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**Cities, Regions and Transborder  
Mobility Along and Across  
the Border**

**by  
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**Series editor**  

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Mobility Along and Across the Border

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## **1 Introduction – Borderless World, Borderless Europe?**

A decisive social experience of these days is the increasing permeability of the internal borders of the European Union. This actually means the elimination of the physical barriers to border crossing, the freedom of travel. It is naturally difficult to overrate this change for those who were once not even allowed to cross the border, and later in another period of history had to wait for hours, often in almost intolerable conditions, in front of the border crossing stations and were only able to continue the travel after humiliating procedures. It is natural that the partial and then the complete opening of the borders was welcomed with enthusiasm. We have to say that the ever easier permeability of the borders serves the integration of the economic and political macro-systems of the nation states; it is leading to the birth of an enlarging supranational economic and political space, in which the free flow of persons, labour, goods and capital are secured. Border regions play a specific role in this system. Will this cross-border flow pass them by, will they remain struggling peripheries of the nation states, or do they use, can they use the opportunities offered by their new situation? Is space opening up for them too? The question of our study is in what circumstances and to what extent the population and economy of border regions can make use of the possibilities offered by the accessibility of the other side and if there is a chance for the birth of single cross-border regions.

Borders and border areas are all unique, individual phenomena. The birth, change and character of the spatial borders depend to a large extent on the spatial unit (in this case: state) they surround, but this is a mutual relationship: states, border regions, and the characteristics of the state border all influence each other (Hardi, 2001). This is why it is not enough to analyse the political, social, economic and cultural features of the border regions via the comparison of case studies; we have to strive for the generalisation of the deeper lying reasons, placing them into a theoretical and historical context.

## **2 Border regions and cross-border movements**

The analysis of cross-border areas is widespread in the literature of regional studies and geography, as they are special areas due to their proximity to the state border. Our starting point is the definition by Hansen, according to whom the concept of border region relates to “that part of the natural space where economic and social life is directly and significantly influenced by the existence of an international border. In this sense we can differentiate between open or potentially open regions and closed regions” (Hansen, 1977). In his definition, Hansen de-

termines the basic types of the border areas. On the basis of his designation we can say that the characteristics of these areas are mostly influenced by the border, accordingly, the types of the borders also define the characteristic features of the areas next to the borders. The border itself, however, can be characterised in many ways, and the characteristics of the borders are also influenced by the quality of the nearby territories, i.e. we can actually see a close interrelatedness.

On the other hand, it is just the versatility and uniqueness that makes it difficult to designate border regions, because border regions – starting from the definition of Hansen – spread to the point where the social and economic modifying effects of the border are still palpable. Borders or border sections of different character may have a totally different impact on the economy of border regions, so it is not possible to *generally* demonstrate socio-economic indices significantly correlating with the presence of the border. The author made attempts in which the correlations between the distance from the border and different indices (incomes, export ratio etc.) were taken into consideration, but no general correlation could be detected. *Guichonnet* and *Raffestin* (1974) said that the border is a unique system of relations in itself, it may be conflict-laden or free from conflicts, depending on place and time. As regards the impacts of the borders, we can distinguish among short, medium and long term effects, which can also differ in their intensity and direction and also can be direct or indirect (induced) effects.

As the most general characteristic, border regions are often cited in literature as areas in a peripheral situation compared to the national centre. So much is correct; however, in a given country only a relatively small area can be defined as the national centre, compared to which all other areas show peripheral characteristics to some extent, and this national centre is not necessarily far from some (modern) border. Moving in a chosen direction away from the centre, it is a natural tendency that the differences increase as we get farther and farther from the centre. This difference is true in the neighbourhood of the central area just like in areas more distant from that, and it is a question where we can draw the boundary of the zone where the *proximity of the border* has a stronger impact on socio-economic processes than the *distance from the centre* does. The proximity of the border can increase the features that get worse and worse as we approach the periphery (e.g. isolation, bad accessibility, worse economic indices), but the border may as well have positive impacts on economy and society, effects that can even turn around this tendency (a nearby traffic junction of the neighbour country may alleviate the isolation, capital may find the border region more attractive as a result of geographical proximity or cultural similarity).

So we can only say that border regions are *always different in some way* than non-border regions, but border regions cannot be designated theoretically or on the basis of a few indices, as a hinterland or an agglomeration can be. Border

regions are so unique phenomena that they can only be examined by individual border sections designated by the known types of borders.

We can examine border regions as geographical peripheries of a country; we can designate as border areas administrative units (municipalities, micro-regions, counties etc.) that are in the proximity of a border, so we assume that the presence of the border has an impact on them. We can see to what extent these areas are different from the national average, and what typical disparities can be demonstrated among the respective border regions and the sections within the same border region.

## **2.1 Region along the border-border region, border area-cross-border region**

First of all we have to clarify the phenomena we want to deal with in our study. Some parts of *territories along the border* – areas not delimited or only closed from the border side –, delimited by certain principles can be given the following names: area along the border, border region, border area, cross-border region; we have to check, however, if these concepts can be classified in accordance with the already known types of regions. For this activity we can use the typifying of the regions by regional studies (*Horváth*, 1998; *Lengyel–Rechnitzer*, 2004; *Haggett*, 2006), so we can approach the concept of border region from statistical-planning, homogeneity and functional-nodal aspects.

If we use the statistical-planning approach, then, taking the glossary of the regional policy of the European Union into consideration, we take the NUTS 3 spatial units adjacent to the borders as *areas along the border*, and their groups along the respective border sections make the *border regions*.<sup>1</sup> The development programmes of the Union recognise these areas during the preparation and implementation of border area development programmes. This is an imperfect bureaucratic solution: “regions” in this case integrate spatial units that were created on different – usually administrative – logics, and their only common feature is that they are located along a state border.

