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Spatial, morphological, formal & socio-economic dimensions

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Recent changes of spatial and functional organization of urban regions and cities in Serbia

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Abstract

This paper summarizes the results of recent explorations of spatial and functional organization of Serbia based on identification of its urban regions (UR). Network of settlements was treated as a complex, open and dynamical system of urban regions, functional urban areas (FUR) and daily urban systems (DUS). These complex systems have been developed under the conditions of continuous redistribution of population and more/less synchronized processes of deagrarianization, deindustrialization and urbanization with general socioeconomic flows. Determination of urban regions is theoretically and methodically based on principles of regionalization and recent doctrines of regional development, contemporary spatial planning and social and economics disciplines of social geography. Results to a great extent identify and scientifically explain problems of the development of spatial and functional organization of urban regions in Serbia.

Keywords: urban regions, spatial and functional organization, spatial and urban planning, Serbia.

1. INTRODUCTION - PARADIGM OF SPATIAL AND FUNCTIONAL ORGANIZATION OF URBAN REGIONS

Recent explorations of urban regions and network of settlements in Serbia are theoretically and methodologically based on paradigms of spatial organization, that is, functional and process approach and nodal regionalism whose instrument is urban region (nodal/functional region, i.e. functional-urban region). Most of these urban-geographic explorations have been carried out for the purposes of spatial planning, with the objective of establishing spatial and functional relations and connections in the dynamic and hierarchical system of settlements. The chosen process functionalism approach has given to the spatial and functional structure of the network of settlements evolutionary character, viewing the relations between the elements of the settlements system as changeable categories dependent on the force, intensity, quality, duration and territorial reach of the relations constituted in the mentioned networks. Every functional relation is the outcome of processes whose synergistic or individual effects cause the changes of the structures of settlement network systems. On the other hand, the concept of nodal region has been chosen due to the empirically established fact that urban settlements, through their functioning, have an impact on regional integration and differentiation of complex and heterogeneous space. Nodal/urban regions are the product of complex interactions between urban settlements and their surroundings. The extent of their influence on the functional integration and regional differentiation of the territory is directly reliant on the transitional phase of urbanization. Regions are developed in the conditions of dynamic processes of concentration and decentralization of functions, population, working places and public utilities and services. Evolutionary development stages of urbanization are synchronized with the attained economic development, that is, with the level of socioeconomic transformation of population. This is the reason why urban regions are regarded as core elements of spatial and functional organization of the

territory. Urban region is, therefore, the space of functional integration of the city and the settlements in its zone of influence and represents an open and dynamic system.

On the basis of the explorations of urban agglomerations development, as well as spatial and functional relations and connections in them, general model of the urban development level has been formed. Urbanization is, according to this view, considered as a transitional process, complex and continuous, which manifests itself through: 1) concentration of economic and social activities and population in the city; 2) spatial and functional integration of the city and surrounding settlements achieved due to the economic interactions and social mobility of population; 3) development of communication systems and infrastructure, which leads to the deconcentration of socioeconomic activities and the increase in the radius of the daily migration of population; 4) development of suburbs with various functional purposes and roles; 5) reduction of disparities between the quality of life of the population living in the centre and the one living on the peripheries of urban regions; and 6) achievement of spatial and functional and socioeconomic equilibrium [1], [2].

Development of cities and their role in the organization of space in Serbia has three key features: a) demographic growth of cities; b) increase in the number of urban settlements; and c) transformation of rural into urban/urbanized settlements and areas due to the spreading of urbanization from urban centres/nucleuses over regional surroundings-periphery. Social division of labour, mobility of capital, development of industry as well as local and regional trade have turned rural areas into influential spheres of cities which due to this acquire regional centrality and become places of concentration of complex functions [2].

2. SPATIAL AND FUNCTIONAL ORGANIZATION OF EUROPEAN UNION

2.1. European Union Urban Systems

Functional integrated areas and multi-modal corridors have been determined in the European Union based on the paradigm of spatial organization, aimed at contributing to the constitution of intergrated urban system with even hierarchy and strong spatial and functional relations. Within the INTERREG programme, the model of Metropolitan European Growth Areas – MEGAs has been proposed, as the most coherent model of decentralization and balanced development of the EU.

