

## PECULIARITIES IN THE PROCESS OF URBANIZATION ON THE GREAT HUNGARIAN PLAIN

J. TÓTH

*Hungarian Academy of Sciences  
Research Center for Regional Studies  
Pécs, 7621, Hungary*

The characteristic features of the urbanization process of the Hungarian plain has been one of my main research field of the past two decades. The partial result of the research, beside other scientific journals, have appeared in the annual *Acta Geographica Szegediensis*. Now I have made a summary of my investigations up to this point.

The main characteristic features of the urbanization process of the Alföld (Great Plain) derive from the specific historical development, the relative backwardness and the comparatively late growth of the region.

The natural endowments, the type of economy, the characteristic features of the settlement system and the territorial differences within the region enhance these principal features further. Compared to other regions, differences are not just the matter of being behind the times. The Hungarian Great Plain does not follow the development of other regions; the urbanization process in the future will also have distinctive differences. The present transformation of our settlement and regional development strategy requires talking these facts into consideration much more now than ever before.

In the following I summarize my research work in a point system. I think that my theoretical statements plus those connected with the characteristic features of demography, settlement, spatial structure and the conclusion, can be utilised in the elaboration of a development strategy of the Hungarian Plain, which is in compliance with the Hungarian long term social goals and also takes the regional potentials and interests into consideration.

### Theoretical statements

1) The development of the productive forces shows not only territorial disparities but also sectoral unevenness. Centres and peripheries, as inevitable counter-types, are formed in the economic space as a result of the fact that the particularly favourable socio-economic constellation influenced by the natural endowments, concentrate the most dynamic branches of economy regionally, and all other branches in close territorial relation with these quickly developing ones, also undergo a rapid development. The use of „central-periphery” model is very frequent in both the international and national economic analyses. (For example: *Berend, T. I.*

— *Ránki, Gy.* 1979) The parts of the centre-periphery notion pair are relative categories: the same element of the economic space can be periphery on one level and centre on another level and in another relation-system. The spatial structure of a country is the complexity of centres and peripheries at different levels with complicated relation system, in which a hierarchical order can be seen, also reflected in the structure of the institution system.

The centre determines the growth rate of economy, the nature of development and its regional relations.

Thus it has an advantage of being more highly developed than the periphery and its development is in the interest of the whole country, because of the faster results, greater efficiency and its influence upon the peripheries. Not negligible are the immanent interest of the institutions concentrated in the centres.

The periphery on the whole, compared to the centre, can be said to be backward. This being behind the times can be revealed, beside the economic sphere, in the peculiarities of the demographic composition, living conditions of the population and also the representation in decision making.

The periphery type includes both the spatial distance from the centre (economic) and being behind the times. The latter means that those processes which have completed in the centre may be just commencing in the periphery.

Therefore the development of the periphery is not just simply the belated repetition of that of the centres but is, instead, of a different nature.

The Great Plain, which inherited backwardness historically, undoubtedly showed striking progress after World War 2, but in spite of this, compared to the centre extending around Budapest and the industrial axis, it has remained a periphery, what is more, certain areas within the Great Plain region have become the „periphery of the periphery”.

2) Urbanization can be defined as a process running parallel with the development of the productive forces and the widening and deepening distribution of labour, therefore:

- a) urbanization is an uninterrupted process — though varying in intensity — which runs parallel to the development of the productive forces;
- b) it is an all embracing process affecting settlements from the separate smallest forms to metropolitan agglomerations;
- c) it involves the mobility of the population (the most important labour force) into activity groups of different character;
- d) it includes the regional concentration of population;
- e) it covers the changes in the way of life of the population which is a direct consequence of the changes in occupation and residence;
- f) urbanization contains the altered level and structure of demands of the population from environmental viewpoint.