Studies with a geographical approach definitely need, however, a functional concept of border areas, as this is the only way to comprehend the actual cross-border processes. This attitude can be found in the literature of the topic. *Hansen* (1977, 1983) considers as *border areas* those territories along the borders whose life, socio-economic processes are considerably influenced by the existence of a state

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<sup>1</sup> In this case then we create regions from areas that were delimited on other grounds, and we get a new spatial concept by their aggregation. County borders are typically delimited as a result on political bargaining, and the main reason for their delimitation was the creation of the administrative units of the centralised state.

border. This definition was born in times when the European borders had a separating character, and what should be emphasised in this definition is the impact of the state border as a barrier to the territories in its neighbourhood, with typically negative connotations. Kovács (1990) dealt in his essay with the transition of the hinterlands of the border cities, the impact that the borders drawn in the early 20<sup>th</sup> century and the territorial development of the new nation states had on the border cities and their hinterlands. The essay was focused on the interruption of the interactions of border cities and their environment annexed to other states. A new, dynamic definition was made by Martínez, who defines the different types of border areas on the basis of the number and depth of cross-border interactions and accordingly differentiates among alienated, co-existing, mutually cooperating and integrated border areas (Martínez, 1994). This demonstrates the change in the historical role of the border, so the attitude of border research should change as well. Taking these trains of thought further, we can see that historical transitions transform the relation of states to each other, and through this the functions of the state borders. We must not forget, on the other hand, that borders separate areas with different geographical endowments. We have mentioned previously that the characteristic features of the state border have close interrelations to the features of not only the designated states but also of the border areas. Accordingly, the functional approach demonstrated above and the respective categories by Martínez are not only the stages of a temporal change but can also be *spatial types*, following the unique features of the border areas (Hardi, 2001). Thus border areas with different geographical endowments have different chances for creating integrated *cross-border regions*.

We can say then that the basis of the definition of the border area can be the existence of cross-border interactions, as a common feature defining a border area. In our time, in the age of permeable borders, those areas can be taken as border areas the everyday life of which are fundamentally influenced by the interactions with the neighbour border area, and we can talk about *cross-border regions* in areas where these interactions mark a spatially designable and intensive system of relations. Literature on the spatial boundaries more and more often mention the fact of life that the sharp differentiation among regions (in this case among areas belonging to different states) is now an obsolete feature, and we can more and more frequently observe the birth of zones (border areas) with transitory features among the systems (Fleischer, 2001; Novotny, 2007). These border areas, coming from their geographical (social, economic, spatial structural) endowments, are varied in width and depth on the different sides of the border. Within them those special areas can be born which we can call cross-border regions. Functional regions are cross-border in the sense that the administrative boundaries are not obstacles to the implementation of their affairs. These functional spaces can be organised vertically and/or horizontally. Typical vertical integrations are



areas built on the urban hierarchy, or on hinterlands organised along the centre-periphery system, i.e. cross-border nodal regions, whereas horizontal areas are those units that are created by certain activities or other features, such as the labour market, joint infrastructure, joint business or economic sector, and mutual dependence (Veggeland, 1997, 64).

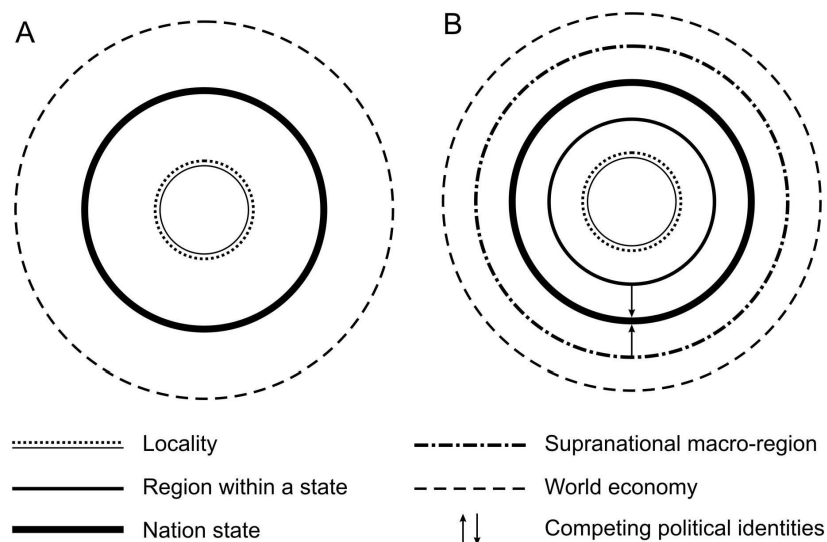
This definition may be criticised if we ask what defines a border area if there are no interactions with the other side, or these interactions are weak and occasional. As we used permeable borders for our definition, our answer to this question may be that in this case, i.e. if these interactions could be born physically, in the absence of institutional barriers, but they still are not created, then this border area should primarily be seen as a *population and economic periphery* which, due to its geographical characteristics, has connections primarily to its own central region. We would probably find very few examples for this in Europe.

## **2.2. The role of the European integration in the future of the border areas**

The transformation of the function of the state borders and their symbolic significance for the nation states was brought about by two important historical processes: the end of the Cold War on the one hand, when the demolition of the separating walls had a positive symbolic value (see the Pan-European Picnic or the Berlin Wall); on the other hand, this phenomenon coincided with the need of integration of the small nation states, forced by globalisation, which had to go along with breaking down the separating role of state borders. A real integration process between countries will necessarily lead to the weakening of the separating character of the border and the increase of their permeability. The goal of the international integration process is the creation of a larger, more effective economic and political space which is more competitive in the world economy; in this space, parallel to the increase of the depth of the integration, borders are becoming more and more permeable. This is an economic and political imperative on the global scale, as an effect of which nation states are willing to eliminate some of the separating functions of their state borders. The borders (of symbolic value) of the nation states have been seriously attacked from two sides. State borders of course do not cease to exist, but new spatial categories have also been created, decreasing the relative significance, symbolic value and separating role of the state borders in the eyes of the society, the economy and the political sphere. A supranational spatial level (integration) was born and also a subnational spatial level (region) – where no such thing had existed before. *Kolossov* and *O'Loughlin* (1998) summarised this transition as in the figure below (*Figure 1*).

