

# Borders and Border Cities in Transition: towards a Typology

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## Abstract

*The objective of the paper is an attempt to develop a typology of border cities. The typology will focus upon geopolitical determinants and their outcomes viewed in static and dynamic terms, all in the theoretical aspect. The synthesis of both approaches enabled 18 possible types of border cities to be isolated. Three of these were discussed in the form of case studies (Cieszyn, Chełm, Przemyśl).*

**Keywords:** border cities, typology, peripherality, antecedent boundary, subsequent boundary

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## Introduction

National borders constitute a changeable and evolving matter (Sitek 2016) which exerts an impact upon the local and regional development of areas located in their proximity in a way which transforms in time (Konrad 2015; Laine 2016; Paasi 1998). For a long time, border areas and cities were marginalized and perceived, both by scholars and decision-makers, as peripheral (Durand, Deco-ville, and Knippschild 2017; Miszczuk 2013; Sohn 2014b) due to specific attributes which include the following:

- geographical location in the proximity of a border,
- peripheral position in relation to the remaining regions of individual countries,
- deformation of human and social capital as a result of depopulation,
- low socio-economic development and urbanization,
- low accessibility,
- differences regarding spatial development in relation to the border areas of neighboring countries,
- institutional distance associated with the inadequacy and incompatibility of competences of neighboring administrative territorial units, and
- specific socio-cultural characteristics, including nationality-related and ethnic character of population (Chojnicki 1998; Koter 2003; Miszczuk 2012).

This periphery-determining set may undergo changes depending upon the character, strength and sequence of influence of the individual characteristics. In addition, the impact of the national boundary upon the development of border cities and regions may have a diverse character. Border contiguity in itself is neither an advantage nor a drawback (Hardi and Uszkai 2017). In various geopolitical and socio-economic contexts it may become an insurmountable barrier or a potential stimulus for development and a source of competitive advantage (Dolzbłasz 2015; Sohn 2014a). As a consequence, the impact of the same boundary upon the development of border regions in various

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historical periods may differ. It may also have a diverse influence upon development processes occurring on both sides of the boundary. The situation is determined by the geographic location in the spatial structure of a specific country, the character and the level of development of the country and areas located across the border (Jakubowski 2018), and the character of the border itself. The model featured in figure 1 proves that it is geopolitical factors which are of chief significance because they determine the permeability level of the national boundary. When the border becomes permeable, the following determinants gain significance: institutional, socio-demographic and economic. Changes in these aspects determine the trajectory of development of cities which concentrate various potentials and functions (Sohn and Stambolic 2015).

The objective of the paper is an attempt to develop a typology of border cities. The typology will focus upon geopolitical determinants and their outcomes viewed in static and dynamic terms, all in the theoretical aspect. The discussion features selected case studies.

## 1 Static approach

There are several criteria for classifying and developing typologies of cities. The typology which has been universally applied so far, classifies cities with regard to the following:

- size expressed by population
  - small cities (below 20 thousand inhabitants)
  - medium-sized cities (20–100 thousand inhabitants)
  - large cities (above 100 thousand inhabitants)
- function
  - central and specialized
  - industrial, of service character, residential, multi-functional
- hierarchic position in the municipal settlement
  - metropolises
  - cities of national significance
  - cities of regional significance
  - cities of sub-regional significance
  - cities of local significance

This typology may be applied in relation to border cities as well. However, they may be of supplementary character, because they do not indicate the impact of the national boundary upon the specifics of cities located in border regions.

One of the few endeavors which take into consideration changes in national borders and their impact upon urban centers is the typology offered by Kulczyńska (2013). The typology distinguishes two fundamental types of border cities established as a result of a change in the demarcation of borders and a modification of their character:

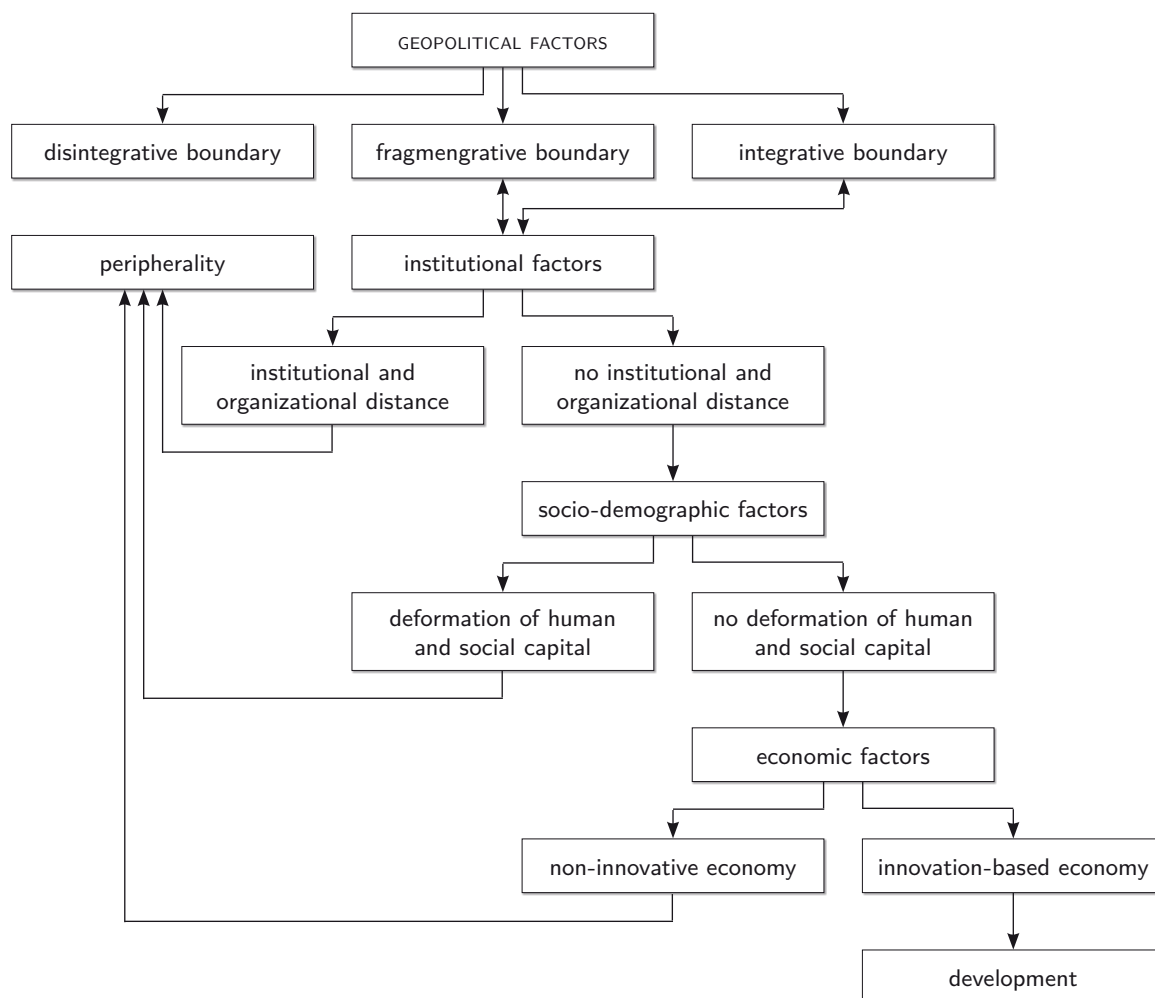
- cities divided in the course of a “new national border” being demarcated within existing urban centers, and
- contiguous cities which emerged on both sides of the boundary as independent urban centers.

These frequently perform as catalysts of changes across the boundary.

A relatively broad typology which encompasses 9 types of border cities was offered in the report conducted by ESPON which presents results of a study concerning city functions.<sup>1</sup> The typology is static in character. Individual types of settlement units were established on the basis of morphological and functional criteria, which enabled the following to be distinguished:

- twin cities,
- metropolises or large cities, with morphological areas extending across the border,
- metropolises or large cities, with a contiguity in the neighbor country,
- small, trans-border urban areas,
- metropolises or large cities, with their Functional Urban Areas (FUA) extending in the neighbor country,

1. See: ESPON project 1.4.3. Study on Urban Functions. Final Report, March 2007, [@:] [https://www.espon.eu/sites/default/files/attachments/fr-1.4.3\\_April2007-final.pdf](https://www.espon.eu/sites/default/files/attachments/fr-1.4.3_April2007-final.pdf).



