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Factors of transformation in the spatial structure of the southern Kisalföld region – between the late 18th century and the early 20th century

MAIN ARGUMENTS OF THE Ph.D. THESIS

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I. Introduction

In the past 20 years we have been witnessing the renascence of historical geography. This revival does not only manifest itself in the increasing general interest taken in the topic itself but also has materialised in more and more conference papers, studies, monographs. My doctoral thesis is intended to be one in the line of these works by which I am aiming at presenting the long-term transformation process regarding the spatial structure, spatial relations and the urban network in the Southern Kisalföld region. Besides, I also attain to reveal the spatial disparities regarding the development standards in this region. It was not just incidental that I chose the Southern Kisalföld as subject of research. The interest of the reviving historical geography has so far been directed – besides the national level – primarily to the specific problems of the Great Plain and also its constituent smaller areas. Besides, research has also been done to clarify specific spatial organisational issues in South-Transdanubia, the historical Upper Hungary and Transylvania (the last two now parts of Slovakia and Rumania respectively). At the same time very few historical geographical works have dealt with the south of the Kisalföld so far. This relative neglect has various explanations. Firstly, the delimitation of the area in question is not explicit i.e. while in the case of Transylvania or the Great Plain the area, besides the physical geographical limits can also be associated with well distinguishable social, historical characteristics, for the Kisalföld it is hard to define such specific features. Secondly, this region is not ranked among the most problematic areas of the country. The very opposite is true. According to the sources on regional development and the statistical data available in historical perspectives the Kisalföld region has always been the most dynamically developing area of the country, except for one short period. This is the long-term uninterrupted development that makes the examination of transformation having happened in the spatial structure of the region possible.

Relative to the number of historical geographical studies a large number of works in regional geography, demography, and settlement geography have dealt with the south of the Kisalföld. From among the pre-World War II Hungarian regional geographical researchers it was Károly Kogutowicz (KOGUTOWICZ, 1930., 1936) who conducted comprehensive research on particular parts of the area, while Ernő Wallner (WALLNER, 1926., 1930.) and Béla Bulla (BULLA, 1941) examined the areas attached to Austria. From among the works of the past few decades the ones considered as landmarks were prepared by Imre Göcsei (GÖCSEI, 1979.), László Rétvári (RÉTVÁRI, 1977., Szörényiné Irén Kukorelli (SZÖRÉNYINÉ KUKORELLI, 2002.) and Tamás Csapó (CSAPÓ, 1994.)

II. Research preliminaries – basic concepts – the spatial determination of research

Historical science and geography were closely coexisting until the early 19th century. On the one hand they were interwoven in education and on the other hand geography was considered as an auxiliary science of history. In the cosmographies, descriptive statistical works of the early modern times the historical and geographical aspects of the problem field were self-evidently integrated. The pathways of the two sciences departed in the second half of the 19th century. This was the time when the methodology of historical science renewed in the study of sources and source criticism which became the quintessence of historical science for a long while. Meanwhile geography was more and more becoming natural science oriented. This was also the time when historical geography as the new auxiliary science of history was born with fully topographic content (historical topography). The first historical geographical works published in the late 19th century were historical topographic by nature (CSÁNKI D. 1890–1913.) Historical geography in Hungary went through its first renewal in terms of methodology, terminology and the objectives in the 1920s and 1930s primarily under the inspiration of the French géographie humaine. The landscape has become the focus of research having evolved as the product of interaction between man and nature. Many of the greatest figures of contemporary geography dealt with theoretical questions of historical geography (among others: FODOR, F. 1935., CHOLNOKY, J. 1935. MENDÖL, T. 1934., 1935., 1938., BULLA, B. 1938.). They all agreed on that historical geography was to be cultivated as part of the human geographical (synthetic geographical) paradigm i.e. historical topography is not historical geography. But it remained a controversial issue if it was to be treated as an individual branch of science or it was only to remain an obligatory complement to landscape geography. The research programmes and main research directions (cross-sectional analyses, examination of long-term dynamics; retrospective geography) prepared by Béla Bulla and Tibor Mendöl well fitted the contemporary international trends and tendencies.