Figure 1

*Territories and levels in the world system*



Source: Kolossov–O’Loughlin (1998).

It is a question what impact this integration process has on linking border areas and the birth of cross-border regions. Slightly sobered up from the euphoria of integration, we have to see that, despite the integration efforts in economy and politics, the spatial units for the self-identification of society remains the locality or the nation state – apart from the exceptions, of course. In the 20<sup>th</sup> century, the nation-building of the totalitarian and other social systems was so strong that it succeeded in transforming the mental maps of people, and so the permeability of the borders and the decrease of their symbolic role has not yet reinstalled cross-border regional identity even in regions that used to be single regions in history (Chromý–Kuldová–Kučera, 2008; Siwek, 2008).

Another important question, besides the joining and integration of the large European systems, is how the internal borders of the European Union will develop. This is a function of the strategic creation of the internal structure of the European integration, which in our opinion is not finalised as yet. This may have a dominant impact on how much the daily issues of the border regions can be joined. It is an important question whether we become a Europe of nation states which a) has a strong external protecting wall and well-marked (but of course permeable) internal nation state borders, and actually resembles a confederation or b) is an integration on its way to federation, where state borders have a weaker

and weaker role but the spatial frameworks remain clearly designated. A third, c) option is the “Europe of the regions” mentioned so frequently, which would strengthen integration and the level of the regions instead of the level of nation states, similarly to the figure by Kolossov–O’Loughlin. The birth of cross-border regions is given a supporting integration framework the least by the first option and the most by the third option. The present geopolitical situation (especially the impact of the Eastern enlargements) makes the first option more probable.

### 2.3 Model of cross-border movements and interactions

As we could see, the basis of the birth of border areas and cross-border regions is the existence of cross-border movements and interactions (i.e. movements and interactions maintained with the neighbouring border area). This circle does not only contain travels but also other dimensions of contact, such as friendships, acquaintanceships, marital relations and media consumption. It is important though for our topic that it is the regular interactions and movements that matter and not the occasional ones.

The opening of the borders necessarily leads to the increase of the number and range of motivations for the movements. *Krakover* (1997), however, emphasises that the openness of the border does not always result in tangible achievements, especially in situations where it is not possible to establish significant trade relations between the two separated countries (e.g. because of the weak economy). Short-term interests (e.g. the incubation of start-up economic companies, protectionism) are thus against the opening of the borders. *Anderson* and *O’Dowd* (1999) emphasise that the cross-border relations are asymmetric, because there are differences between the border regions as well.

We should then examine the geographical frameworks, social, political and economic factors which determine these interactions, their directions, frequency and magnitude.

The spatial movements of humans are usually motivated by economic necessities and benefits. The concept of economic benefit does not only include profit realised during economic activity (business, work) but also if the individual can use certain functions, services (education, healthcare, transport infrastructure, residence) with less travel, or at lower price, maybe in better quality – with less expenses. The basic reason for regular cross-border movements is the benefit derived from them.

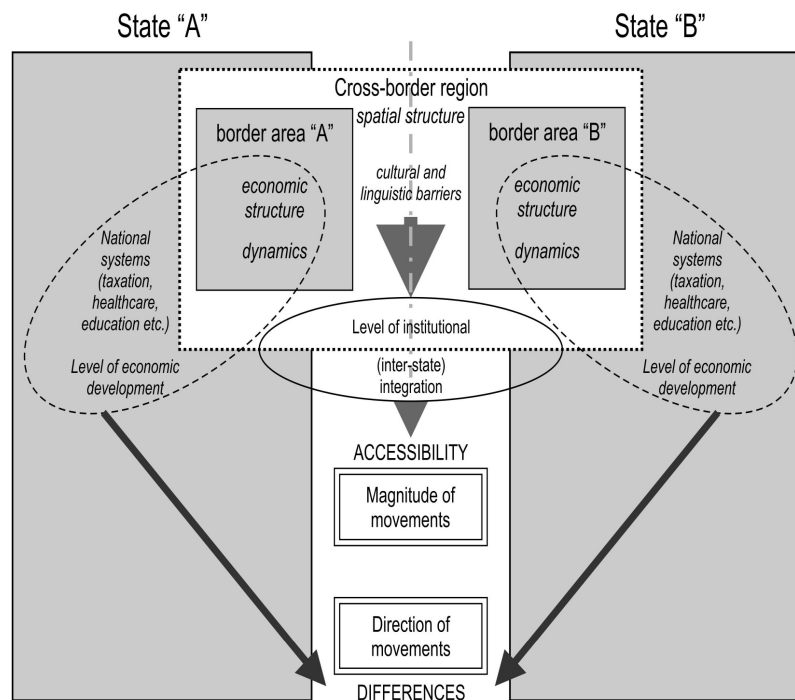
Due to the spatial organising activity of the nation state, “the other side of the border” is not our natural space of movements. In order to use the other side more or less regularly during our everyday activities, we must have a benefit that makes us neglect the obstacles coming from the existence of the state border (border

checks, different social and cultural environment, mental border, other currency etc.). In other words, the profit realisable must be bigger than the existing barriers. This is true for inter-state, international migrations in general. What makes movements between border areas different is usually that the benefits coming from the differences are made more accessible by spatial proximity, so local or regional level paths of movements are enough to use the benefits as a normal activity of our life.

The direction and magnitude of the movements are determined, in our opinion, by the features of the neighbour states and border areas, their differences, and the accessibility of the other side. The mechanism of these is summarised in *Figure 2*.

