which tends to include supra-national institutions, and which originated from the interaction between states, regional and local institutions and nongovernmental financial institutions. In the European context of the nineties, these processes of altering structures and reshaping powers have been effectively summed up in the idea of multi-level 'governance' (Hooge and Marks, 2001).

For a regional or local government, producing an effective vision of multi-level governance has proved to be an essential condition for gaining resources to be developed in a competitive climate. In recent years, the growth of a real 'political economy' for the city and region (Le Galès, 2001), supported by a voluntarily institutional action (which will be analysed later), constitutes one of the main characteristics of the European scenario and is a key concept for understanding the positioning of cities as nodes of intersection between global and local networks.

2. Between virtual network and physical space: Towards new urban and spatial configurations

So far, thanks to a small number of theoretical contributions, we have briefly described the assumptions and logic that have led to the building of networks, mainly active on a global scale. We have said that the conditions are mainly technological: the internet and its capacity for gathering a great amount of information, part of which spread with new media, but also the growing mobility of people due to the extent and efficiency of high speed transport.

These conditions have promoted an increasing growth of information and socio-economic fluxes among places spread all over the world, where some organizations are active (institutions or enterprises) and, as a consequence, have been moved to change their *modus operandi* towards the external context and the local society. We have ended by saying that cities, and to a lesser extent regions, are contexts more sensitive to this historic change, whatever the viewpoint is, be it socio-economic, geographical or spatial. We have emphasized the prevailing movement that is occurring horizontally, within networks progressing at a global scale, and that connect nodes, at first supposition, have been considered as monolithic. As a matter of fact, we are well aware – from the ‘systems theory’ and from our daily experience as urban dwellers – that each node is, at the same time, an intersection with other networks whose control it is almost impossible to exercise if we shift our viewpoint from collective to single actors.

First, we will show how one of the most visible features of the networking approach to planning is to virtuously connect these networks, floating on a local scale, with global networks able to promote processes on a local scale (Dematteis, 1996). Second, these planning strategies are asked to promote those connections that should generate positive sum games (for local societies), producing a better quality of life, more attractive and recognizable urban places and chances for growth and jobs.

Perhaps, in order to reach this objective, it is useful to go briefly through what are, according to many experts, the spatial morphologies that are drawn by the network ‘games’ produced at different scales and by the physical space.

First, it is useful to say something on the concept of the metropolis, being aware that in recent decades this notion has been interpreted in so many ways that today it is hard to recognize which one is more accurate (Hall and Pain, 2006). However, one aspect, which can be seen in all the urban areas of the western world, gathers everyone’s agreement. The metropolis phenomenon has taken on so many morphologies and levels of complexity that the interpretative models used so far, based on centrality and hierarchy, which were originated by Christaller and improved afterwards, are widely inappropriate to explain such

processes. This does not mean that they are no longer used to understand some dynamics of the urban phenomenon – all major cities are still service and work centres which trigger commuting relationships with their suburbs – but a series of variables linked to culture, lifestyles and to specialized functions brought about by globalization have changed their profile deeply.

The current metropolises are, more and more, urban multi-polar morphologies which tend to spread their range of influence to constellations of centres and functions which are far outside the administrative and geographical borders inherited from their first stage of development. Therefore, they seem to be the outcome of a double movement:

- (a) spreading towards the suburbs, caused by the disposition of cities to project their functions (assimilating others) towards large territories, which sometimes go as far as the regional or cross-regional level;
- (b) converging of suburbs and areas that were identified as rural, as a result of the changes that have affected the lifestyles of the population and the processes of the emergence of productive models based on small enterprises.