Spatial development of the EU is characterized by “inherited economic monocentrism and urban polycentrism” [3:171]. EU expansion has significant geographic, political, institutional, economic, ecological, functional and other implications. Previous regional disparities in terms of the economic and social development level have been increased, which becomes evident in greater dichotomy between well-developed and spatio-functionally integrated West European nucleus and periphery which is insufficiently developed and lacks traffic accessibility. Economic space in the EU has the centre-periphery attributes, while its urban system consists of still incoherent set of national urban systems [3]. Therefore, the model of polycentric urban system based on metropolitan regions and their infrastructural connecting by trans-European transport corridors [4], [5] has been selected as the most suitable instrument of reaching balanced regional development. Classical monocentric approach is simply no longer appropriate for modern metropolitan areas in the EU [6]. Urban system comprises several well-connected centres with specialized socioeconomic functions. In addition, it has been observed that these metropolitan areas play an increasingly relevant role in the network of supranational and global system of cities as well [7].

The velocity of technological, political, social and economic changes results in, among other things, changes in the hierarchy of functional relations of the existing urban systems in European countries. The process of cities' adaptation to globalisation, their new position in the hierarchy of urban centres of

national systems and the EU is afoot. By this process, the new functional network and agglomeration systems in the European space are developed. In the instances of certain cities the changes are radical, some of them adjust to them more easily, whereas some others are faced with new limitations. Functional characteristics of the most important EU centres are: their accessibility, the fact that they are the centres of entrepreneurship and international institutions and that they are integrated in the global market, as well as the fact that they are the centres of decision-making and governance. Contrary to them, metropolises of peripheral regions have a limited and specialized international role, rather poorly developed sector of modern utilities and services, fewer activities of global importance and, generally, weaker access to the market. Owing to the lack of efficient policy in relation to the market control, which becomes extremely prominent in the moments of world economic crisis, it seems that modern trends of integration into the global economy contribute to the inherited centre-periphery structure of the EU! Its current spatial development is characterized by further concentration of activities, particularly high technology and global functions in the nucleus and a few metropolises on the periphery. Therefore, prospects of economic development are far more favourable in the nucleus, which is distinguished by population growth, higher productivity, in addition to higher percentage of highly educated population. It is also equipped with better services and infrastructure, which gives new comparative advantage in comparison with the rest of the EU [8].

2.2. Determination of agglomeration systems of the EU and other European countries

There are two basic views of urban areas in the EU as the key determinants of polycentric development. The first view is based on the fact that every city has its “territorial horizon” (the zone of influence) which overlaps with the territorial horizons of neighbouring cities. The overlappings cause two seemingly opposite processes: competition and cooperation. This is taken into account when planning the daily migration between the central city and its territorial horizon, but also that between the central city and its overlapping zones with other urban centres. The second view is grounded in the fact that main urban centres indirectly influence the organisation of the territories which are not directly in their zones of influence, but belong to the zones of general “urban context”. In all regional units of Europe general “urban context” has a considerable impact on the activation of potential, both by its general availability and the availability to specialized services and market. In this respect, every city represents an element and factor of “urban context” of several regions. The general availability results in the intensification of daily migrations at larger distances [5].

The conclusion could be drawn, based on ESPON researches, that the degree of polycentricity has declined in all European countries over the last two decades. The reason behind this lies in the increased accessibility of big centres for disadvantaged areas, economic growth and the growth of the population in big metropolitan areas. It is expected that the process of declining of polycentricity will continue in the future, which is indicated by all scenarios of transport policies considered in ESPON. EU member countries which joined the Union after 2005 are still more polycentric than the EU “nucleus”. The decline of polycentricity is faster in the countries which have recently accessed the Union than in the old ones, while the process of centralization in the former ones will be accelerated by the implementation of planned transport policies.

In contrast to the EU nucleus, socioeconomic transformations and their spatial manifestations in the urban systems of former socialist countries which are now either members of the EU or in different stages of the EU integration have a multitude of common characteristics which point to the accelerated development of centre-periphery structure. Recent explorations of socio-economic transformation of the population in **Croatia**, as well as social space of the city of Zagreb and its structures, indicate that there are rather negative spatial and socioeconomic changes. Following 1990, social segregation of urban population has increased. According to the socioeconomic indicators, the population still follows the scheme of concentric distribution, but with ever more prominent dichotomy between the centre and the periphery. However, the differences in