In the post-World War II. period the cultivation of historical geography fell into the background for a few decades. The main reason for this was partly that social (human) geography was replaced by one of its branches, economic geography forcing all the other branches to the periphery, and partly that human geographical (landscape geographical) approach within geography was strongly questioned. Historical geographical research in Hungary restarted in the second half of the 1970s. In contrast with the "old", outdated historical geography these research works were varied and colourful in terms of methodology. One can easily detect the impact of Christaller's functional settlement geographical school, especially in works of KUBINYI A. 1971., BÁCSKAI V. – NAGY L. 1984., BELUSZKY P. 1990, as well as the appearance of the Anglo-Saxon "new historical geography (TÍMÁR L. 1986.), and also the

revival of Vidal's human geographical approach. The need for the synthesising géographie humaine can be felt from the landscape reconstruction projects of the "nyiregyháza school" under the name of Sándor Frisnyák (FRISNYÁK S. 2004.). Historical ecology – present in Hungary with numerous trends – also takes as central the interactions of nature of society (R. VÁRKONYI Á. 1998., RÁCZ L. 1996., SOMOGYI S. 1996.). The approach that I am using in historical geography is connected to the trend of Christaller's settlement geography. In the thesis I treat the hierarchical relation of settlements with special stress, I follow the changes happening in the role and relative position of towns, size of hinterlands, and the modification in the spatial structure (GYŐRI R. 1999., 2003.).

In the past decades concept of region elaborated by géographie humaine went through considerable change of extent. The meaning of landscape grew narrow, its use was confined to physical geography. At the same time in social geography a wide spectrum of concepts was worked out for the spatial units of different nature.. Most of these concepts were based on the wide interpretation of spatial structure, while the concept of region (*régió*) gained a special extent (PROBÁLD, F. 1995., NEMES NAGY, J. 1999.). All these influence the concept of historical landscape, historical region, historical hinterland currently in use in Hungary. Comparing the concepts of a spatial unit used by historians, ethnographers and geographers (TÓTH, T. 1980., FARAGÓ, T. 1984., ANDRÁSFALVY, B. 1980., KÓSA, L. 1998., HAJDÚ, Z. – T. MÉREY, K. 1985.) the conclusion is that most of these are narrower or tighter (re-)interpretations of the region concept elaborated by human geography that was enriched with new components. These concepts equally contain physical (ecological) and the segmented social factors and almost all the approaches tend to integrate the results of spatial structure research. As I see historical region is a spatial unit describable by using the region, division, landscape concepts currently in use. It is always the objective of the individual research project that decides which element or interpretation of the region concept is emphasized. In my research project I take the region concept in a broad sense, by the concept of a region I mean a spatial unit determinable by its social geographical characteristics.

The delimitation of the Kisalföld, the Southern Kisalföld or that of West-Transdanubia is never explicit. The major difficulty of delimitation is that if the Kisalföld is considered as part of West-Transdanubia, then its northern border is the Danube itself. However, taking the basin-character of the Kisalföld as central we need to involve areas from both the left and the right sides of the river this way questioning the soundness of the delimitation and concept of West-Transdanubia itself (Incomplete-Transdanubia).