Figure 2

*Model of the development of cross-border movements*



Source: Author's construction.

Movements, migrations between two states occur as a result of differences that have evolved between socio-economic development levels (and accordingly the realisable incomes) and the national systems (e.g. taxation, healthcare, educational etc. systems). Naturally, this motivation can also appear in case of movements between border regions; in fact, the probability of movements is greatly

promoted by the spatial proximity of the neighbour system. For example, between Slovakia and Hungary, it is especially the inhabitants of the Hungarian towns and cities near the border who establish businesses and buy cars in Slovakia, motivated by the differences in the two taxation systems. Similarly, it is especially the border areas of Slovakia from where students attend the educational institutions of the Hungarian towns and cities along the border. Of course people from other parts of Hungary also travel to Slovakia to buy cars and Hungarian ethnic students from Slovakia also attend educational institutions elsewhere in Hungary, but these phenomena have a measurable magnitude and thus become parts of the everyday life in the border area where these activities can be realised within the daily range of movement.

The attraction coming from the differences between the states can be modified considerably by the economic features, structure and development dynamics of the border areas. It is of little use to be neighbour to the peripheral area of a rich country: there, we cannot utilise the income disparities between the states, and a citizen living in the border area can only take part in large-distance international migration. This is justified by our surveys in relation to Hungary and Austria, where cross-border daily commuting was done by 10–12 thousand people in 2004, but the larger share of this number was concentrated in the northern part of the border; moreover, the border area in Hungary involved in commuting was wider in this area (Hardi, 2005). The number of employees commuting from Slovakia to Hungary in late 2007 was approximately 28–30 thousand, but two-thirds of them lived and worked along the Danubian border (Hardi–Lampl, 2008). The economic structure of the border areas may even reverse the disparities between the states. Along the northern stretch of the Polish-German border, we find the economically less developed territories of Germany where in some cases the incomes of the Polish middle class can be higher now than those of the significant part of the population living in the peripheral German areas (Sontheimer, 2008). Similarly, the difference in economic development levels of the border areas motivates (in addition to spatial structural and urbanisation-related reasons) cross-border suburbanisation in our region. The migration of citizens from Bratislava to the border areas of Austria and Hungary takes place mainly due to the fact that in this region the peripheral areas of Austria and Hungary are adjacent to the dynamic economic centre of Slovakia. Although real estate prices are usually higher in Austria, and in fact, also in Hungary than in Slovakia, the situation is just the opposite in the border area: in the Hungarian part of the area real estate prices are significantly lower than in Bratislava. A similar situation has evolved between Szczecin and East Germany. So we always have look at the positions of the border areas within the respective countries (centre or periphery), as well as the development levels relative to each other and the dynamics of their development. We could make a longer list of the differences

and the consequent examples. We can say that the socio-economic development disparities of the neighbour countries and their border areas have an impact on what social groups and for what reasons decide to visit and use the other side of the border.

The volume of this phenomenon, i.e. the number of movements, interactions is regulated by *accessibility*, i.e. what sort of barrier the border represents. This has many components. Spatial structure is important. If a city is located close to the border, it evidently has a stronger attraction on the other side of the border than if the same city can be found at a distance from the border, in worse traffic conditions. The permeability of the border is also influenced by the transport network. In the northern part of the Austrian-Hungarian border, excellent infrastructure and dense public transport have also contributed to the fact that a larger part of cross-border commuting is concentrated here than in the south part of the border area with a poor transport situation.

The concept of accessibility also contains the presence and strength of linguistic, cultural and mental barriers. It is not by chance that our survey made among the commuters across the border revealed that the biggest problems for the commuters in the Hungarian–Austrian border region are the language and cultural differences, while these problems – evidently – were much less of a problem in the circle of the Slovakian-Hungarian commuters, given the fact that the state border does not mean linguistic and cultural separation in the latter case. The minorities living in the border areas usually contribute to the increase of accessibility in the broader sense, to the decrease of the language barriers (*Kocsis–Wast-Walter*, 1992). Mental separation, discrimination concomitant with working in another country was also much more frequent in the Hungarian–Austrian case (*Nárai*, 1999) than in the Slovak–Hungarian border area.

Institutional integration is also meant to break down the barriers. In the previous chapter we showed that the efforts for EU accession allowed the free crossing of the borders, and the different measures allowed employment, purchase of real estate, studying etc. on the territory of another state. All these together opened up new possibilities for the border areas, as they resulted in the rapid increase of the number of interactions and movements, and also in their purposes. The other arena of international integration, on the other hand, is the sphere of national systems (education, healthcare etc.), which are only slowly approaching each other and retain major differences despite the Union's integration. These may be barriers to movements across the border areas. By the integration of these national systems we mean that the systems become permeable, i.e. we can relatively easily use the institutions and infrastructure in the other country. A Hungarian hospital can e.g. make a contract with Slovakian health insurance, allowing patients living in the border area to use the health services in Hungary. The same does not work the other way round for the time being. What is more, even the

handling of the urgent cases is unsolved, as the ambulance service cannot transport a patient to the nearby hospital of the neighbour country. These are only simple examples, but several others, the permeability level of which impacts the amount of possible movements, could also be raised from telephone services to educational systems.

### **3 The urban network and the border**

#### **3.1 Centres in the proximity of the border**

As we could see from the previous chapters, the geographical character and the function of the borders have changed a lot in the course of history. Nevertheless the border kept its basic function of being the dominant spatial structural element and factor of the society and the economy. This spatial role of the border strengthened with the birth of the nation state borders. The inner spatial structures of the states are usually adjusted to the state borders. The backbone of this spatial structure is the urban network, the total of the junctions of the space and their relations. The urban network of the respective political entities (states) is evolving specifically within the borders of the entity, influenced by both the natural and the socio-economic environment.