Equally to the spreading of global networks, these two movements are supported by the development of more and more extensive travel and telecommunications infrastructures, widening the life space, the relationships between economic and productive functions and the self perception of the urban phenomenon to a dimension which is difficult to bring back to the traditional city. Recently, within the scientific literature coming from different branches of learning (from geography to planning, from economics to sociology) different models have appeared, which are sometimes very imaginative. These models have tried to outline the contours of these new steps of the development cycle of the metropolis. Besides, some of these definitions have also tried to take a normative function, able to have an influence on the policies of urban and regional government, as, for example, the concepts of the ‘metropolitan region’ or ‘polycentric metropolis’ (Hall and Pain, 2006).

Probably, urban networks are, at best, the conceptual instrument that has fulfilled the need for interpretation and analysis of the current metropolitan phenomenon in Western countries. Although it is evident that within the great conurbations hierarchical dynamics still remain, the networking paradigm is very helpful in understanding the processes through which the metropolises, which are similar geographically and in size, have developed different levels of attractiveness or economic performances.

Recently, for example, the analysis of the urban phenomenon has shown how the extent of the functional integration between the nodes of a metropolitan area and between the latter and the neighbouring metropolitan areas can have important effects on the competitive levels and international opening (Boddy

and Parkinson, 2004; OECD, 2006). Metropolises, where intermediate or peripheral nodes host high level functions, not only allow the central spaces to specialize in more strategic functions but also produce the conditions to limit the phenomena of congestion, typical of metropolises at a more underdeveloped stage.

Having said that, the planning control of all these dynamics which contribute to generating complex metropolitan articulations is extremely difficult, unless we split up the problem and analyze it in each single dimension and aspect: spatial, environmental and economic. In what follows, we will see that one of the main functions given to the current practices of strategic planning is to increase the rebalancing of the dynamics of development in the major urban areas.

A second dimension of the spatial development of great theoretical and practical interest for the networking paradigm is linked to the concepts of the district and local productive systems.

According to some consolidated definitions (Bagnasco, 1988; Pyke et al., 1990), a district is a gathering of small and medium firms which operate in similar sectors and are located in a limited spatial context. These firms live in a state of (continuous) competitiveness generated by the need of taking possession of the limited productive resources and by the probability that they compete in the same markets. However, due to their spatial proximity, they enjoy many advantages. The most relevant are the possibility of sharing cognitive resources and technical knowledge which have settled in the territory, as well as the opportunity of altering their productive processes by externalizing the less profitable processes. Therefore, firms gain a lot of advantages by cooperating, mainly if they are able to start their productive processes evolving into a system.

In the more evolved stages of development the issue becomes even more complex when we widen our view to the relationship between such firms and the institutions operating in the same space. Thus, these networks, based on mutual convenience, can become the basis for interactive forms of cooperation between public and private spheres: as for the public sector, they are linked to the socio-economic effect generated by the presence of the productive district in terms of income and employment; as for the private firms, they are determined by the need to obtain specific infrastructures from the public sector (material or immaterial), which would be difficult to generate by themselves. Governing these forms of cooperation, or rather shifting them on a strategic and planning level, has meant, for many local productive systems, acquiring an identity which is liable to mix up the borders between public and private spheres, which has convinced many sociologists to label them as 'collective actors' as is done with some great European cities (Crouch et al., 2001; Le Galès, 2001).

Recently, in Europe, a typical phenomenon is the extension of the concept of district to alternative productive sectors different from those merely industrial or manufacturing. This broadening of meaning can be considered as the outcome of a double trend: on one hand, for years, due to its flexible management and its ability to react to the market crisis, the district has been considered an effective alternative to traditional industrial models; on the other hand, the exponential growth of emerging sectors in the services field has driven the perception that the district is a model of agglomeration that is consistent with the enhancement of resources which are strongly rooted in specific spatial contexts.

In this second situation the district is the result of a particularly complex relational dynamic, which includes not only the producers of goods and services, but also those subjects who govern and guarantee the safeguarding of the environmental heritage on which the economy of the district is based. For example, we can consider the cultural–touristic districts or the districts based on specific agricultural productions, whose added value assured by the territoriality can be obtained only through specific policies of integration among the strategies carried out by different actors (Donolo, 2003; Vinci, 2005). To sum up, cooperation within the network of actors who constitute the district becomes itself an instrument to strengthen and spread the spatial identity (Dematteis and Governa, 2005).