Its way of writing in Hungarian did not consolidate until the middle of the 20th century. The exact determination, the delimitation of the borders – this way the content of the concept – of the area in question have kept changing by authors since its first appearance. Besides, it was strongly influenced by the prevailing trends in Hungarian geography as well as by the actual political will and intentions. In the regional geographical works on Hungary before the emergence of the synthesizing geography focusing on the interactions of man and nature the physical and the social geographical spatial structure of the country were distinct. In case of the Kisalföld the physical geographers treated the north and the south of the area as uniform, however the social geographical analyses – thinking in terms of administrative spatial units – would not follow this spatial division but divided the area in the line of the Danube (HUNFALVY, J. 1865., 1886., CZIRBUSZ, G. 1902., PRINZ, Gy. 1914., CHOLNOKY, J. 1929.). In the golden age of Hungarian géographie humaine, between the two World Wars geographers generally agreed to consider the Kisalföld as an area stretching to the north of the Danube. Nevertheless, the exact borders were drawn differently (FODOR, F. 1937. KOGUTOWICZ, K. 1930., 1936., KÁDÁR, L. 1941., PRINZ, Gy. (with no exact date), BULLA, B. – MENDÖL, T. 1947.). In works of landscape geography published in the post World War II period the area of the Kisalföld was narrowed down. In the physical geographical works it only referred to the area south of the Danube belonging to the state of Hungary (MAROSI S. – SOMOGYI S. 1990.). It was only after 1990 when such spatial divisions came out that treat the north and the south of the Kisalföld as one geographical unit (HEVESI A. 2001.). At the same time the social geographical works does not (can not) treat the area as one any more (SZÖRÉNYINÉ KUKORELLI I. 2002.).

In my view in a historical geographical research project examinations both treating the area in question as uniform (mainly according to formal characteristics) and as divided into two sub-areas are justified. Taking the viewpoint that primarily according to the principles of functional delimitation of regions the Kisalföld is dividable into two parts, I am taking the area located to the south of the Danube – on its right side – as the subject of my research and in the following I call this area Southern Kisalföld or alternatively West-Transdanubia.

III. The aim of research; the data base and the methodology

The period that my thesis embraces stretches from the end of the 18th century to the early 20th century. The period under scrutiny is divided into three parts. From the 18th century till the mid-19th century the transformation of the spatial structure was going slowly, the role and rank of the towns did not change much. Though commercialisation became general in this region, due

to the insufficient traffic infrastructure all sorts of flows were tied to the traditional means and routes. The middle or more the last third of the 19th century meant a turning point as in the course of the formation of a modern state the function and character of towns also changed and quick rearrangements took place in the settlement network (old privileged places started to decline, new centres started a marked progress). The traffic infrastructure considerably improved following the extensive railway constructions. The settlements profited from the newly constructed railway network differently. From the late 19th century till World War II no transformation of similar significance had taken place, the shifts were smaller and originated more from qualitative than quantitative changes. The sole important event having had immense consequences on the spatial structure of Hungary was the Trianon Peace Treaty and the consequential newly drawn state boundaries. This one and a half centauries are appropriate for presenting the basic features of the spatial structure before modernization, the operation of a modern network and for pointing out the impacts of an external intervention, the re-drawing of the state boundaries.

After sketching out the scientific historical and methodological preliminaries, taking into account the possible approaches, the clarification of the basic concepts as well as the determination of the research area the doctoral thesis deals with three issues:

- One issue central in the thesis is the clarification of the transformation having taken place in the spatial structure of the Kisalföld: a.) the way the spatial structural lines rearranged in the course of the 19th century; b.) the development pathways of the old and the new centres, c.) the way settlement hierarchy changed. Relying on archivalia and a model calculation based on statistical data I determined the spatial sphere of influence (hinterland) of towns for two dates. In the thesis I am examining on the one hand the way towns divided the space among one another and on the other hand the impact of the Trianon Peace Treaty on the size and shape of the hinterland of the towns concerned.
- I also go thoroughly into the examination of the relative position of the region in the thematic development map of the country. I am striving to define the different set of factors in the success of modernization in the Great and the Kisalföld.
- I attribute an especial importance to the examination of the internal disparities. My aim is to discover the internal fault lines of development standards and also to compare the development disparities with some social characteristics that can be taken as historically constant (religion, denomination, size of settlements, distance from the centres).