*Haggett* (2006), when introducing the analysis phases of nodal regions, describes the spatial process by which the birth of the urban network can also be comprehended (*Figure 1*). The first phase of the six is the analysis of the directions of spatial movements and relations. On a historical scale this is strongly influenced by the natural environment, as the directions of the relations were very much influenced by transport possibilities, e.g. passes across the mountains, routes usable in the plainlands of the Carpathian Basin even in times of flood, river crossing places etc. The content and intensity of the relations, on the other hand, were influenced by economy and society, after they reached the development level when they would produce for exchange (appearance of marketed goods as opposed to self-subsistence) (*Beluszky*, 2001). The transport of these goods is what created the basic structure of the space, the system of routes. The junctions of the routes provided chances for the development of centres and towns by offering the best available geographical location. The settlement development chances coming from the possibility of relations and from the central location is what *Tibor Mendöl* called *positional energies* (*Mendöl*, 1963). These positional energies in turn determine the development of the junctions, and the actual or potential positions in the urban hierarchy. Junctions are surrounded by zones at different levels of development, which influence the birth of the hinterlands of the

towns, the functional content and symmetry of the inter-city relations, the functional hierarchy of the settlements.

Walter Christaller, the academic working out the theoretically ideal system of central places, proved that in a theoretically single plainland with homogeneous population density, the settlements at the different level of hierarchy are located in a hexagonal system, in a way that a hexagon is made from the lower rank central places, with a higher rank central place in the middle of each hexagon, and these places also make a hexagon, in the middle of which an even higher level central place is born. This hexagonal order is repeated at ever higher grades. This theoretical order of Christaller's space is of course disturbed by the lack of spatial homogeneity (different population density, natural conditions, orography), and as Mendöl remarks, the disparities of the positional energies basically distort this hexagonal system, as there will be places and junctions in better positions where more important central places will be born.

Because positional energies are functions of spatial relations, state territories and accordingly state borders can have a considerable impact on them. Partly, the borders themselves can have such impacts, and partly also the neighbour states and territories.

The direct impact of the borders can vary, depending on the character of the border. First, they separate two urban networks with different historical development paths. Within a national economy, the size of the central places, the distances among them, and the majority of the other functions determining central goods and services (e.g. the structure of demand, prices, wages, tax system and the expenses of distance) are the same. Crossing the border, however, all of these factors are different, which changes the location and size of the central places and their distance from one another (*Jeanneret*, 1984, in *Imre*, 2008). In the case of a strongly separating border, the units of an urban network close to the state border are in worse positions than their counterparts in the vicinity of the national centre. The opening up of the border will have different impacts on the respective centres. The possibility of border crossing can in itself be an important positional energy, similar to that offered by a ford or a ferry across a river in the Middle Ages: it attracts movements, especially when there are few border crossing facilities, it manages special cross-border commerce, and it stores the goods transported (legally or illegally) across the border and distributes them towards the inner areas of the country. Let us think in this place of the settlements along the border to Austria, Yugoslavia, or Ukraine in the 1980s and 1990s, invaded by merchants and soldiers of fortune from all parts of the country, who rented even garages in both Hungary and Burgenland at a high price to store their goods.

If borders are open, this positional energy more or less ceases to exist. The opening up of the border takes place anyway between countries whose socio-economic systems are converging towards each other. The border region actually



becomes a transit area in this case, when its positional energy is primarily influenced by the development level of the state and region on the other side. A more developed state can have a positive impact on the centres in the border area of a less advanced state. If state “A” is more developed than state “B”, the following situations can emerge.

- The border area of state “A” is a periphery within its own country, its centres in the vicinity of the border are weak, while there are important centres in the border area of state “B”. Such a situation has evolved in the Austrian–Hungarian border region, apart from the hinterland of Vienna, and also in the middle and southern parts of the Romanian–Hungarian border region. In these areas, the border cities have considerable capital absorption capacity in the poorer countries, as they are situated close to the more developed country and are important economic centres in their own countries. This leads to an interesting asymmetry between the periphery of the advanced state and the dynamic urban area of the less developed country. Slovakia e.g. is much less developed than Austria, still many people move from Bratislava to the border areas of Austria, and a similar phenomenon can be seen in the case of Oradea or Arad in Romania, from where many move to Hungary, while many Hungarian employees commute to Romania to work. Also, a similar situation has emerged between the eastern border areas of Germany and the Polish border city, Szczecin. Movements of this direction would have been unimaginable only ten years ago.
- An important urban centre can be found in the border area of state “A”, and there are developed centres in state “B” as well. In these cases the border cities of state “B” gain a significant positional energy from their location. A typical example for this is the relationship among Vienna, and Sopron, Győr and Bratislava, where it is the relations towards Vienna and the access to the Austrian capital city that have given a tremendous amount of positional energy to the other respective cities. Their development has been much more dynamic over the last two decades than the progress of Eisenstadt and Wiener Neustadt<sup>2</sup>, both in the vicinity of Vienna in their own country. The three cities above (Bratislava, Győr and Sopron) have profited from the proximity of Vienna according to their hierarchy levels occupied in their respective countries. The greatest benefit has been achieved by Bratislava, due to its geographical location right by the border.
- Both states have peripheral regions, void of centres, in the adjacent areas. In this case the institutionalised openness of the border is in vain, as it can only give a very weak positional energy to the municipalities, towns and cities. We may even call the border an iron curtain of settlement geography.

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<sup>2</sup> Kismarton and Bécsújhely in Hungarian, respectively.

