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Networking cities in Greece: The tri-pole Kavala, Drama, Xanthi in brief

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ABSTRACT

Networking, as an organising principle of the urban systems, is a basic feature of the territorial policies and practices, but also a classic concept of the theory of urban geography and of spatial planning. In the first place it refers to the fundamental characteristic of cities and towns, not to constitute isolated and autonomous points of concentration of population and activities in geographic space, but to generate and attract flows, connecting them to other urban and/or rural areas.

The present article attempts to illustrate the dynamics emerging from the development of an urban tri-dipole, as well as its impact on each of the three cities and on the broader surrounding area / region. Within this framework, the article focuses on a specific case of three cities in Greece, Kavala, Drama and Xanthi, which have already a degree of cooperation on a first level, are complementary in the nature of their urban functions, and they have the potential of developing to an urban tri-pole. The aim of the article is to define the prospects for economic development of this tri-pole and examine its dynamic in relation to other cities in Greece, by using situation audit analysis, taking into consideration the local distinctive characteristics of each city and the characteristics of the tri-pole as a whole.

JEL: R11, R12, R13

KEY WORDS: Urban Networking, Polycentricity, Urban Functions, Tri-pole, Case study, Situation Audit Analysis

1. Introduction: urban networking and the concept of dipoles/ tripoles

Networking, as an organising principle of the systems of cities, is a basic feature of the territorial realities, but also a classic concept of the theory of urban geography and of spatial planning, as for instance in the case of Vidal de la Blache, Christaller or Isard. In the first place it refers to the fundamental characteristic of cities and towns, that is that they do not constitute isolated and autonomous points of concentration of population and activities in the space, but they generate and attract flows, which are orientated to other cities or the countryside (Tsakiris and Lalenis, 2006:6). Urban network – urban system or, according to other authors, urban grid (Derruau, 2001), is defined as a system of cities and their interactions, which faces cities as points of the system (Economou, 2005). A huge number of scholars, both on theoretical and implementation level, have studied networked cities, focusing on the role of communications and technologies (Townsend, 2001; Beaverstock *et al.*, 2001; Taylor *et al.*, 2002; Taylor and Lang, 2005; Wall *et al.*, 2007:16). National, regional and local authorities and development organizations, including universities, are trying to support specifically innovative processes through different

knowledge networks and a new type of collaboration (Kosonen, 2005; Sakellariou, 2008). The development of urban networks has been used as a policy instrument to build alliances, exchange knowledge and save resources, take advantage of economies of scale, develop common markets, and exploit complementarities, which are all part of the new trend of internationalised policies (Pyrgiotis, 1991; Economou and Vrassida, 2005). City Networks are more flexible and adaptable forms of organisation, able to evolve with their environment and with the development of the cities that participate in it. Still by definition networks do not have one centre, they decentralize performance and opportunities and they share decision making. This creates a problem in coordinating actions, focusing resources and beyond an “optimum” size managing complexity (Castells, 2000; Economou and Vrassida, 2005).

The concept of urban **dipoles and tripoles** fit in the tradition of the networking, comprising elements both from the classic hierarchical urban systems and the recent networks of peer towns. It presupposes, in the first place, two/ three centres which belong to the same urban system, and have a similar order in the system, serving equivalent hinterlands. As a consequence, the cities are playing similar roles regarding the central place functions. However, when these cities also contain, or develop, (usually different) special functions, their profile can be also relatively differentiated: their common factors are the central functions, while their discriminating factors are their special functions. Moreover, the existence of special functions makes a closer interinfluence and cooperation possible (the conditions being related to the geographical position of the fixed resources which support the special functions) than the ones expected by the sole influence of central place functions. If this happens, the corollary is a gradual intersection of the hinterland, with the creation of an intermediate zone that tends to be served selectively by these cities.

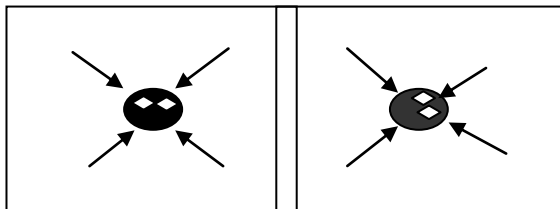
2. Central Place Functions in the case of dipole and tripole

The urban functions which are the main motors of the above scheme are the so-called “**central place functions**” or “central functions”. These functions tend by nature to be distributed in space according to hierarchical ranks and, correspondingly, hierarchically ranked hinterlands (service areas), in whose centre they are located. Typical functions of this type are commerce, the social services and administration. The central-place functions lead to the creation of urban systems, whose nodes (that is cities and towns) tend –especially when the wider territory is a flat uniform plain (isotropic)– to be spatially distributed with a geometrical regularity. Cities of the same rank normally have the same distance between them, and serve hinterlands of the same range which do not overlap.