3. Networks, strategies and policies

In this section, we will more clearly shift our attention from phenomenologies to policies, although we have previously stated that this border is not always easy to settle. The actors (institutional, social, economic) operating in the city or in the district tend to organize themselves freely in networks – both in horizontal networks moving within the local systems and in greater networks which can even attain a global level. This propensity to network interconnection is an indicator of the development of organizations and can be determined by a series of factors. First, as for the institutional actors, the opening-up to forms of cooperation with the outside could mean sharing common issues and, perhaps, building useful links which could have an influence on the decision-making processes of actors belonging to higher levels (such as the state or the EU). Second, as for the private actors, this opening-up could be explained with the research of positive externalities (for example in the technological innovative sector) or, more simply, of trading objectives. From the opposite point of view, the cooperation of these actors within their proper systems is more complex to determine: there are institutions which are unable to settle on effective policies of local cooperation, both in relation to the government of the space and to development, and there are firms (or whole economic sectors) that interact quite

seldom with the material or immaterial resources present in their spatial context. The experience of recent years shows how network policies, built within planning initiatives, can have positive effects on synergies, relations and complementarities among spatial actors. Therefore, at present, the concept of network can be considered among the most influential paradigms in the European 'policy making' context.

In what follows, some critical remarks will be stated on these planning practices that have been mostly influenced by the networking metaphor: the strategic planning for cities and metropolitan areas and the policies of local development. The networks of cities active at the cross-regional or international level (Perulli, 2004; Dematteis and Rossignolo, 2006), will be consciously left out, even though they are of great interest, more for the evolution of urban and regional governance rather than for the paradigms of spatial planning.

The adjective 'strategic' has been used for such a variety of heterogeneous planning practices that it has been difficult to choose an unambiguous definition (Gibelli, 1996). In general terms, we can say that a plan can be defined as 'strategic' when it tries to project its efficacy towards a time horizon which is longer than the local government cycle, taking upon itself complex and heterogeneous objectives. This means that it has to identify 'assets' particularly meaningful for the local context, on which the plan has to rely in order to attain its goals of development or spatial rebalance, even when some (unpredictable) changes during its implementation may occur.

Until the eighties, the strategic side of the spatial policies was assigned almost entirely to the planning of the physical space. It had to guarantee a future balanced development of the urban and metropolitan settlements, promoting a better integration among priorities such as the conservation of the natural heritage, control of the spread of residential housing, infrastructural development, and localization of higher level services.

The networking metaphor has had quite a lot of 'space'; however, its engagement has usually been limited to improving the understanding of the complex weaving between nodes and physical networks, leaving behind the interaction with the social environment. Over time, this aspect of spatial planning has taken on the meaning of a 'structural' dimension where the strategic purpose is expressed through planning control in a series of real 'structural' elements of the physical space (ecological networks, infrastructure, technological networks) able to influence the planning policies at different institutional levels.

During the nineties, due to the emergence of new forms of primary role played by local governments, planning approaches were being spread, within which the strategic dimension was translated in more complex and even more ambitious objectives compared to those aimed at by the physical planning. They

entirely mirrored the reshaping processes of power occurring in the public sector and the new forms of interaction between the public and private sectors which were being reproduced at different scales of the spatial policies and which were being characterized with:

- (a) action plans which aimed at having an effect on more complex dimensions of the physical spatial system, such as economic competitiveness, social cohesion and environmental sustainability;
- (b) planning visible in the interaction or in the dialogue between public and public-private actors, and which was based on forms of contract such as 'deal', 'agreement' and 'pact';
- (c) voluntary forms of institutional cooperation rather than hierarchical, translated in spatially variable geometries and changeable according to the different topics of development that the plan wished to deal with.

