

University of Szeged Faculty of Science and Informatics  
Doctoral School of Earth Sciences Department of Economic  
and Social Geography

**PROCESSES OF GEOGRAPHICAL  
CONVERSION ON THE PERIPHERY OF THE  
BUDAPEST METROPOLITAN REGION**

Summary of the PhD Thesis

**Tünde Szabó**

Supervisor:

**Dr. Zoltán Kovács**

professor and head of department

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## **1. Research background and history**

The neoliberal conversion set up new framework conditions for urban development all over the world: the capital gained increasing leadership over framing economic conditions and alongside of that, over shaping social and political relations. Neoliberal conversion and market processes taking lead over socio-economic relations changed the capital-labour intercourse. The novel conditions for capital-labour dynamics reorganised class-relations and tracks of social mobility, and contributed to the increase of uneven social development (Gentile et al., 2012). Transforming spatialities of society and economy, as well as escalating uneven development accompanied to changes of social structures.

Neoliberal urbanisation resulted in a particular scale of transformation in the metropolitan suburban zone as well as in the urban-rural frontier area on the metropolitan periphery. The process is defined by the term ‘postsuburban development’ that is originated with a growing engagement of metropolitan periphery to global commodity production (for instance see Keil-Young, 2011). Geographical patterns of commuting became more complex as the dominance of the core city on the field of employment decreased and parallel to that, commuting flows among metropolitan centres enhanced. Hierarchical relations among the core city and the metropolitan centres loosened and became more multi-directional, which implied a growing share of cross-commuting among metropolitan centres (Hall, 2009).

A scientific investigation on postsuburban commuting patterns in the functional urban area of Budapest has been published not before the latest years (Keserű, 2013). Over this, some other aspects of postsuburban development, like changing housing needs as a result of transforming lifestyle have been extensively enquired. Studies on theoretical groundings of suburbanization have aimed at highlighting the multifold conceptualisation of the phenomenon (Timár, 1999). Critical interpretations have conceived suburbanisation as the spatial expression of uneven

development, which is maintaining, and at the same time the result of, neoliberal capitalism (Timár-Váradi, 2000).

There are still some open questions dealing with the spatial transformation of the metropolitan periphery. We accept presumptions as facts without or with purely implemented empirical validation, when we are talking about suburbanisation of economy, flourishing production activities on the periphery, embeddedness of peripheral located joint enterprises in transnational production chains or even about globally determined metropolis building. We have even less-informed presumptions about mechanisms of production of space. We are not aware of the ways and means on how the agents, who control production of space, recreate peripheral landuse and landscape by individual actions, by institutional practice and by network relations.

## **II. Research questions**

In the current doctoral thesis I investigate two issues affecting the spatial structure of the metropolitan periphery. One from them is the polycentricity of the peripheral centre system, the other one is the spatio-economic structure of the periphery. I use theoretical findings as a guideline for arguing, which have been evolved from international and national urban investigations. These findings, like inevitable polycentric restructuring of metropolitan regions, a cascade-like relocation of the urban economy or the theoretical construction of a suppressed state by market forces have not yet been satisfyingly validated by empirical studies in the Budapest metropolitan region. The research gaps formulated beforehand have led me to raise the following questions:

1. How is the central system of the metropolitan periphery being reconstructed?
2. Do the commuting patterns become similar to Western-European precedents, i.e. does the central system on the metropolitan

periphery of Budapest come closer to a polycentric urban structure?

3. What are the main features of the spatio-economic structure at the metropolitan periphery?
4. How does the spatio-economic structure of the periphery reflect capital-labour relations?

The current work puts emphasize on whether spatial structures, those are reflecting urban forms of mature capitalisms, can be detected around Budapest. However, my goal was not solely to separate capitalist versus postsocialist processes. Any divergence among mature capitalist and postsocialist spatio-economic configuration of the metropolitan periphery can refer to the dynamic relations between the state and the capital. Diverse state-capital relations can imply structural varieties in peripheral micro-spaces. I argue that diverse spatio-economic structures on the periphery are generated by disparate relations among the agents of the arena of power. Those relations can be varying from one settlement to another. On the basis of the spatio-economic varieties I investigate the mechanisms on producing peripheral spaces by looking for geographical similarities and differences. By doing this I would like to answer the question:

5. By which mechanisms are metropolitan periphery around Budapest being reproduced?

### **III. Methods**

In the first part of the research I have investigated commuting patterns within the metropolitan region. By doing so I have applied the methodology laid down by the ESPON POLYCE project, that has been accomplished with the cooperation of the University of Szeged Department of Economic and Social Geography.<sup>1</sup> The research area I have delineated embraces 284