### 3.2 Hinterlands and state borders

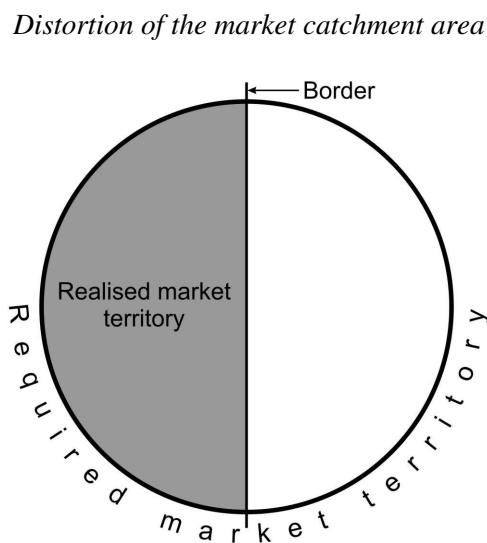
One of the most striking phenomena in the relations of the border and cities is the case of fragmented hinterlands. A city near the state border cannot shape its hinterland in all directions around itself, because it cannot have attraction on the other side of the border, or this attraction is incomplete. If we examine the issue of complex hinterlands in itself, this statement seems to be true. We have to consider, on the other hand, that the proximity of the border can also be a positive energy for the development of the cities, as we have already demonstrated. These positive energies can even be definitely large in some cases, and the hinterlands of the cities may reach into the territory of the other state in some functions. The concept of cross-border “shopping tourism” covers the phenomenon when the differences of the exchange rates or prices, the disparities of the goods supply, maybe the differences in the regulations concerning trade or services lead to the purchase or use of goods and (non-touristic) services in another country by private persons. The quantities of purchases may be below the volume of trade on a personal basis but considerable on the whole, and the main motivation of travel may be the purchase or use of goods or services. If these disparities are significant, a small town in the border area can have a hinterland much larger on the other side of the border than in its own country, even including settlements at higher levels of the hierarchy than the respective town itself. An example for this can be Lenti, whose marketplace was regularly visited in the second half of the 1990s by customers from the capital city of Slovenia and Croatia, while its hinterland in Hungary did not reach beyond 15–20 kilometres at that time. Similar examples could be mentioned in commuting employment and the use of certain services (e.g. dentistry). If the prices and costs decrease, shopping tourism will survive where the differences of supply are a strong motivation. This may mean the rich country – poor country disparity, but the really lasting disparities of supply come from the disparities of the settlement network, i.e. from the cross-border rural-urban relations.

In Lösch’s theory, the catchment areas of the markets theoretically have a circular or hexagonal shape in case of undisturbed development, so they spread in all directions out of the centre, while this in reality is blocked by the state border with political and customs border functions, not allowing the birth of a complete market catchment area, hinterland (*Rechnitzer, 1999; Niebuhr–Stiller, 2004*) (*Figure 3*).

We have to add that the distortion of the market catchment area is not only the effect of the border as a barrier. Even in the case of open borders, the market catchment area may be narrowed down by the fact that the socio-economic or even the technical systems of the neighbour country may be more or less different, so a town in the vicinity of the border cannot extend its hinterland as freely to

the neighbour cross-border areas in the other country as to its own national territories. What does this mean? There may be several deviations between the two states that might make urban-rural relations across the border more problematic and expensive. From administrative and public service aspects, citizens living on one side of the border in state “A” are foreign citizens, even if they are close spatially, so they do not have or only have limited access to institutions maintained by the taxpayers of the citizens of state “B” (healthcare, education, labour services), or they may have access at higher costs, and prefer to use these services on the territory of their own state, maybe further in space but at lower expenses. The category of cost-increasing factors contain many other items: currency exchange, higher telephone and transport tariffs, the uncertainty of border crossing, loss of time, less dense transport network etc. Accordingly, cities can only extend their hinterlands across the border in those urban functions where border crossing does not mean an increase of costs, or only causes a negligible cost increase, and the increased costs are compensated by the spatial proximity, or even a profit may be gained from the comparative advantages.

Figure 3



Source: Niebuhr–Stiller, 2004, 5; re-edited by Imre, 2008.

*Hansen* (1981), using the logic of growth pole theories, comes to the conclusion that the border is a barrier to the diffusion impacts radiating from the centre to the nearby areas, the hinterland, and it blocks the spread of innovations. Thus, the centre cannot use the benefits deriving from economies of scale and agglomerative factors. The opening of the borders will eliminate these obstacles, and by

the re-start of the diffusion processes the centres reinforce their positions and start to develop. Hansen complemented his concept by saying that the launch of economic development in the border regions depends to a large extent on the centre-periphery relations, the accessibility of the centres and the economic development level of the other, neighbouring border area. The opening up of the borders will not eliminate the peripheral situation of the areas without centres or far from the centres, as the centres are looking for each other's complementary resources, which strengthens the centre to centre relations in the first place. On the other hand, it is just the different economic conditions (prices, supply, consumption structure, supply of resources) that may trigger the activity of the border regions and their centres, and can lead to specialisation in some activities (Rechnitzer, 1999).

It is already clear from Hansen's activity that a development pole can have an ambivalent impact on the territory on the other side of the border. The existence of both a *backwash* or *spread* effect is possible as a result of the centres. A developing urban centre may drain resources from its environment (labour force, capital flows, radial transport network etc.), but it may as well develop its area by the spread effect, distributing civilisation goods, innovation and incomes there, provided that the conditions for that are given.

In case of permeable borders, the developing centres can also have similar impacts on the other side of the border; in fact, the proximity of the different systems (with different taxation and wage costs in most cases) may even reinforce these – either positive or negative – impacts. For example, in the western border areas of Hungary for example the Austrian demand for labour resulted in a shortage of labour supply in Hungary in some professions, especially in the case of the trained labour force. This is a strong backwash effect, because the education of the labour force, financed by Hungarian taxpayers, generated incomes in another country. It is true, however, that the larger part of the wages earned in Austria by Hungarian employees is spent in Hungary, and parallel to the incomes, work ethic, innovation etc., in other words, spread effects also arrived at the Hungarian region. In other cases, for example the Romanian cities in the proximity of the border, there has been a strong backwash effect on the Hungarian areas, because they drain investors with their better taxation conditions and lower wage costs: investors only have to cross a border and can choose Oradea or Arad instead of Debrecen or Szeged.