From our interpretation it emerges from other things that the intensity of the urbanization process may divert spatially to a great extent. Progressive and regressive phase may alternate each other in the process in compliance with the development of the productive forces. This and the accompanying regional differentiation

appear even in a small country like Hungary. This primarily is in connection with the fact that kind of role certain regions of the country play in the spatial structure of the national economy. The urbanization process in some areas may remain behind while in other regions it enjoys a period of exeleration, compared to any former eras depending on the changes of the economic, political and geographical situation of the country and the reevaluation of the natural resources.

Therefore the concrete measures, plans and conceptions in connection with the urbanization process cannot overlook the fact that as a consequence of earlier characteristics of the development, the urbanization process in different areas are at diverse levels. As a result the impact of the measures, the areas concerned react differently.

A settlement, in the given geographical environment, can be defined as a system of the socio-economic and technical structures (spheres) intensively interacting with the elements of the geographical environment. In an optimal case, which suppose a harmonious development of certain structures, this concept can be demonstrated by a Tetrahedron.

The base of the tetrahedron is the geographical environment, the other three sides are the economic, social and technical (infrastructural) spheres respectively. Along the edges the intensity of the interaction between the spheres (structures) depends on their level of development. The settlement is the system of all these structures and their interactions, which is in strong interrelationship with the natural environment both as spheres and a uniform organism. Conceiving a settlement in this way (considering the settlement-environment relation), the following can be stated:

- a) the development (complexity) levels of the spheres are different;
- b) the dynamism of development of the structures differs;
- c) in the long run and as a tendency, there is more or less a correlation between the development level and the dynamism of structures;
- d) the whole structure can be modified by the change of the elements of the structures (their accelerated development or their decline, or perhaps by the appearance of a new element);
- e) this modification influences in an indirect way the system of structures (of the whole settlement);
- f) the complexity level of development, the structure-systems (the settlements) and their dynamism are different.

The development of the productive forces and the urbanization process help strengthen the interrelationship between settlements. The settlements loose their earlier independent status and form a unified settlement system. Thus a settlement network forms, in which the higher development level of the productive forces and the more advanced the urbanization process, the stronger are the interactions of the individual elements.

Within the settlement network the towns and villages can be separated functionally and according to the complexity level of the structure system. The investigation and

interpretation of the settlements can only be worthwhile by revealing the concrete regional concerns and the concrete spatial structural interrelationship.

3) We consider the environment as that part of the Earth's biosphere where the settlement functions and beside natural laws, social influences, also come across modifying the former impacts. As a result of this conception of environment (considering settlement-environment relation), the following can be accentuated:

- a) the elements of the geographical environment are in direct relationship with all the three structures of the settlement;
- b) this is an interrelationship:  
certain elements of the environment influence the development of the structures, while the structures in turn react upon the environment;
- c) the operation of the system transforms the geographical environment with different intensity and to various depths;
- d) the altered environment responds in a different way upon the settlements;
- e) in the environment of the settlement, beside the modified natural process, the socio-economic and technical influences come across more and more;
- f) the intensity of these effects is in proportion to the size, development and complexity of the settlement;
- g) the nature of the effects can be differentiated according to the types of the settlements;
- h) with the growth, development and functional transformation of settlements, the rearrangement of constituent structures, different elements of the geographical environment may become of greater importance;
- i) at the present level of the productive forces in Hungary, the demand for the environment which provides favourable living conditions can be considered a general one;
- j) the protection, the purposeful transformation and reestablishment of the environment and its elements requires a complex approach and environmental management.

With the formation to the settlement network and the utilization of the environment as a whole the impacts on the environment are becoming more and more universal and intensive. In contrast, compared to the previous situation characterized by a geographical environment where natural laws operated uninterruptedly, and the settlement-environment interrelationship was isolated, a uniform relationship between settlement networks and environment has been established.

In this new environment zones and centres of intensive settlement-environment interrelationship are surrounded by areas of less intensive interrelationships, though the are organic parts of the interaction zone.

4) In regards to the structure, rate and direction, the development of a region depends upon the role it plays as an economic-spatial unit in the regional distribution of labour of the national economy. As a result, the settlements of the region concerned enjoy development, because the population, the majority of the socio-economic activities takes place in the area concerned and the infrastructure also concentrates in them.