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<sup>1</sup>[http://www.espon.eu/main/Menu\\_Projects/Menu\\_TargetedAnalyses/polyce.html](http://www.espon.eu/main/Menu_Projects/Menu_TargetedAnalyses/polyce.html)

settlements, which means that it has reached beyond the legally settled border of the official Budapest Agglomeration. Delineation of the metropolitan region is based on inward commuting to Budapest. In the research area there have been the many of 56 employment centres appointed, with the purpose of analysing the spatial rearrangement of employment centres within a timeframe of 1990 and 2011.

Further, by enquiring commuting patterns on the periphery I have calculated commuting flows among peripheral employment centres, applying ESPON POLYCE methodology. I have determined values of reciprocal commuting flow from commuting matrix by applying the formula:

$$REC^{AB} = (x^{AB} + y^{BA}) - [x^{AB} - y^{BA}]$$

*(where REC means values of reciprocal flow; A and B are employment centres; x means commuting flow from A to B, y means commuting flow from B to A)*

By using values of commuting flow, relations among employment centres can be classified by calculating the proportion of reciprocal to total commuting:

$$\text{type of commuting flow: } (REC^{AB} / (x^{AB} + y^{BA})) * 100$$

In the second part of the thesis I have enquired the joint enterprises those are located in peripheral centres. Due to some recurring objections against reliability of statistical data on joint enterprises, I have decided to set up a database of my own. In order to assemble the database I have accomplished online data searching by using sources like Opten, HVG Céginfótár or CompLex Céginfo. The database I have set up contains firm name, address, main occupation and the then-latest turnover (data refer to 2012/13) of the joint enterprises, in 56 employment centres of the metropolitan periphery. Due to data-processing limitations I have considered joint enterprises, of which annual turnover have exceeded 500 millions Ft. The database contains 1313 firms.

Mapping of the database has raised the issue of linking postal addresses to geographical space (geocoding). In order to control reliability of firm data I have implemented numerous on-site visits, where I have also raised information to delineate spatially concentrated entrepreneurial activities.

In the third part of the thesis a theoretical question has been raised on the basis of the previous findings. This question has been focused on local mechanisms of production of space. In order to find the answer I have made several interviews with selected agents from the local economy and political arena within a delimited set of settlements (Szigetszentmiklós, Tököl, Dunaharaszti) on the metropolitan periphery (table 1.).

<b>Position</b>	<b>Relation to power</b>	<b>Sex</b>	<b>Age</b>	<b>Occupation</b>
municipal officer	local state	man	40-50	architect
city management organisation, CEO	local state	man	35-45	technical graduate
local politician	local state	man	45-55	entrepreneur
municipal officer	local state	man	50-60	architect
politician	central state	man	30-40	human graduate
local politician	local state	man	50-60	teacher
investor	investor	man	40-50	financial-technical graduate

*Table 1. Some status features of the interviewees. Source: own data survey*

In order to avoid misconclusions evolved from interviewee's subjectivity I have extensively studied various information sources (articles, non-scientific studies), analysed planning documentations, and reviewed legal frameworks for development planning. Beyond these investigations I have accomplished some site visits, in order to outline a subjective, sociographic picture about my research area. The goal has been to make a draft of the

main spatial relations and barriers, of patterns of accessibility and isolation, of spatial structure of functions as well as of landscape conceived.

### **III. Main findings**

#### *Scattering and selective strengthening of employment centres on the metropolitan periphery*

Interaction of the state and the market has affected spatio-economic structures. It has been manifested by growing employment and by enhancing economic performance on the inner metropolitan periphery. In addition, cooperation between the outer metropolitan periphery and regions over its border has been increased due to a growing demand for industrial locations in storing, logistics, and production, favouring the outer zones of the periphery.

Employment centres from the pre-transformation era have been partially survived. A part of them has passed through structural reorganisation. In other employment centres production has abandoned industrial premises those remained from the socialist era, and has started businesses by green field development. Partial economic reorganisation has been driven by industrial production on the outer metropolitan periphery. Meanwhile economic growth has been based on distribution and production services in the case of the inner peripheral locations.

#### *Enhancing polycentricity, and growing significance of reciprocal- and cross-commuting on the periphery*

Capitalist restructuring has rearranged employment centres, which has implied changing commuting patterns. As an outcome for this, commuting intensity and share of reciprocal commuting among peripheral employment centres were steadily growing as part of postsuburban transformation process. As far as 2011 commuting intensity and reciprocity of commuting relations among peripheral centres have risen beyond all precedents (table 2.).