To answer the research questions – primarily to demonstrate disparities in development standards and to draw the border of hinterlands – I put together a data base with the settlements

as statistical units. The data set is based on the data gatherings of the time of Dualism and originates mainly from the population census of 1910 (CSO 1912, 1913., 1916). I completed this data set with the data from the census conducted during the reign of Emperor Joseph II. (DÁNYI D. – DÁVID Z. 1960.), a micro-census for a narrower circle of settlements in 1828, and the statistical data from the population census conducted by the Austrian Statistical Office (KOVACSICS J. (ed.) 1991., 1993., 2002., DÁNYI D. 1984.). In the case of the settlements, currently still belonging to Hungary the data set was completed with data found in the administrative bulletins and finally with the data of the population census of 1930 (CSO, 1932). The chapter introducing the relative position of the area in the spatial structure of Hungary is based on the state-wide data analyses done partly on settlement and partly on old counties' level. During putting together the data base lots of difficulties had to be solved out e.g. making the data homogeneous due to settlement integrations, the identification and coding of the settlements which got to the neighbouring countries (Austria, Slovenia, Slovakia), as well as the determination of the settlement co-ordinates relative to Budapest etc. Finally a data base with 1086 settlements was produced which conditioned producing datasets for both the current and the early last century settlement borders, administrative division, and state boundaries. With the progress of analyses I was to realise that the rough data and the indicators calculated from them could not be used for mapping as the 1910 vectoral, GIS based base-map with settlement borders was not available. This map had to be prepared by myself only after that could I start mapping the findings of my research.

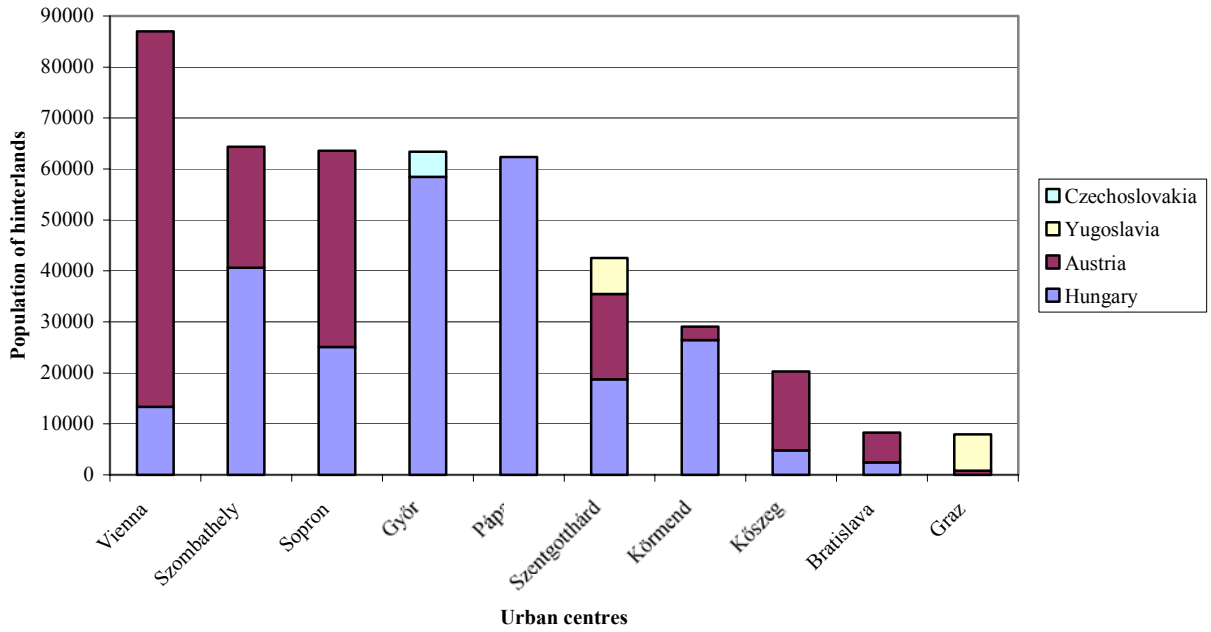
To answer the research questions – beyond studying the relevant literature – I applied the tools of positivist quantitative methodology used in regional analyses. Besides the simpler methods such as segregation index, standard deviation, correlation etc. I modelled the spatial transformation of the settlement network using the closest neighbour analyses. For examining the hinterlands of towns – completing the empirical data base – I applied the gravitation model method. The chapter presenting the relative position of the area within Hungary is based on the shift-share analyses, For demonstrating the internal development disparities of West Transdanubia moving averaging, while for its explanation spatial auto-correlation and multi-variable regression methods were applied. In the chapter describing the character of the region I analysed the way gravity centre of population shifted. (For the methodology applied see SIKOS T, T. (ed.) 1984., NEMES NAGY, J. 1998.).