socioeconomic status have deepened due to the transition from the socialist into post-socialist city. They are reflected in greater differences in terms of income and the unemployment rise [9]. The level of urbanization of the settlements in the vicinity of city centres has gone up, especially in cases of those along main roads. Rural settlements tend to be isolated, remote and utterly functionally dependent on the centre. Industrialization has been the main driving force of polarisation, while after the initial process of migration from villages into the city, in the process of suburbanization daily migrations have become stronger. Decentralization of the housing function is stronger than decentralization of the work function. There is a prominent correlation between the size of settlements in terms of population and the achieved level of socioeconomic transformation, i.e. functional integration in the urban region [10], [11], [12]. The processes of spatial and functional restructuring are also afoot inside the city. New business centres in the city are established, along with new residential areas; the traffic issues and similar have intensified [13]. Post-industrial development of **Slovenia** is characterized by general globalization trends which have an effect on the economic, social and spatial development of the city: concentration of capital, knowledge, work places and highly qualified workforce, infrastructure etc. in larger cities; terziation and productive specialization of industry; regional centralization and increased social segregation [1], [14], [15]. . The process of metropolitanization, which started as early as in the 1980s in **Poland**, intensified, but in new spatial and social conditions. The economic, social and spatial transformations of the city and city regions are nearly identical to the ones in other ex socialist countries [16]. It is interesting that Parisek believes the development of Polish metropolitan areas will depend rather on the influence of external than internal factors, due to the big differences with regard to the economic potentials of Poland and the developed part of the EU: "The future of Szczecin will be decided in Berlin, while that of Lublin will be determined by the political and economic situation in Ukraine, Belarus and Russia", [17:115]. The situation is similar in **Romania** where planned regions with development functions have been formed so as to alleviate regional disparities. These disparities have especially intensified during the country's process of approaching the EU membership and after its accession to the EU, as the majority of direct foreign investments have been focused on Bucharest and several regional centres. Demographic processes have been distinguished by mass emigration of active working population to the developed EU countries, in addition to the emigration from deindustrialized cities to rural areas [18], [19].

3. SPATIAL AND FUNCTIONAL ORGANIZATION OF URBAN SYSTEM OF SERBIA

3.1. Specificities of Serbian urban system development

The most intensive demographic, socioeconomic and socio-geographic changes on the Serbian territory, which drastically changed the organization and use of space, occurred during the last decades of the 20th century. The fundamental causes of these changes were pronounced planned industrialization of the then Yugoslavia, along with urbanization and deagrarianization, all of these being politically initiated. Their synergistic effects essentially changed the socioeconomic structure of the society as a whole.

The first phase of industrialization, immediately after the Second World War, was featured by crucial structural and spatial changes and consequences. In this period cities, as future industrial centres, became the centres of development and population concentration. Until the 1960s, the processes of demographic transition had been intensifying, however, they gained the character of acceleration with spontaneous effects afterwards [20]. Until then, the majority of rural settlements had positive birth rate, which later on became negative owing to selective emigration of young, fertile and active working population. The birth rate and net migration combined resulted in demographic exodus and depopulation in rural areas, as well as lower or higher level of polarization in urban centres and their surroundings. Urban concentration of population and functions in municipal centres and the demographic emptying of rural areas prompted by emigration or birth rate decline or, most frequently,

by the combination of the two, led to the changes in the demographic size of the settlements, especially to the demographic reduction of villages [21]. Thus, demographic and social changes were faster than the economic ones which, during the 1970s and 1980s, became “rather oriented to extensive production than intensively productive” [20:261].