These requirements can be found in some of the most recent initiatives of strategic planning at the metropolitan level, so that it is possible to point out that we are now facing the spread of a new model of 'network planning' (Camagni, 1996; Perulli, 2004).

While the pioneering experiences of strategic planning were based on the construction of social networks of lesser extension – for instance made of a single municipality pushed to share, with a limited circle of public or private actors, a strategy to re-define the municipal economic profile, or to face the regeneration of specific urban contexts – the most recent strategic plans aim at designing networks of actors that are extremely complex and compound, both institutionally and spatially. This transition is well shown by the recent experience of some European metropolitan areas (such as Barcelona, Lyon or Turin) which, after having designed strategic plans oriented towards the control of the effects of large urban transformations, have needed to extend the area of intervention of their strategic plans to the metropolitan scale.

These plans witness the acknowledgement of the deep change that has taken place in public policies and the subsequent need to ascribe some new effective profiles to the planning of urban contexts:

- (a) the achievement of economic-productive dimensions that are more suitable and diversified, that function in such a way to avoid the risks of the possible phenomena of urban decline and can face, in a better way, the challenges coming from the global competition;
- (b) the acknowledgement of the limits of public finance and, therefore, of the need to maximize the integration and the complementarities between financial resources and diversified kinds of investment;
- (c) the awareness that, concerning the development and the quality of life issues, the spatial planning approaches based on hierarchy and norms are

able to deal only with part of the problem – mainly with what is more linked to the localized choices.

All things considered, the current strategic plan is the result of the integration of complex networks of actors and policies which draw their legitimacy from being built within the processes of public participation. Their effectiveness is linked to the abilities of the institutions to govern the process of coordinating all the positive planning forces that can be released and leading them to goals of social relevance. Only at this stage can we talk about a ‘network surplus’, or rather the added value coming from the network in comparison to a hierarchical or sectorial approach.

Further interesting clues for assessing the effectiveness of the network approach as regards spatial policies come from the culture and the practices originated to sustain the local development in the more fragile and marginal territorial contexts (Donolo, 2007).

Usually, thanks to the decisive involvement of the regional policies of the EU, ‘policies of local development’ means a variety of approaches and planning instruments spread all over Europe. European programmes such as the Urban (usually addressing the urban or district level) or Leader programmes and the Territorial Pacts for employment (usually addressing the inter-municipality level) have had the advantage of starting planning experiments, even in marginal regional contexts or contexts little inclined to innovation.

The basic concept on which the policies of local development are grounded, even in periods facing high levels of social decay or economic decline, is that there are always some hidden resources which are widely under-exploited. The task of the public policies is to produce a balanced mix of investments of the physical, social and productive capital, which can start new development processes or help the local communities to support the efforts made by the economic regeneration. A key role in implementing these policies is given to the degree of awareness and ‘capacity’ which the social capital is able to produce, considering that the virtuous processes should be able to sustain themselves to the end of the plans (Donolo, 2007).

From a conceptual point of view, this generation of spatial policies shares with strategic planning the awareness that some critical issues are present in the traditional models of public action: for example, the fact that the state, through its spatial subjects, is unable to guarantee autonomous policies of spatial development without activating a variety of social actors; or rather, the model of sustainable development promoted by the Community institutions is difficult to implement at the local level if it relies only on sectorial logic. Both approaches are based on a wide application of the concept of ‘integrated action’, whose meaning for the programmes supporting the local development is:

- to include in the same cycle of the project actors with different interests and, when possible, make them active in the implementation process of some planning actions;
- to invest in synergy between projects, for example between interventions of spatial regeneration and actions to do with human and productive capital;
- where possible, to settle forms of partnership in the local context among relevant actors, usually between institutions active in the economic and social fields.

Differently from strategic planning, the policies and programmes for local development can have less wide goals because they are focused on the removal of social constraints or on the enhancement of specific productive potentialities.