IV. The major findings of the research

The settlement structure of West-Transdanubia in the late 18th century could be

characterised with an irregular and dense network of centres with relatively low population. From among the towns it was Sopron and Győr which had a hinterland stretching over the region, while Pápa, Kőszeg and more and more increasingly Szombathely acted as centres of regional importance. On the lowest level of the hierarchy the estate centres (manors) also acted as space organisers. Until the middle of the 19th century the transformation of the spatial structure was going slowly i.e. the transformations were primarily generated by the new transportation routes of the land crop. The shipping of grain crop strengthened the position of Győr and Mosonmagyaróvár to that of Sopron and Pápa. In the second half of the 19th century new factors accelerating the transformation of spatial structure appeared. These were the establishment of the capitalist administration, the increasing dynamism of economy (among others the expansion of manufacturing industry) and the radical modernisation of traffic and transportation systems (development of the railway network). As the result of the processes happening almost simultaneously in Hungary and Europe, the whole settlement system simplified. The smaller centres lost their role in shaping the spatial structure, the central functions were concentrated in fewer settlements promoting their quicker development. Transformation in this region was not coupled with the radical exchange of the major centres. There were only few towns whose quick growth in relative position (e.g. Szombathely, Szentgotthárd, Celldömölk), stagnation or decline (e.g. Kőszeg, Pápa and Csepreg) was noteworthy. With the simplification of the system the arrangement of centres became more even and regular. The position of the most important towns of the region lowered in the settlement hierarchy of Hungary. The hinterland and spatial sphere of influence of towns such as that of Győr, once having been centres of national importance, has shrunk to their immediate region. By using the gravitation model, delimitating the hinterlands which stretched over the state boundary reinforced the importance of Vienna. The capital of the Empire, Vienna had the greatest sphere of influence in West-Transdanubia, and the hinterland of a couple of Austrian towns also crossed the Hungarian boundary. The area could be typified with a balanced urban network, lack of centres could only be found in peripheral areas. The Trianon Peace Treaty, just like in many other areas, cut through the natural hinterlands. The urban centres now located by the border were left without their back areas that were attached to the neighbouring states. The town that suffered the most from the losses resulted by the new borders was Kőszeg, but Sopron and Szentgotthárd also lost more than half of the territory of their former hinterland. In case of Szombathely the loss was about two-fifths. The hinterland of Győr and Körmend also suffered smaller losses as well. Over the border huge areas with no centres came into being.