Consequently<sup>3</sup> there is an essential interrelationship between the regional and settlement development. The texture of the region, either from an economic, social or technical point of view, appears mostly through the settlement network. Therefore the co-ordination of the regional and settlement development have to be insured but the present Hungarian institution system, primarily because of its sectoral disunity, is unable to provide this to a great extent.

### **The population geographical aspects of urbanization**

1) In the period of accelerated socio-economic changes following World War 2, all those circumstances which influenced the position of the region in the regional distribution of labour in Hungary and those which maintained the peripheral situation of the Great Plain, also asserted their influence upon the demographical processes.

At present the number of the population living in the Great Plain is half a million less than could be expected on the basis of the indices of the natural increase; consequently the out-migrants belong to the more mobile, younger, more educated and trained, therefore demographically and socially more valuable part of the population. The consequences of this have caused an only slowly curable deformation in the demographical structure of the Great Plain. Also it has contributed to the conservation of its peripheral nature reducing the chances of its elimination.

2) The share of the Great Plain in the total number of the population in Hungary rapidly decreased following the liberation (1945) of the country and at present it has reached the bottom in spite of the fact that the relative situation of the region improved in the past decade.

There are essential differences in the change of the number of population between the studied periods. In the 1950s the number of the population in the macro-region increased and the natural increase exceeded the migration loss. During this time the population of the villages was not decreasing at a rapid rate, though it was the only region of the country which showed any decrease at all. The 1960s (especially the first few years) were the period of the most rapid interregional population redistribution in Hungary. This had an especially disadvantageous influence upon the Great Plain: nearly 10 per cent of the population of the villages was lost during this period. At the same time the growth rate of the urban population was still under the national average.

In the 1970s, in spite of the fact that there was no essential change in the demographic indices and the make-up of the village population, the relative situation of the region improved as a result of the accelerated growth rate of the urban population. In the light of the demographic processes of the 1980s leading to a loss in the national population, this improvement proved to be very transitional: the structure of population compared to the national composition has made its effect felt, though with intraregional differences.

3) The demographic differences have increased between the regions of the Great Plain. On the whole population centre of the region has shifted toward the north. The traditionally high natural increase of the population of the Northern Territory Beyond the River Tisza and the spatially differentiated ratio of out migration also play a role in this.

In some regions, like Sárrét, Tiszafüred and South-Békés, out-migration has grown out of proportions, sometimes exceeding 50 per cent. Compared to the general situation of the region, a dynamic development of the cities can be seen; they have become the focal point of intraregional in-migration and this way, the places of spatial concentration of the population. Significant and spatially differentiated changes have taken place in the outlying areas, too.

4) The level and rate of the process of urbanization is well reflected by the structure of occupation and the rate of its transformation. The driving force of the occupational restratification on the Great Plain was industry, (as well as, in other parts of the country) though compared to the national average, it was a belated and a much slower process. Recently the role of industry has been taken over by the tertiary and quaternary functions, first on those towns with a more harmonious structure. Agriculture still plays a greater role, compared to the national average, in the occupational structure of the population in the Great Plain. The value of the C coefficient, which shows the rate of restratification and the relative population concentration, is the lowest in the surroundings of the city (cores), while in some peripheral areas (Szatmár, Bihar, Nagykunság, South-Békés) it approaches 1 as a consequence of the slow restratification. The values of some earlier industrialized towns indicate the inception of a new type of equilibrium (for example: Baja, Kalocsa, or Szolnok, Szeged). In the latter two cities the ratio of the people with agrarian occupations has grown.

5) As a result of the large-scale out-migration the age structure of the population in the Great Plain has deteriorated at a significantly faster rate than the national average. The changing of the aging index (the ratio of old people and children) shows that in 1960 in a great part of the settlements of the Great Plain, especially in the villages (regionally it includes two-thirds of the territory east of the Tisza in the north and the Danube-Tisza Interfluve) the situation was more favourable compared to the national average (0.54), and there were hardly any settlements where the ratio of old people over 60 was higher than that of the children. By 1980 the values of the aging index indicated polarization.