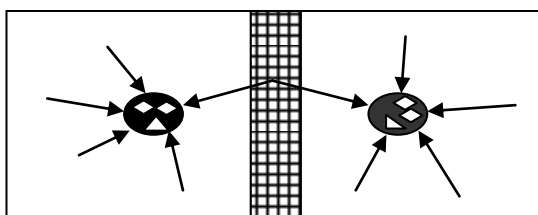
The central place functions were in the base of the urban phenomenon since its beginning. A very different kind of urban functions are the **special functions**. This term refers to functions which are carried out for non-local, non-contiguous areas, and are located according to the random fixed spatial distribution of specific resources, usually natural or geographical ones. Such functions, as extractive industries or tourism, are attracted where these specific resources pre-exist. The contact with the final consumer is made either with the export of the product or by the travel of the consumer.

The special functions, whose systematic appearance is more recent than that of the central functions, tend to superimpose to the latter, and—because of their different locational model—to modify the systematic spatial pattern of the traditional, “central-place” based, system of cities. For instance, a city of high rank and a settlement of low rank in the central-place hierarchy may both develop very important special functions, in case that they possess the relevant natural resources (see the case of tourism). As a consequence, the growth of the special functions flawed the orderliness of the systems of cities, permitting, for instance, the existence of big cities in small distances and / or the overlapping of their hinterlands.

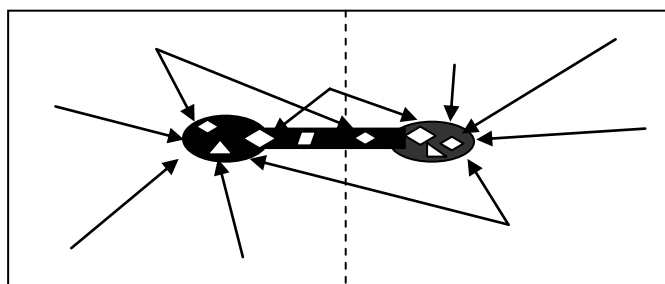
When this phenomenon appears, a possible evolution is the strongest connection of a number of cities, which will start to “share” some of their central functions, and this can result to a more pronounced intersection of the hinterlands and eventually to an intermediate zone with a magnitude that exceeds that of each former hinterland alone. This consequence involves the



Two neighbour cities which belong to the same rank of a classic urban system: same central place functions, similarity of roles, equal but distinct hinterlands



Two neighbour cities which belong to the same rank of a classic urban system, but develop special functions: same central place functions, similarity of roles, but overlapping hinterlands as far as the special functions are concerned



Two neighbour cities which form a dipole: the dipole is situated on a higher rank in the urban system, and has a semi-unified hinterland as far as the higher functions (both central and special) are concerned.

possibility of the emergence of new central place functions, of a higher rank than those that existed in the cities in the previous historical phase. Such an occurrence has, evidently, and other aspects. The two/ three cities are apt to develop spatially by approaching each other, while the area between them will be subjected to urbanization forces, with the result that the pair/triad of the cities –actually a dipole / tripole– will attain a not only functional but also physical existence, with the creation of a complex urban structure. The cities may, more or less, maintain a semi-autonomous physical identity, and the axis which links them may retain not built-up and even natural segments—in other words the spatial form of the dipole/ tripole is not predetermined—but on a structural level a new urban entity will have been created. Moreover, the facilitation of movements and contacts in the interior of the semi-unified hinterland will amalgamate the markets (of labour, of land etc.) and will create economies of scale and of urbanization for the central functions and, possibly, for some special functions.

3. Objectives and prerequisites for the emergence of urban dipoles/tripoles

The above analysis permits the examination of the basic strategic issues for the emergence of urban dipoles / tripoles: the objectives of such a strategy and the prerequisites of the creation of dipoles / tripoles (either preexisted or promoted through deliberate, mostly administrative, intervention).