Backwash effects can be considerably reinforced by disparities on the two sides of the border, as a result of which a developing urban centre may cause problems for the other side of the border, but spread effects can also be strong, because in some cases certain things may become innovations (e.g. work ethic, behaviour culture, language skills etc.) which are no longer innovations in the country of the centre.

### 3.3 Specific city types along the borders

As we have demonstrated, the impact of the state border on a border city or area can be extremely varied; border location in itself is neither advantage nor disadvantage, and the treatment of the same border area can vary by historical periods and states. The development of border cities depends to a large extent on the geographical location of the given city or the region within its own country, and also on the characteristics of the neighbour city or region on the other side of the border. It means that practically all examples are unique, it is hard to generalise or we can only come to very superficial conclusions. Nevertheless, we still have to define general phenomena that may be generated in the life of the border city or region by the state border and the change of its spatial and functional character.

The ESPON project conducted an analysis of morphological character (ESPON project, 2006 in Székely, 2007). This classification gives a graphic description of the relationship of the city, the border and the neighbour city (and also the functional urban zones of the cities), and classifies several European cases into this system. The nine types are classified on the basis of the size of the cities, their proximity to each other and the state border, and the extension of the functional urban areas (narrow hinterland).

Type 1: twin cities, typically of small size, maybe making a structurally single city cut by the borderline. Both have their own functional urban areas, even if they have public transport connections. The best known example is the Görlitz–Zgorzelec city pair on the German-Polish border.

Type 2: large city whose morphological zone is continued in the neighbour state(s), in the form of small towns in the functional urban area of the big city, or a contiguous suburban zone. Typical examples include Basel (Switzerland, Saint-Louis – France, Lörrach – Germany) or Geneva (Switzerland, Anemasse – France). A key area of cooperation is the organisation of joint public transport networks. This may have legal obstacles especially if service providers are not managed locally (e.g. state railways). In the ideal case cross-border service companies are established.

Type 3: big city whose morphological zone is not continued in the neighbour state(s), the small town(s) has/have their own functional urban areas and a relatively small number of people commute daily from the small town to the neighbouring city. Such an arrangement definitely decreases the necessity of cross-border service companies. It is usually the small town that profits from the proximity of the large city service providers. The best example is Strasbourg–Kehl.

Type 4: a small cross-border morphological set. Coming from the size, organisational problems are much less than at Type 2. Such examples are e.g. d'Esch-

sur-Alzette (Luxembourg) – Audun-le-Tiche (France) or Longwy (France) – Pétange (Luxembourg) – Aubange (Belgium).

Type 5: a large city whose functional urban zone is continued in the neighbour state(s), maybe spotted with small towns with their own secondary functional urban areas. The macro-region of Luxembourg can be a good example. The two major areas of cross-border interactions is the accessibility of the large city from the other side (movement of labour force) and the development of the educational infrastructure of the country of origin so that it should satisfy the labour demand of the large city.

Type 6: two structurally connected large cities on the two sides of the border, such as Heerlen (Holland) and Aachen (Germany). If cross-border technical cooperation is needed, it is organised at a higher level. On the other hand, a relatively large proportion of the cities prefer to pursue joint city marketing (auxiliary functions).

Type 7: two large cities on the two sides of the border, which are not connected structurally, only their functional urban zones are adjacent to each other. It is a version of the previous type, and a typical example for this is the cities of Vienna and Bratislava.

Type 8: large cities relatively close to each other (at a distance of approximately 50 kilometres), whose functional urban zones are not adjacent in most cases. Examples are the group of four cities: Hasselt-Genk, Maastricht, Aachen and Liège; or Hasselt-Genk and Eindhoven. Even if there is some organisation for cooperation, it only has a consulting and occasional role. Global strategies very rapidly lead to fierce competition, because the cities are located at a large enough distance to be able to avoid the joint use of infrastructure. The large-scale and high quality intellectual centres (universities) or service centres (hospitals) are limited by the national regulations, so they are not more susceptible to cross-border cooperation than to collaboration with other institutions located farther away.

Type 9: large city cut into two by the borderline. An example for this was the divided Berlin (West Berlin did not have a functional urban area) or Nicosia (Cyprus). It is an exceptional situation coming from problematic political decisions, where there is no cross-border cooperation.

Based on our analyses made in the Carpathian Basin, we have to complement the nine types with a tenth one: this is the category of towns in the vicinity of which there is no central settlement on the other side of the border which could influence the spread of the functional space of the given city beyond the border.

The MOT (Mission Opérationnelle Transfrontalière – Cross-border Operational Mission) puts forms of cross-border cooperations involving cities and urban networks into three categories.

a) Cross-border agglomerations: urban zones of different size, contiguous or separated by a river. This category contains Geneva (700,000 inhabitants), Basel (600,000 inhabitants), cities that are the most similar in their structures to Lille (2 million inhabitants). Geneva and Basel are the examples with the most advanced cross-border administrative structures. Despite its smaller scale, another example is Görlitz–Zgorlevec (100,000 persons), where it is actually about the division of an old German city since 1945.

b) Cross-border urban networks: these are cross-border cooperation networks made by cities geographically close to each other (within 50 kilometres), without structural contiguity. Such an agglomeration is the MAHHL (Maastricht–Aachen–Heerlen–Hasselt–Liège) network, whose population reaches 800,000 inhabitants in a cross-regional space with a population of approximately 3 million. Despite the cross-border structure, the objectives of the MAHHL network do not include the organisation of an integrated urban space.

c) Cross-border urban regions (Euroregion type): regions located in two or more countries whose largest cities are not too distant from one another geographically (50–100 kilometres), and participate in cross-border cooperation projects on urban issues. An example for this is the Basque Bayonne–San Sebastián Eurocity (an elongated coastal region divided by structural breaks with an already operating cooperation structure), Copenhagen–Malmö in the Öresund Region (two urban zones connected by a bridge and a tunnel, with a sea strait in between them, and with a fruitful cooperation already), and Vienna–Bratislava in the Centroe region (a cross-border region involving four countries, which, in addition to the two capital cities, includes Győr in Hungary and Brno in the Czech Republic, and where cooperation is just winding up).