It is not unusual for such initiatives to be settled within a wider strategic scenario. Nevertheless, they are asked to make a substantial contribution to the local reality with visible results in the short term, rather than a long period of strategic plans. For this reason, attention has been paid to their effectiveness during their implementation, mainly where their construction involves public finances (as it happens in all Community Programmes).

Moreover, the presence of financial incentives can be an element which fosters time-serving behaviour from a part of the stakeholders who have been asked to share the initiatives of local development. The presence of large and structured coalitions (usually a typical feature requested by the EU), cannot always be an indicator of democracy and participation, but is rather an element generated by the interest in probable advantages that the actors envisage and is liable to disappear at the end of the programme.

All things considered, the added value within these networking policies could be great; however, critical analysis needs to be carried out on a case by case basis. In the most effective cases, the presence of cooperative relationships between local actors is an element of great interest, even greater of the duration of the local development programme. In many of these cases, the solidification of interactive and planning relationships between public and private collective actors has generated the building of lasting coalitions which take on the role of real collective actors, so that some observers have noticed the rise of real 'territorial local systems' (Dematteis and Governa, 2005).

4. Morphologies and functions of networking planning

The examples given above show only some of the reasons why the networking metaphor has seen such a large spread in spatial policies (and in the literature), and also how its use can be various and complex. In fact, it has worked very well both from an interpretative point of view to understand the complex relationships between places and actors which are being reproduced at

different spatial scales in a globalized environment, and also as a powerful planning instrument to foster the relationships of synergy and complementarity that are required by our current society (Healey, 1997; 2007).

Furthermore, in recent years critical contributions, useful for their normative value, have also been issued.

For example, Castells, wondering about the role played by current urban policies, has said that ‘the key element to maintain cities as cultural forms within this new spatial context will be the ability to properly integrate planning, architecture and urban design’ (Castells, 2004). Planning practices should guarantee the highest connectivity between locality and flows, not only linking the cities to the global networks, but also answering for changing scenarios consistent with the physical space at a local level. On the other hand, as for the community, the sustainability of these changes is one of the toughest challenges that architecture and urban design have yet had to face. They are being asked to produce places whose spatial and symbolic qualities encourage dimensions which seem antithetical: places that are the perfect summary of physical space and space of flows, places that foster cohesion and social exchange, and, finally, the production of symbols that gather local traditions and cosmopolitanism (Castells, 2004).

Dematteis (1997) affirms that, within the post-Fordist transition, the object of planning cannot be the space seen as a passive physical support, but should be sustainable local development. In this case ‘the plan is not the design of the city or of the ‘space produced’, but it is the ‘invisible plan of identities and local potentialities that are already active or could be activated in the processes of development and of network interconnection. Therefore, spatial and urban policies, in particular, become policies of nodes and networks, seen as complex and interactive aggregations of actors active at different spatial levels. It is not a question of spreading infrastructures, investments, employment, flows on the territory, rather to create the conditions and the networking synergies at different spatial levels so that processes of development could start ‘from the inside’ (Dematteis, 1997).

Camagni (1996), recalling the metaphor of ‘plan as network’ points out that ‘the participation, the building of consensus and the activation of all creative and planning capacities present in the city’ is the more effective way to accomplish the processes of modern planning. He identifies in the practices of strategic planning, built around the tiring processes of ‘visioning’ participation and collective learning, the more promising solutions to tackle the new challenges of contemporary spatial development.

In the last decade, these different theoretical conceptions have made room for a great number of experiments in the field, developed through operative concepts and strengthened praxis which, at present, can be seen as the real

cognitive assets through which strategic planning deals with the challenge of the networking city. To sum up, it could be useful to outline the emergence of the networking approach in the current planning and spatial policies through five dimensions which, in our opinion, prevail over the rest.