The northern part of the Trans-Tisza Region continues to have a more favourable age structure compared to the national average (0.78), moreover, the Nyírség, within the area, has even a better composition of population according to age than the national average in 1960. In other parts of the Great Plain there are hardly any areas with a better age structure when compared to the average: moreover, the situation of some areas (Sárrét, South-Békés, Bácska, Jászság) that are just becoming peripheral is striking in regards to their demographic indices.

6) Over the past few decades significant changes have taken place in the educational level of the population, too. The Great Plain has also followed this process,

although with a relatively little lag, meanwhile the intraregional differences have survived. There are some regions (the area between Debrecen-Nyíregyháza-Mátészalka and around the Danube-Tisza Interfluve) where extensive settlement groups can be found with a population of lower educational level than that of the national average in the villages. Thus among others, the chances of these areas are further diminished in the innovational process.

7) The accelerated process of urbanization of the past few decades has change the earlier situation: compared to the traditional circumstances in which the village with a younger age structure and higher natural increase opposed the town having just the opposite demographic features, at present the towns have become (though to different extent, showing intraregional disparities) the determining factors of demographic processes and the targets of in-migration.

### **Settlement geographical aspects of urbanization**

1) There stages with different characteristics can be distinguished in the impact of the urbanization process on the settlement network after the liberation of Hungary (1945): the 1950s were a relatively calm period, the 1960s experienced impulsive changes essentially (and disadvantageously) modifying the structure; a new phase started in the 1970s from which we hope to develop a more harmonious settlement system and to restrain concentration.

2) Compared to other Hungarian towns, the former market towns once playing a leading role in the settlement structure of the Great Plain, were structures set up of more simple retrogressive spheres in accordance with the socio-economic development and the role the region played in the regional distribution of labour of the country in which they were functioning. Beside backwardness harmony is to be stressed in another context, too: there was conformity between the underdevelopment spheres of the structure of the market towns. The contradictory quicker development of the Great Plain, when compared to past conditions, have disrupted this harmony and reshaped the traditional structure of the market towns in an intraregionally differentiated way. The re-establishment of the harmony of the new structure at a higher level is required by the local and regional interests.

The chances of the market towns for further development in the new phase of the settlement development are dependant upon both the national tendencies and possibilities, and the change in the role of the Great Plain played in the regional distribution of labour. The local factors will also play a role of increasing importances.

3) The giant villages and the real or potential small towns form a historical settlement type, characteristic of the settlement system of the Great Plain. At present this settlement type is undergoing a regionally differentiated transformation. There are three categories which represent the various stages of the development affecting settlements from the giant villages of conservative structure to the dynamic small towns:

- a) the „Szeghalom-type” with developing functions, own potentials and an independent attraction zone; it also enjoys central subsidies;
- b) the „Mezőberény-type” which joins to another, more dynamic centre, thus developing by borrowing other potentials;
- c) the „Vésztő-type” which has hardly transformed from its giant village nature; it can rely on only the local potentials.

The aim of the development is to encourage the development of the settlements into small towns where this process has not yet taken place, or not yet finished and strengthen those where the settlements have already attained a higher phase of this process.

4) The most decisive impact on the settlements typical of the Great Plain, (the 'tanyas', scattered farmsteads), has been the rapid and regionally differentiated elimination of them. At the same time, the living a condition in the more established farmsteads in the Danube-Tisza Interfluve, in the proximity of towns, have substantially improved.

The „tanyas” have also changed morphologically, and their functions are becoming more and more many-faceted.

Though, taken as a whole, the role of „tanyas” in the agricultural production is important, nowadays a part of them are the residences of families which hardly depend upon the traditional agricultural production. „Tanyas” have been transformed into „second homes” and are also becoming more and more numerous.

5) As a result of the urbanization process the interrelations between the settlements are becoming more varied and stronger. Three stages can be distinguished in the development of the interdependent, co-operating settlements covering smaller or larger areas: the settlement group, the conglomerate of settlements and the agglomeration. Very few examples of the latter can be found in the Great Plain, according to the urbanization level, but the first two stages of development are represented more.