In the network of settlements the processes of accelerated differentiated growth of cities and the establishment of functional and hierarchical relations between them were intensified. The initial effect of industry, by the principle of circular cumulative causality, stimulated the development and concentration of other functions in the cities, which resulted in the increase of their functional capacity and, consequently, the overall development. In the initial phase of spatial and functional transformation of the settlement network, urban functions were concentrated in the cities, while in the next phase, which coincides with the development of tertiary and quaternary sectors of the economy, urbanization spread to the settlements in the cities' close vicinity, which meant the commencement of suburbanization. The influences of big cities (the phase of metropolitanization) occurred towards the end of the 1960s, the mid-size ones in the 1970s, while those of the small ones only in the 1980s. Due to the scarcity of the buildable land, insufficiently developed public services, communal and technical infrastructure and suprastructure in the city nucleuses, suburban settlements became the migrants' destinations. This provoked their demographic growth, accompanied by intensive construction of blocks of flats and socioeconomic transformation reflected in the decrease of the share of agricultural population in the overall and active population, as well as in the increase of the number of households with non-agricultural and multiple sources of income. The mentioned processes were accompanied by functional transformation of individual settlements and/or their networks as a whole. In the initial phase of concentration, only municipal centres had more or less polyfunctional character, while other settlements were monofunctional with the domination of active population in primary sectors of the economy, mostly within their own households. Villages did not have developed central functions. Regarding public services, primary education, with relatively dispersed schools in line with the distribution of the population obliged to attend them, was implemented. Since then, until these days, villages have been functionally transformed under the direct or indirect influence of the development and diversification of functions of municipal centres [22]. Functional differentiations of municipal territories and diversification of the functions of settlements were done in the conditions of the employment of population in non-agricultural sectors of the economy, gradual development and somewhat more dispersed arrangement of the structures of public-social infrastructure in rural areas [23].

The processes of urbanisation, deagrarization and industrialization had diverse effects on macro units and conditional regions of Serbia. The biggest transformations in space were evident in the places where the abrupt industrial development and hence triggered deagrarization provoked the abandoning of or changes in the previous lifestyle, both in periurban zones of large city centres and passive highland areas. The consequences of this transformation have been reflected in the intensive depopulation and demographic ageing of the population of rural settlements and, more recently, smaller urban centres on the one hand, and the concentration of population in regional centres and spheres-zones of growth and development on the other hand.

3.2. Morphological structure of Serbian urban systems

On of the latest models of urban systems in Serbia distinguishes 4 types of cities according to their functions [22], [24]: 1) cities of great importance for the international integration of Serbia; 2) cities of great importance for the integration of Serbian geospace; 3) cities at the internal development axes; and 4) cities of local integrations. Primary axes of development are those of the Danube, the Morava (the Velika Morava and the Južna Morava) and the Zapadna Morava. Secondary axes of development are not sufficiently differentiated, or lack adequate infrastructure. In addition, the model distinguishes geospaces with demographic and economic depression, which are out of reach

of the axes' influences and include peripheral, border and mountain parts of Serbia. In most parts of the country the hierarchy of urban centres has been established, with the formation of zones of influence around these centres based on spatial and functional complementarity. It is worth emphasizing that the mentioned hierarchical relations are the consequence of the position of the centres in territorial and administrative organization of Serbia.

Morphologically and structurally, several forms of nodal centres and areas have been formed [25], [20], [21]:

- Smaller urban areas in rural surroundings have been constituted by the local concentration of population and functions in small municipal centres. These centres have been, thanks to the allocation of industry, transformed from craftsmanship, trade and administrative centres into the urban kind of settlements with the well-developed functions of centres. Until the 1980s, they grew due to migrations, mostly those from the villages in their close vicinity. These urban centres, with their functional capacities and nodality, could not attract all migrants (population from the surroundings no longer engaged in agriculture) who moved to urban settlements with well-developed functions. They are the centres of local integration, that is to say, local centres of work. Most in terms of population small urban centres in Serbia belong to this category.
- Smaller and larger agglomerations of urban settlements are functionally compatible with more or less urbanized peri-urban and surrounding settlements with the evident spatial differentiation of the nucleus with higher level of nodality. Until the 1980s, the nucleuses had the functions of the growth poles and later on, the development poles. The structure of the fields of the economy which prevailed in them changed due to the industrial recession and the reduction, that is the increase, in the number of population employed in industrial centres, that is the centres of services sector, respectively. They influence the socio-geographic transformation and functional integration of the surrounding, and the creation of smaller or larger functional-urban regions and stable daily urban systems, that is, nodal regions.
- Regional functional-urban systems have been created by the combination of spatial and functional influences between the regional and local urban centres. They have the character of functional-urban regions and incorporate several settlements whose mutual connections originate from the functional relations and interactions between their structural elements.
- Belgrade agglomeration, which is a complex and dynamic system of urban settlements with high level of functional and morphological connections, specific hierarchy, large zone of influence which surpasses the borders of Serbia, and which possesses the potential to become the centre of the future European metropolitan region.