<b>Nature of commuting flows among employment centres (share of reciprocal flows to total commuting*) and volumes of commuting relations</b>				
	<b>hierarchical &lt;35%</b>	<b>multidirectional 35-65%</b>	<b>reciprocal &gt;65%</b>	<b>Total</b>
<b>1990</b>	46	26	14	86
<b>2001</b>	51	19	20	90
<b>2011</b>	47	40	24	111
*taking into account commuting relations, where reciprocal flows exceed 200				

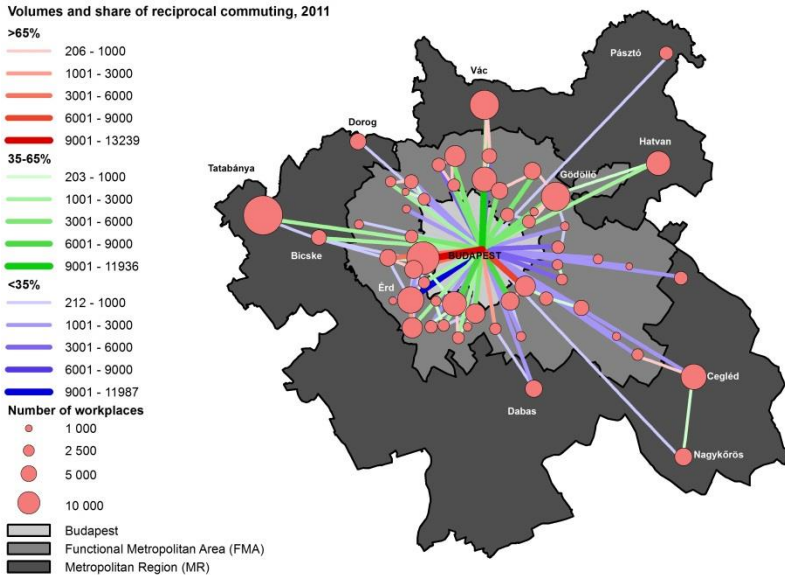
*Table 2. Volume of reciprocal commuting relations and the nature of commuting flows in the metropolitan periphery of Budapest, 1990-2011. Source: Szabó et al. 2014*

In the last two decade monocentricity has been loosen, as the network of employment centres has become more balanced. Commuting patterns have become closer to western urbanisation trends. Scientific enquiries argue that the network-like polycentric urban system as a common feature of mature capitalist metropolitan regions is formed by localised circles of globally organised production chains (Hall-Pain, 2006). However, limited evidences have been found for globally shaped economy in the case of the metropolitan periphery of Budapest. There are clear signs to be seen that strengthening peripheral employment centres are steadily rearranging spatial structures, however it would be groundless to talk about a polycentric urban system on the periphery of Budapest (map 1.).

*Spatial structure of the economy on the periphery: metropolitan-scale economy and neoliberal restructuring on the periphery*

The sectoral division of joint enterprises on the periphery has not reflected Western patters on the way they have been turned out from scientific literature. The database I have set up has shown not only the lack of high added value firms, but also it has highlighted the poorly equipped industrial production branches on the inner periphery. In the outer peripheral zone economy has been more oriented towards production.





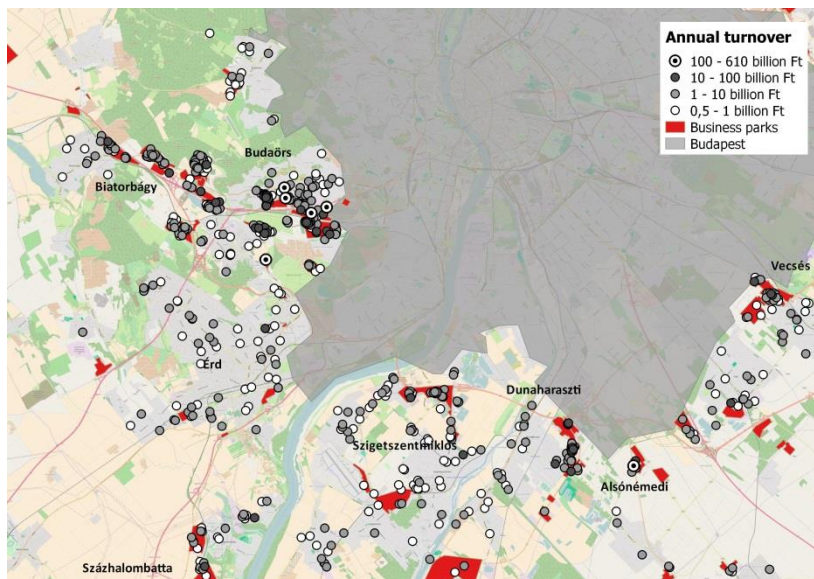
*Map 1. Volume, share and directions of reciprocal commuting on the metropolitan periphery of Budapest, 2011. Source: KSH*