6) The conglomerate of Mid-Békés settlement thoroughly investigated, is the most developed settlement conglomerate of the Great Plain and it also plays a significant role in the spatial structure of the country.

A new type of regional development plan of the area, which makes use of the results of the investigation, is under elaboration.

7) In connection with the general situation of the region and its role in the regional distribution of labour of the country, the rate of home construction in the Great Plain was lower than the national average, though towards the end of the period it came close to it. Consequently the inhabitants of this region were forced to make greater financial efforts of their own to improve the housing shortage. Because state central home-building and the construction of the subsidized flats was concentrated in the towns to a greater extent than usual therefore, for a long time, the villages with a population of even 10—20000 were exclude from the circle of the favoured settlements.

8) The National Settlement Network Development Conception (Országos Településfejlesztési Konceptió (OTK), 1971), greatly influenced — also inconsist-



ently — the urbanization process of the Great Plain. The OTK, because of its uniform nature, could only artificially be adapted to the peculiar settlement network of the Great Plain. In many ways, in this part of the country it hindered rather than developed the self-development of the settlements.

9) The new phase of the settlement development of Hungary and the urbanization process in general, started at the beginning of the 1980s. It can objectively be characterized by the fact that the large scale territorial movements of the population have decreased; so instead migration has changed to a movement between the centre and its attraction zone. The development of the new process is supported by increasing the independence of the settlements significantly, and upgrading the role and proportion of local resource.

A characteristic feature of the new phase is that all these changes are taking place in a period of economic development which is struggling with structural problems. In spite of this, the new phase shows promise that a settlement policy massed on the regional peculiarities of the Great Plain will develop.

### **The spatial-structural aspects of urbanization**

1) The socio-economic changes following the liberation of Hungary (1945), the situation of the Great Plain in the country characterized by an altered political-geographic location, put an end to the relative homogeneity nature of the region and differentiated the economic space.

At present a distinct frame of the spatial structure of the Great Plain has developed in which the most important elements are the towns and those areas of dense texture around them, and the belts developing along the most important transportation lines.

Compared to their environs these spatial structural elements have a more dynamic structure and rate of development. They also show the spatial picture of urbanization of the Great Plain.

2) The areas between the foci and lines of the spatial structure are connected with the former, but their texture is looser, their development is slower and their structure preserves a lot of conservative features. From among these regions of peripheral and disadvantageous location those being close to the national boundaries deserve special attention. (There also exist peripheries along the country boundaries proving the limits of our county system.)

3) The attraction zones joining to the towns which have a decisive role in the spatial structure of the Great Plain, consist of less but more populous settlements — in accordance with the peculiarities of the settlement system of the Great Plain — therefore the medium-rank functions give the connecting power. In other regions the texture of the attraction zones is looser than in general; from among the usual intensity zones, the agglomeration area can be found only in the case of the largest centres. Extensive, however, is the transition belt attracted by more centres.

- 4) Within the Great Plain 13 spatial-structural units of different size and population can be distinguished on the basis of the results of the investigation. These units represent different intraregional variations of the urbanization process. The differences of the socio-economic structure and the level of their infrastructural development, the peculiarities of the natural environment and their spatial relation system separate these units, therefore self-development concepts based detailed investigations are required.
- 5) Compared to the national rural average the Great Plain gets permanently and substantially less, through the process of central distribution, from the development resources. This is an intolerable situation, which is not only an ethical question: it is also supported by economic arguments which are unavoidable if we take it to account.
- 6) The differences, in some cases, increasing between the Great Plain and other parts of the country and the differences within the Great Plain (decreasing) refer to the necessity of a uniform economic and regional-settlement development strategy based upon the regional characteristics. There exists a „Great Plain” interest even though its institution system has not been developed yet. The real co-operation of the counties of the Great Plain in the interest of more efficient development and assertion of the „Great Plain interest” would also be a great help.

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