3.3. Urban system of Serbia in spatial planning

In the Spatial Plan of the Republic of Serbia from 1996 [26] the network of settlements was treated as the main instrument of rational functional organization of space. The main objectives of the development of "the systems of urban settlements and functional areas" were: more rapid development of those urban centres which would encourage and direct more even-balanced and harmonized development of the network of settlements on the whole territory; rational spatial organization of central functions in accordance with the distribution of users and services; the formation of closer and rational connections in regions and macro units. Planned spatial solution of the network of the centres in Serbia included: 1. hierarchical structure of urban centres; 2. spatial system of urban centres; and 3. zones of intensive relations of regional centres. Serbia was, in keeping with the established criteria, divided into 34 "functional areas" (with the regional or higher level centre as the centre of the given area) whose territorial reach chiefly coincided with the division into the administrative districts.

In the new Spatial Plan of the Republic of Serbia [27] the basic planning objective is also achieving the polycentric urban system. The plan specifies the "potential" functional-hierarchical structure of

the centres, divided into 6 hierarchical levels: 1. main city or the centre in the category of the European MEGA (Metropolitan Growth Area); 2. centre with international importance; 3. centres with national importance; 4. regional centres; 5. local (municipal) urban centres; and 6. other local (municipal) centres. The concept of the accordance between the development of the network and the functions of the centres was implemented in spatial planning by the formation of functional urban areas (FUA) on the basis of: a) defining territorial and functional jurisdiction, along with the centres hierarchy; and b) decentralization of the work function and the establishment of development centres with smaller functional importance, dispersedly distributed in the closer or broader surroundings of main centres.

3.4. Model of delimitation of urban regions

Based on the experience of the countries which entered the tertiary phase of urbanization earlier, the models which start from the premise that socioeconomic region consists of the city having a certain size and functional capacity, and its regional surroundings which are being socially, economically, spatially and functionally transformed owing to the influences of the city functions have been made [2]. In line with the current specificities of spatial and functional structure of the network of settlements in Serbia, the current model has the following starting points [25]:

- The city is the centre of growth and development. In the service-oriented society, it is the source of new socioeconomic, technical and technological, as well as cultural innovations whose effects are present in the regional surroundings, influencing their transformation.
- Establishment of the functional equilibrium of settlements is the process whose result is reflected, in spatial terms, in urbanized areas with regional importance. In the pre-industrial and early phase of industrial society, dichotomies and disfunctionalities between urban and rural settlements are prominent. They are constantly and gradually diminished by the development of various forms of more or less socio-geographically transformed and urbanized settlements. In the late phase of industrial and in post-industrial society, the spatial and functional settlements dichotomy is alleviated and gradually disappears in the equilibrium;
- There are permanent relations of volatile intensity between extremely urban and extremely rural settlements;
- Metropolitan regions are organized, distinguished and differentiated into subregional totalities by grouping of settlements with the same or similar level of urbanization.

3.5. Daily urban systems in Serbia

Daily migration of the population in Serbia was initiated by the society's attempts to solve the issue of agrarian overpopulation by means of industrialization and relocation of the population into urban settlements. Thus urban settlements, paralelly with the allocation of industry and the development of the branches of tertiary-quaternary sector and public-social services in them, gained the role of development centres [28]. In view of the fact that not all the population, following the transition from agrarian into non-agrarian sectors, migrated from rural into urban settlements – centres of work, the conditions were created for the daily migration in the form of daily urban systems. Due to the employment of population in urban settlements and partly in the peri-urban ones on the one hand, and the fact that it was impossible to definitely migrate to the centres of work on the other hand, daily migration was the outcome of economic compromises. Due to this, special socioeconomic category named "worker-farmer" appeared in the country. This is the implication of the incomplete allocation of work from agriculture into secondary, service and administrative sectors. This process had an impact on a certain kind of socioeconomic transformation of city surroundings [25].

In the last couple of years daily migration has started to gain the position that belongs to it in spatial plans. In strategic spatial planning, when preparing several regional spatial plans which were made

in the Institute of Architecture and Urban & Spatial Planning of Serbia [21], [29] the segment related to the daily migration of population was implemented. In this case daily migration was researched for the purposes of analyzing the existing settlement network and the spatial and functional relations within it, on the one hand, and for the purposes of planning its sustainable and rational organization, on the other hand. The emphasis was placed on the correlation daily migration of population - territorial reach of the functions of regional and local centres.