The objective of the creation of dipoles/tripoles is, on a first level, the promotion of externalities—economies of scale and economies of urbanization. In a dipole/tripole there is a considerable augmentation of the internal market (mostly, there is a doubling of the market in the start of the process, while later, the increase can be larger, through multiplicative effects). This allows for the existence and use, by two or three cities, of specialized equipment and services which were either not viable when restricted to the original cities (especially in the case of market activities) or existed but operated on a sub-optimum level (especially in the case of public facilities). Correspondingly, the enlargement of the labour market allows for more differentiation and flexibility. Overall, these evolutions lead to the increase of productivity and competitiveness of the firms located inside the dipole. This—which is in particular true when the two/three original “poles” had already a relatively high rank in the system of cities—concerns both the central and the special functions, albeit in different ways, as is listed below:

- Administrative functions: possibility of localization of higher level activities, when the scale of the dipole/tripole result at its transfer on a higher rank of the urban system (public sector)

- (Higher) education and research: facilitation of the existence / creation of research centres, as well as of the increase of the size of the universities (public sector, possibility of private participation).
- Health: contribution to the viability of large integrated hospitals, which necessitate a big internal market, but from the moment that they exist they can also provide services to external markets. (public and / or private sector)
- Culture: infrastructure of high range and wider recognition, who presupposes a large audience, and operate not only in the field of culture but also as emblems of the region which enhance its supra-local (interregional or international) “visibility” (opera houses, big museums, great concert halls etc.), especially when this activities dispose also of a high architectural quality building. Such equipment can be a major component (“flagship” of a city-marketing strategy. (public sector, possibility of private participation)
- Transport, telecommunication and energy: contribution of the dipole to the economic viability of large infrastructure. Especially: (i) frequent rail connection (intra-dipole and external), (ii) regular air-flights (external connections), (iii) inter-modal transport systems, (iv) regarding energy, the contribution of the dipole concerns mainly the distribution networks and cost. (public and / or private sector)
- Organized areas (parks) for manufacturing industry, logistics etc. (private sector)
- Commerce: rare retail establishment (private sector)
- Special forms of tourism which need a metropolitan or a least fairly big urban environment (conference tourism, urban tourism, golf resorts...)(private sector)
- Business services of high level (financial, consulting...)(private sector)

A dipole/tripole can emerge by itself, if the objective prerequisites are present, through the action of the economic and spatial forces which has been examined above—when these forces are strong enough to produce major territorial transformations. When, however, these prerequisites exist but not at a level which could generate spontaneously this phenomenon, the creation of a dipole presuppose a conscious administrative strategy which will adopt such an goal and will promote the necessary policy measures for its fulfillment. Such measures comprise, certainly, transport infrastructure, but also the creation of high level infrastructure in other sectors (R&D, culture etc.), the encouragement of complementarities (for instance specialization of each pole according to comparative advantages), as well else institutional arrangements. Therefore, apart from the objective prerequisites mentioned above, more “subjective” conditions may be crucial for the

creation of dipole, as the existence of **political will**. To this, the **social acceptance** of the idea of the two/three cities forming a dipole/tripole must also be added.

4. Spatial Planning and Networking in Greece

Networking in cities is prescribed by the National Spatial Development Plan, as a policy that will boost the development and the reinforcement of common actions and co – operations and that will also boost the development of complementarities in the region economies and in new technologies. In nowadays circumstances in the region East Macedonia-Thrace, the tripole Drama – Kavala – Xanthi and especially the dipole Komotini-Alexandroupolis exist only as theoretical issues. Actually, every city faces its neighboring cities as competitors and this attitude is highly encouraged by local factors and authorities, without considering the already existing experience in networking in other cities, which have already promoted their potential in complementarities so as to achieve development. The dipole Volos – Larisa is such an example, that has already started upgrading their interconnecting transport networks, combining spatial planning, organizing campaigns of public and organizations awareness that have already created a great attraction and have also increased financial flows.

The concepts of cities networking, then, in the form of development cooperation poles, it is necessary to be clarified in the following section in order to assess the potential applications in our region.

5. SWOT Analysis of networking in urban centers of Drama, Kavala, Xanthi

It must be noted that while in the chapter on development poles of the country the three cities of Drama, Kavala and Xanthi are treated separately, contrary to other prescribed dipoles, in other chapters of National Spatial Development Plan (as in the collaborative networks of urban centers) there is reference to the tripole Drama - Kavala - Xanthi. It is therefore obvious that while the developmental roles of the three cities of our region are degraded when treated individually, it is different when taking into consideration the operation prospects of the dipoles Drama - Xanthi, and Kavala - Xanthi, or the tripole Drama - Kavala - Xanthi.