When analysing border cities, we also have to take the impact on the birth and the hierarchy level of the settlements into consideration. By such a “genetic” classification, the border cities can belong to three categories:

1) Cities created by the border itself. These can be seen along borders existing for a long time, they are cities established as defensive and/or commercial centres. They are typical along the historical, frontier type borders, like e.g. the former trading centres of North America on the edge of the conquered territories. Typical examples for this are the city pairs along the lower reaches of the Danube River, on the Romanian-Bulgarian border (e.g. Nikopol–Turnu Măgurele; Ruse–Giurgiu), and on the former border of the Austro-Hungarian Monarchy and Turkey (e.g. Novi Sad–Petrovaradin, formerly Újvidék and Pétervárad). In these cases the settlements are typically fortresses, or trading cities built on the two banks of river crossing points opposite to each other.

2) So-called “substitute centres” born because of the relocation of the border. The new border separates a part of the region or other administrative unit from its former central settlement, which makes the designation of a new centre necessary,

or the settlement becoming a regional centre moves upwards the settlement hierarchy. There are several examples for this in the Carpathian Basin (Komárom, Lenti, Salgótarján etc.), but also in other regions (e.g. Bolzano in South Tyrol, Pasewalk on the German-Polish border).

3) “Loser cities”, which lost their former positions in the urban hierarchy after the relocation of the border. Parallel to this loss, their functional development was not as dynamic in the 20th century, either, than that of their similar counterparts located in other areas of the country. Several towns and cities like this can be found in the Carpathian Basin. Losses may have two reasons in most of the cases:

3a) County seats that lost the major part of their counties, and were unable to assert their interests at the reorganisation of the counties<sup>3</sup>, so the new counties were given new centres. This was the fate of e.g. Balassagyarmat, Rimavská Sobota [Rimaszombat] and Zlaté Moravce [Aranyosmarót] next to the Slovakian–Hungarian, Berehove [Beregszász] and Vynohradiv [Nagyszöllős] next to the Ukrainian–Hungarian, Zalău [Zilah], Sombor [Zombor] and Zrenjanin [Nagybecskerek] next to the Serbian–Hungarian, Gyula [Giula] next to the Romanian–Hungarian and Sopron [Ödenburg] next to the Austrian–Hungarian border. The development of these settlements was mainly blocked by administrative barriers.

3b) Some towns and cities found themselves in definite border location. These settlements lost a part of their functional catchment areas and inter-municipal relations. We have to take the fact into consideration that in the early 20th century a “complex catchment area” in the present sense of the word, i.e. a region that is organically integrated to a city in everyday issues, was significantly smaller than it is now. The situation of the transport facilities and lifestyle (employment structure and consumption habits of the rural population) at that time did not make cities as mutually dependant on their wider environment as they are now. The functional development of the settlements near the border was evidently set back by the narrowing down of their hinterland, but our experiences suggest that the following factors also played important, sometimes dominant role, besides the loss of the catchment area:

- Political reasons: in all countries, in the total or a part of the 20<sup>th</sup> century totalitarian regimes were in power. With their control urban development also took place, especially in its quantitative growth phase in the time of intensive urbanisation (at different times by countries, from the 1950s to the late 1980s). The border cities, because of their location and occasionally ethnic composition, did not become targets of development in the totalitarian period, and in some cases their development was consciously held back. Examples for this include Sopron [Ödenburg], Baja, Esztergom, Lučenec [Losonc] or Subotica [Szabadka].

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<sup>3</sup> After the designation of the borders, the fragments of the old counties were integrated, the administrative boundaries were redrawn and the new powers designated new centres.



- Loss of transport connections: after the drawing of the borders some settlements lost the transport connections which promoted the development of the economy of the settlement before. This was an especially great shock for market towns that even had relations to distant areas. Also, several settlements became destinations of infrastructure lines; they lost their former junction characters. This happened in e.g. Mátészalka or Mohács. We can also mention Trieste here, a city where the border drawn cut the railway and road running to the city.

4) City quarter separated by the border, becoming an independent settlement/city. In these cases the borderline drawn is running across the inner territory of a settlement/city, disrupting the organic unity of the settlement. There are many examples for this in Europe: e.g. Teschen in Silesia or Baarle–Nassau on the Belgian–Dutch border. In the latter case the life of the city is not disturbed by the border, only a mark painted on the pavement shows the location of the borderline between Belgium and Holland. A typical example in the Carpathian Basin is Sátoraljaújhely.

## **4 Conclusions**

The regular spatial movements, traffic and relations of people have a basic influence on the formation of spatial structures and regions. This is especially true for border areas and cross-border regions. In our study we paid attention to the clarification of those concepts relating to spatial units within which our surveys should be done.

For us it seems that the several decades or centuries of nation state development and its impact on shaping the spatial structure made a permanent, or at least long-lasting mark on the life of border regions. The tracks of movements within the nation states are transforming only slowly and if the necessary conditions are provided. Even under favourable circumstances, the other side of the border can only be a real space of everyday movements for a small part of the population. The integration efforts of the level of the Union and nation states will, in our opinion, only partially promote the birth of cross-border regions, what is more probable is the birth of transitory zones, border areas. Besides the further development of these and the use of the possibilities we also have to consider that the chances that the border areas offer are not the same for the inhabitants living on the sides of the borders, in different geographical environments.

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