Structural division on the metropolitan periphery of Budapest has not proven to be similar to typical Western urban regions. Significance of high added value production and services, creative or even IT industry has recorder to be limited, at least in the range of the highest turnover firms. Against Western patterns, the peripheral economy has been described as a self-contained metropolitan-scale economy, which at the same time, also gathers its strength from distributive functions reaching beyond the metropolitan borders.

*Manifestation of neoliberal state-capital relations in the metropolitan space: diverse spatio-economic structure*

The database I have set up has enabled to enquire the spatial distribution of joint enterprises on a local scale. There have been found micro-spaces

which can be characterized by concentrated settling of firms meanwhile others have shown more scattered spatio-economic structures. I argue that spatial settling of joint enterprises is guided not only by accessibility alone, due to there have been no significant dissimilarities proven in conditions of economic development on the periphery, as infrastructural provision has not shown determining inequalities among the inner and outer peripheral locations. A concentrated settling of firms of high turnover into entrepreneurial zones has been typical in the most dynamic centres of economic development (map 2.).



*Map 2. Location of firms of high turnover on the metropolitan periphery, 2012/13. Source: own elaboration*

*The interplay among the central and local state and the capital: production of space by practicing licensing and government regulation*

In the neoliberal system of capitalist production the state has a priority role in regulating space production, by setting up macro-economic frameworks

for development, by redistributing wealth among different social groups, or even by using governmental institutions to exert control. In course of the interviews I have accomplished there have been many references made on techniques of state pressure onto market processes. Some of these techniques form part of the classical repository of state intervention mechanisms, for instance regulating imposition of local taxes, procurement of land properties or regulating means of local zoning and building codes, etc. Beyond these, direct market interventions can be detected. An example has been raised by the interviewees: the central state has exerted legislative power to concentrate public utility provider's market, in order to gain dominance in that market of strategic importance.

Based on the interviews I have detected the evolution of a mutually beneficial relationship among local political elite and agents of market forces, where legitimacy derives from involvement of powerful actors. Interests of the political and economic actors have been bind together, upon that a strong alliance has been built. A stabile local regime has been supporting for the political elite of the central state for a certain point, which has led to that the central state has promoted the establishment of local regimes of mutual dependence by regulation means (zoning, licensing). In the last years however we are witness of the concentration of state power. Rescaling affects an increasing part of decision making power to be relocated to the level of the central state.

Concentration of public authority and its utilisation in favour of the capital's interest are peculiar features of the neoliberal conditions. As a result of these the political control becomes estranged from realities of places. Places those are proved to be valuable by the capital are likewise gaining special attention by the central state. Meanwhile 'non-marketable' places become lower-ranking due to the absence of powerful advocates.

#### **IV. List of publications related to the thesis**

Szabó T. (2015) Tértermelés a budapesti várostárség peremén – amit a gazdaság morfológiája elárul. *Tér és Társadalom*. (29)4. 60-78.

Kondor A. Cs., Szabó T., Juhász Sz. (2015): Specific features of tourism in the urban-rural fringe. A case study of Aquaworld Resort Budapest. In: Tózsá I., Zátori A. (eds): *Regional Studies Association, Metropolitan Tourism Experience Development Conference Proceedings. Budapest, Hungary. 28-30 January 2015*. Corvinus University, 68-78.

Szabó, T., Szabó, B., Kovács, Z. (2014) Polycentric urban development in post-socialist context: the case of the Budapest Metropolitan Region. *Hungarian Geographical Bulletin*, (63)3. 287-301.

Kovács Z., Szabó T. (2013) A policentrikus városfejlődés térfolyamatai Közép-Európában. *Településföldrajzi Közlemények*, (2)1. pp. 6-19

Szabó T., Gauder P., Albel É. (2011): Budapest metropolisz strukturális átalakítása. Válasz Faragó László „Településfejlesztés” című vitairatára. *Tér és Társadalom*, (25)1. 119-132.