TRIPOLE KAVALA – DRAMA - XANTHI	
Advantages	Disadvantages
Short distances among Drama - Kavala Kavala - Xanthi	Problematic connectivity Xanthi - Drama
High accessibility of Drama - Kavala since the completion of the axis of Exohi and possible rail link between the two cities (suburban), and Kavala - Xanthi since the completion of the Egnatia (Nestos) and the rail link between the two cities	Operation of the tripole as two separate dipoles: Drama - Kavala Kavala - Xanthi
<i>Strengthening the role of Thessaloniki in the area with favorable implications for the region of Drama - Kavala - Xanthi</i>	<i>Strengthening the role of Thessaloniki in area with a tendency of marginalizing the region of Drama - Kavala - Xanthi</i>
Development opportunities with a range in the Balkan / European hinterland (accession of Bulgaria and Romania) in two parts (from Exohi and Echinós)	Reluctance of local governments and various institutions for collaboration
<i>Multiculturalism in Xanthi</i>	<i>Sensitivity to the coexistence of ethnic groups in Xanthi</i>
Connection of the vertical axis from the Echinós Bucharest (Pan axis IX)	Lack of coordination of the planning centers of the network
Cities in the same tier urban hierarchy	
Existence of a rich cultural and tourist resources, possibilities for alternative forms of tourism (cultural, conference, etc.)	
Full network of combined transport (Egnatia and vertical axes, an international airport, port system, rail)	
Population increase and improvement developmental sizes (Xanthi)	
Strong cultural identity, function and dynamics in cities	
Complementarity functions (mainly of Drama - Kavala Kavala - Xanthi)	
Democritus University of Thrace, TEI Kavala and Drama → strengthen of the research and technology section	
Increased population and development figures over the tripolar	
Reference to Tripoli from all previous development plans	

Author elaboration

As was shown above, Drama, Kavala and Xanthi are located at short distances, with immediate prospects for further improvement of accessibility among them. This accessibility is particularly valid for the axes of Drama - Kavala and Kavala - Xanthi, where networking trends have begun to emerge, while in the axis of Drama - Xanthi this becomes more difficult, mainly due to increased travel time between them, and to structural / infrastructure problems in their transportation connection. The potential for immediate improvement of accessibility between Drama – Kavala and Kavala - Xanthi stems from the proposed improvements to the vertical axis of Egnatia Road of Exohi, and the railway connecting the port of New Karvali to the train station of Toxotes, while in the meanwhile there is a possibility to improve accessibility among the three cities with rail service connection of a suburban type, on all sides of the triangle Drama - Kavala - Xanthi. Thus, among the advantages and disadvantages of three alternatives mentioned above, the best option seems to be the choice of the tripole, while from the other two dipoles, only the Xanthi – Kavala one presents a development interest. So if there is political will to acknowledge the importance of the tripole on the development of the area and to provide the necessary infrastructure for promoting it, backed by a positive social consensus, there are strong possibilities that the present weaknesses for the development of the tripole Drama - Kavala - Xanthi will be overcome. In addition, yet, given the fact that the reference to this tripole has been included in almost all recent development projects, which have been mentioned at the beginning of the text, it is highly likely that the tripole Drama - Kavala - Xanthi as a development option for the National Spatial Plan is obviously a choice with undisputable advantages.

5. Conclusions

The main strategy of the development of the tri-pole Drama – Kavala – Xanthi aims at boosting territorial development at the Region of East Macedonia – Thrace, and eliminating territorial inequalities between this region –being the most underdeveloped in Greece- and the other regions, by elevating the level of quality of urban functions and life, in general, within the Region. The rating in hierarchy, and the complementarity of the main points of strategy should enhance the relative advantages of the emerging tri-pole urban system. The expected outcomes should secure a higher pace in development, and an increase in the regional GDP, in such a way as to come in level with the national GDP. They should also contribute in the establishment of a viable, competitive economic environment, with highly extrovert orientations.

Based on the above, the strategic vision for the tripole Drama – Kavala – Xanthi is «its establishment as a multicultural centre, and a centre of cross –border cooperation, with a consequent valorization and promotion of the exceptional natural beauty of the area. ».

Finally, there is a number of newly developed conditions which guarantee a new, significant role of the Region in the international level, and which should be further developed and secured. These conditions are the strategic location of the Region –and of the tripole in particular- in relation to the Trans-European transportation corridors, to the reshaping of the energy networks which cross these grounds for reaching the rest of Europe, and to the geopolitical and economic changes in the South East Mediterranean emerging after the acceptance of Bulgaria and Romania to the E.U. Of equal importance are the « Europeanization » process of Turkey, and the gradual relocation of the geostrategic centre of Europe towards the East. The attainment of this vision, part of which, is the strengthening and modernization of the internal productivity of the tri-pole, will create an internal economic, social, and spatial cohesion, and strong possibilities for external effects of the development to the broader area.

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