3.6. Modern spatial and functional transformations of urban regions in Serbia

Although urban centres, that is, nodal regions in Serbia have been created in diverse physical-geographic conditions and predispositions, in, it could be said, different cultural and historical context of development and have different importance in terms of their population and functions, as well as territorial reach, it is possible to generalize and abstract the conclusions about modern spatial and functional relations in the network of its cities and urban regions [30]:

- For the extent and intensity of the functional influence of the city, its position in terms of traffic and geography is relevant. The concentration of population is done along major traffic roads in the urban region. This process manifests in the space in the more intensive construction and changes in the land use, especially when approaching region nucleus.
- Demographic size of settlements decreases from low to high altitudes, i.e. the population concentrates in the settlements situated in river valleys, which are well-connected in terms of traffic and which are close to the urban centres.
- Population density increases from the periphery of the urban region to its centre. It is still the highest in the nucleus, as well as in the peri-urban settlements (peri-urban zones).
- After the Second World War, the cities came to be the centres of industrial development, therefore, due to the demand for workforce, the migrations towards them intensified. The cities then became the centres of tertiary functions. The level of the immigrants' education varied and they were differentiated according to the place they had migrated from. The bigger the territorial reach of the city functions was, the further from the city were the places the immigrants came from. The population emigrated predominantly from the villages and smaller urban centres which were close to the city, while in the case of the cities with specialized functions and demands for the workforce with specific type of education (some industrial branches, universities, health care and defense), the population also emigrated from other centres, as well as from other republics of the former Yugoslavia. The concentration of population, activities, services and capital was the characteristic of dominant urban centres, as well as other settlements in their surroundings, though with less intensity and territorial reach in the latter case.
- The increase in the number of urban population is not completely compatible with the decrease in the number of agricultural population, i.e. transfer of the population from agricultural into non-agricultural fields of the economy does not necessarily mean their migration to the city. The process of deruralization does not happen at the same speed as the process of deagrarianization, which results in: inevitable transformation of rural settlements which is reflected in the change of agrarian landscape, the changed purpose of the objects used in agricultural economy etc., that is, in the "urbanization of villages"; and the appearance of increasingly intensive commuting which require certain infrastructure and suprastructure.
- Until the 1980s, when it comes to the structure of migrations, immigration prevailed over emigration. After this, in the period starting from 1981, the year of the census, most settlements were characterized by emigration, apart from municipal/urban centre, in addition to certain peri-urban settlements which maintained characteristics of immigration, positive birth rate and demographic growth. Since 2000, only Belgrade, Novi Sad and Niš, along with a few regional centres, have been marked by positive net migration.
- Based on the analysis of the components of the natural movement of population in urban centres as development poles, the conclusion can be drawn that there is an increase of population, both owing to immigration and positive birth rate. In the period from 1971-1981, migrational component was

dominant over the birth rate. In the next period between two censuses, the same could not be observed. The centres were immigrational areas, the immigration being more prominent with the higher functional importance of the centre. The development potential of most regional municipal/urban centres was drastically diminished due to the general socioeconomic crisis. Therefore, they lost their population which moves to Belgrade, Novi Sad and Niš.