Network as cooperation and coordination. This dimension comes from the decline or from the re-articulation of the political-institutional structure inherited from the twentieth century and that has been shaped into the model of functionalistic planning. The proliferation of the levels of government, the breaking up of the decision-making roles and the regionalization and devolution of competencies are all processes which have generated a new form of 'governance' of public policies, without those forms of power prevailing on others. This means that the government of spatial development is more and more the outcome of the interaction between complex institutional networks, whose effectiveness requires continuous and improving actions of cooperation and coordination both among equivalent institutional actors and institutions at different hierarchical levels. These new institutional environments, which go alongside the government of the ordinary spatial policies, acquire greater political importance when the building of the coalitions is oriented towards sustaining strategies and policies of complex spatial development.

Networks as coalition and partnership. A further result of the reduction of the role played by central powers in the development policies is the need for the local government to give more active roles to the private sector or, in any case, to the sectors that are outside public administration. Private actors can reveal themselves in the shape of 'strong' powers, holding economic revenues and prevailing positions, or bearers of broader interests in which take form as organized representatives. In both cases, they tend to share with the local government the settlement of the strategies of spatial development, or the building of more restrained policies which are formalized through instruments, variously bound, such the 'deals', 'agreements' and 'contracts' for development. In a highly competitive environment, in order to collect resources and external investments, the strength of the coalitions between public and private actors is often a decisive element for the effectiveness of the development policies.

Network as planning integration. The inadequacy of the sectorial approaches to development policies has highlighted a variety of planning practices that try to test the principle of functional integration among planning instruments. In its more widespread meanings, integrated action foresees an investment in the synergic relations that could come from the functional coordination between projects and different kinds of policies, such as regeneration projects on environmental heritage, the qualification of human resources, and the stimulus for social capital or to mobilize private capital. These kinds of approaches are based on the principle that, from the district level to the more articulated spatial

structures, signs of social uneasiness or underdevelopment are the result of the negative interaction between different elements of material or immaterial kind. The spatial project should try to reproduce this complexity truly, through a suitable mix of heterogeneous actions which, altogether, could produce the kind of discontinuity needed for reversing states of degeneration or starting new scenarios of development.

Network as techno-structure. The management of complex spatial policies in new institutional environments which have issued from multi-level 'governance' has emphasized the need for new profiles and attitudes towards the traditions of public policies. Keeping alive partnerships for strategic development of territories, or the management of complex integrated projects, can require praxis and competences that are sometimes very different from those necessary to govern 'ordinary' public policies. In recent years, a very widespread phenomenon has been the building of structures or 'purpose' agencies aiming at keeping alive and maximizing the 'networking effect' among a variety of subjects. This effect can be produced with projects of local development or it can be required to support complex strategies involving private and public sectors jointly. Agencies of local development, as well as the mixed societies or 'task force' created to sustain the international or marketing strategies of the territories, are heterogeneous examples which show the organizational implications the networks of actors could require in order to show their effectiveness in the processes of territorial development.

Network as participation. Enhancing the aggregation of civil society within the local policies (both concerning spatial development and social cohesion) has been a password imposed throughout the nineties in public policies, mainly in those coming from the European Community. However, the translation of this principle at a local level has taken on different and articulated forms, so as to make the practices of participation one of the most controversial issues of spatial policies in recent years. Due to participative practices, networks of actors can be built for different aims: contributing to the building of spatial plans, controlling their development, being restrained to acting as decision-makers or bearers of corporative interests, or even including the beneficiaries of the local actions. Above all, they can be highly artificial and can run out when a specific planning process has finished; or, in other words, they can reproduce themselves over time so as to have a lasting influence on administrative action and on future spatial policies.

If we wish to learn from the different experiences in which networks have played a recognizable role within spatial planning processes, we have to recognize that the network is at its best effectiveness when two specific conditions are present. First, when the participative networks are the outcome of strong inclusive practices and representative of spread interests, otherwise we

would rather talk about ‘network as coalition’. Second, they should be formalized and recognizable, which is a necessary condition to gain strength and legitimacy in the decision-making processes.

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