Figure 1. Hinterlands of urban centres according to the post-Trianon boundaries



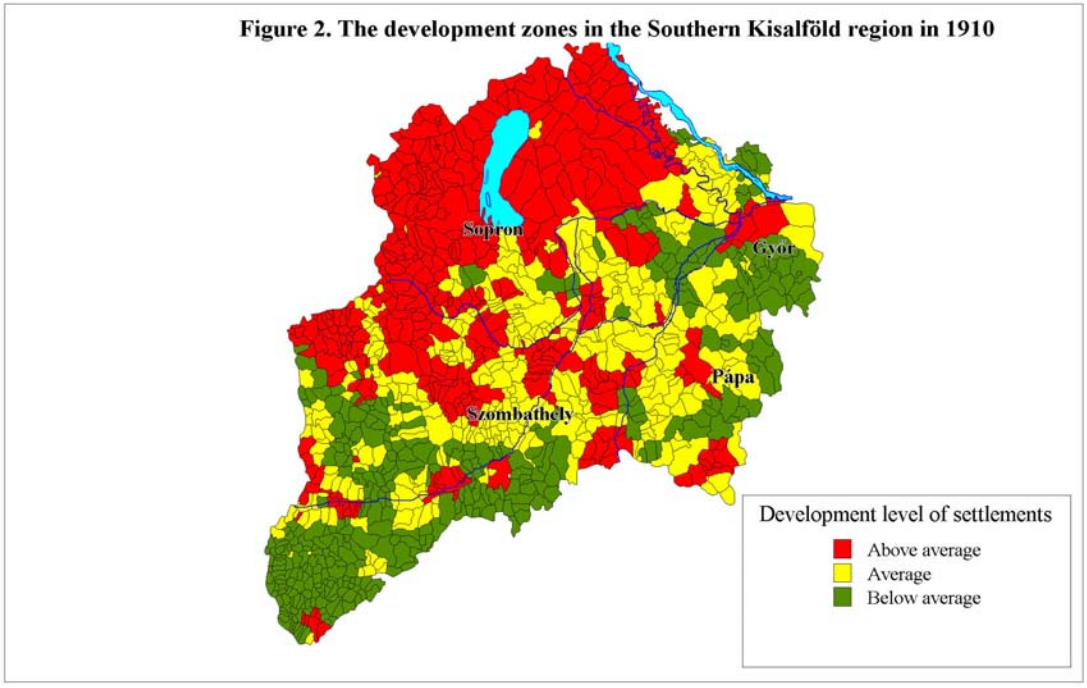
In the early 20th century a west-east and the north-south duality characterised the spatial structure of Europe. The internal structure of Hungary broadly reflected the same pattern. Besides Budapest and its environs the most advanced region was West-Transdanubia (with the north of the Kisalföld). It was outstanding both regarding the productivity of agriculture and the rate of wage earners in manufacturing industry. However, in his work on the spatial differences of modernization in the Carpathian Basin Pál Beluszky (2000) points out that besides Budapest and West-Hungary the Great Plain pioneered in modernization too. On the basis of my findings I concluded that there were different reasons behind the modernization success of the Great Plain and West-Hungary.

The advanced position of the Great Plain originated primarily from its settlement structure – the lack of small villages, agricultural towns with large population, overweight of large villages – and the composition of nationalities favourable for modernization. One can attribute less importance to the same factors in the modernization of West-Hungary. It can be explained with other features of the region. First of all the region was located in the western gateway of the country in the immediate proximity of the centre of the Habsburg Empire, the most significant roads and waterways led through this area. Already in the 18th century this region was the most densely populated area, was full of towns and its agricultural commercialisation was advanced Its north-western part had belonged to the area providing the daily supply of Vienna since the early modern times. This position started to change in the

middle of the 19th century when the quickly growing Budapest was becoming the economic and political centre of the country. This was the time when the Great Plain, which was destroyed during the Turkish invasion started to catch up with the Kisalföld. On the Great Plain the population was continuously growing due to migration, economy was booming, all the elements of life was going through modernization.

When examining the internal development disparities a "north-western – south-eastern slope" could be found. This reflects the development pattern relevant for the whole historical country. (The western-eastern dichotomy is not a new phenomenon but a steady feature of the Hungarian development pattern fitting the European scheme). I also concluded that in the internal spatial disparities of the region the distance from Vienna was a lot more deterministic than factors like the religion and the nationality of the population or the settlement structure. The development map shows a marked zonal arrangement, continuous, relatively underdeveloped areas can be found only in the southern and eastern peripheries, which are disrupted by patches of relatively higher level of development connected to towns. This fact justifies that in the early 20th century the centre of this region was not Budapest but Vienna.

Figure 2. The development zones in the Southern Kisalföld region in 1910



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