- Generally speaking, autochthonous population in settlements outnumbers the immigrants at the level of administrative units. However, urban centres often have approximately the same number of autochthonous population and immigrants, or moreover, the higher number of immigrants. The more functionally important the centre is, the bigger the share of immigrants is.
- By comparative analysis of the data regarding the number of population in rural settlements in the period from 1971-2002, one can observe the positive tendency of the increase in the total rural population in mid-size and large villages. The mentioned positive trends can be explained by completely exhausted demographic reserves and potentials of rural settlements (traditional providers of cities with population), decrease in attractive characteristics of urban centres due to the collapse of industrial production and stagnation related to the construction of blocks of flats, as well as economic effects reflected in the availability of cheap buildable land in peri-urban centre zone. However, it is necessary to make a distinction between this process and suburbanization.
- The process of the regeneration of settlements by means of increased birth rate is mostly finished. The only positive component in the birth rate is mechanical movement. There is a two-way process: demographic enlargement of the cities (the number of large urban settlements increases), with simultaneous decrease of villages (the number of small villages, in terms of population, increases). The city centre loses its attractive attributes which it previously had (due to the mentioned), and the share of migrants increases in peri-urban settlements and certain peripheral settlements.
- Bigger share of commuters is noticeable in the settlements of peri-urban zone.
- From the aspect of dominant functions of settlements, agrarian ones are still dominant, but the changes can be seen in the increase in the number of agrarian-industrial and agrarian-service settlements. The share of industrial-agrarian and industrial-service settlements generally decreases because of the drop or complete standstill of industrial growth. The biggest functional transformations have happened in the central and peri-urban centre zone. The city most frequently becomes the dominant centres of the service sector, whereas the settlements in the peri-urban zone gain the attributes of industrial and service ones. This processes point to the economic transformations of settlements from predominantly agrarian to industrial and service types. The number of settlements with the functions of diversification rises. The city centre specializes in the tertiary sector, while the secondary sector is moved to peri-urban settlements in the commuting isochrone.
- It is indicative that the changes in the degree of urbanization of settlements generally follow previously specified processes in the functional transformation. The processes of urbanization radially spread around the city centre.
- In the period considered, the demographic background of city centres is exhausted, some of the attractive functions of the centre have vanished (employment, housing and urban lifestyle), transitional crisis has called into question the advantages of the city life, while the time of travelling between settlements has diminished. In addition, the impossibility of moving into the city has placed the pressures on the periurban zone, which has provoked moving of the certain functions towards the periphery.
- Functional organization of the urban region comprises the centre with the ring of peri-urban settlements and several centres with specific functions, distributed on the periphery (chiefly settlements with tourist and other specific functions).

5. CONCLUSION REMARKS

The administrative importance of cities in Serbia determines to a great extent their industrial relevance, by means of which the city's work function becomes stronger. City centres are the poles of industrial development with the concentration of subregional and local workforce. Nevertheless, with the recession of the industrial sector and the sector of services connected with it, the polarization of the territory to the centres of work commenced. It is to expect that larger centres have retained their industrial importance, which clearly determines the direction of daily migration, that is the migration of the population in general. Due to this, the functional capacity of smaller centres has been additionally reduced and limited to the administrative and public service functions. The concept of „vicious circles” is thus accelerating, since the decrease of functions will encourage emigration, which will make it harder to maintain administrative-public functions. However, deindustrialization, wrongly interpreted rather as „the closing of factories“ than the evolution of industry towards technically and technologically more progressive and flexible branches of the economy, with synchronized development of tertiary sector has disturbed the industrial structure of Serbia, leaving serious consequences on the overall development of the society [31].

In this respect, by selective emigration of highly educated, fertile and active working population, the functional capacity of peripheral urban regions, their centres and settlements is decreasing, which raises the question about the competence and, generally, possibility of local communities to govern their own development. Another significant consequence of administrative decisions concerns the territorial organization. As a rule, the motives of all previous models of organization, particularly the current ones, have been based on the political will and bureaucratic practice. It appears that there has been little regard in this case for the geographic sciences, i.e. implementation of the paradigm of spatial organization. The question remains whether, and to what degree, the majority of cities/local communities in Serbia have the role in the even-balanced spatial development of their territories? Is the situation quite the opposite – is it possible that they simply encourage emigration and deepening of the space polarization for the reason of their modest functional capacities?

Regarding the future development of public services and utilities in Serbia, there will be a disparity between the constitutional rights and proclaimed standards on the one hand, and economic conditions on the principle of Christaller's „minimum of demand“ on the other. Favourizing economic profitability over equal social standard has led to the changes in the functioning and hierarchical organization of some public services (above all, social institutions and health care, and potentially educational system). Further effects will show according to the already mentioned negative concept of vicious circles

The impulses of urbanization spread in line with the general theoretical basis of their phases and dynamics. Their intensity and territorial reach are the reflection of the functional significance of the centre. Morphologically, they are usually visible in the form of concentric circles or line systems, with the urbanization reducing with moving away from the centre. Urbanization has a greater impact on rather „rural“ settlements, i.e. those with lower level of socioeconomic transformation. In addition, in cases of the settlements with similar functional capacity and spatial vicinity, the effect of agglomeration and polycentric complementarity of development can be observed. The model of the urbanization level stresses the issue of regional imbalance: when and under which conditions do positive impulses from the centre towards the surrounding settlements, which influence their socioeconomic transformation, become negative, thus causing the decrease in the functional capacity of the surrounding settlements putting them in the position of utter dependence on the centre with accompanying degradation of their socioeconomic structure?

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