**Fig. 1.** Model outlining the determinants of peripherality and development of a border region

*Source:* Miszczuk (2013)

- two metropolises or large cities, on each side of the border,
- two or more metropolises or large cities, on each side of the border, with tangential FUAs,
- a trans-border FUA without contiguity, and
- cities divided by a border.

When developing typologies of border cities, it is necessary to include criteria specific for this category of urban centers. The following division of boundaries offered by Hartshorne (1936) may be considered as a departure point:

- antecedent boundary—primary in relation to the forms of spatial management, and
- subsequent boundary—secondary in relation to spatial management.

The antecedent boundaries usually assume relatively regular lines and are typical for African and North American countries. On the other hand, the subsequent boundaries are usually irregular and are dominant in Europe, for example. The division has far-fetched consequences for border cities. The following premises can be made:

- Cities located by the antecedent boundary are secondary (emerged later) in relation to the boundary delimitation. As a consequence, since the beginning, their development included factors associated with the proximity of the national border. However, the development does not preclude further boundary changes, which may assume the subsequent character later on
- For cities influenced by the subsequent boundary, especially if the border is of a closed (disintegrative) character, the following can be distinguished:
  - divided cities, where the boundary divides the existing urban organism into two or more crippled urban centers,

- cities of limited functional relations; this denotes a discontinuation of the existing network of cities — e.g., in the relationship between a large, metropolis-function city and a small or medium-sized satellite city, and
- cities of peripheral accessibility, which as a result of the disintegrative national boundary delimitation, lost the status of a transport node.

It ought to be noted that the aforementioned classification of border cities which are determined by the disintegrative subsequent boundary is not fully disjunct due to the fact that the divided cities usually lose the status of the transport node as well. Similarly, the limitation of functional relations is correlated with accessibility.

## 2 Dynamic approach

Over time, the function and character of the national border may undergo changes. In relation to studies of Rosenau, Moraczewska (2008) offered the following sequence of national boundaries' functions: disintegrative, fragmengrative, and integrative. The border in the disintegrative function is not permeable to any cross-national and trans-national contacts. The border constitutes an instrument isolating a particular country from the international environment. Such state of affairs may result from international sanctions imposed against the country. Alternatively, it may stem from the intended policy of the country. The fragmengrative (filtrating) function facilitates the boundary becoming open to certain factors, or diversifies the openness towards individual countries. On the other hand, the integrative function is characterized by a considerable openness and strong dynamics and intensity of cross-national and trans-national contacts.

The model offered by Martinez (1994) is made frequent references to in the literature of the subject. The model encompasses the following stages: hostility, coexistence, cooperation, codependence. Hostility usually emerges due to violent political events associated with the threat to a country's existence, integrity of its boundaries and territory. The national boundary performs a dividing (disintegrative) function (tab. 1). The transfer from hostility to coexistence requires time. It is facilitated when the cooperation between border regions is stimulated by the transgression of the functional space (economic, socio-cultural, etc.) across national borders. This, in turn, is a consequence of the delimitation of the subsequent boundary.

**Tab. 1.** Evolution of the phases and functions of national boundaries

Boundary development phase	Boundary function
hostility	disintegrative
coexistence	fragmengrative
cooperation	fragmengrative
codependence	integrative

*Source:* Own study on the basis of Martinez (1994) and Moraczewska (2008).

The coexistence stage may be labeled as the information exchange phase.<sup>2</sup> The exchange occurs in various dimensions and among different entities. Transregional contacts intensify in the course of cooperation. It takes place primarily with regard to public safety, especially actions concerning the prevention of natural disasters, crime, education, research, culture and sport. The boundary performs the fragmengrative function in the coexistence and cooperation phases. On the other hand, the codependence phase entails the reinforcement of transboundary relations in the course of technological, capital, and joint partner initiatives, and employee transfer. By performing the integrative function, the boundary assumes an inconspicuous character, which ought to be perceived as a desired target state. Such an approach is convergent with radical postmodernism presupposing the “death” of borders, which stems from globalization and the free flow of people, goods and

2. See: Handbook on Transfrontier Co-Operation. 2006 Edition. By Charles Ricq, Council of Europe, [@:] <https://localgovernment.gov.mt/en/dlg/legislation/documents/legislation/the%20hb%20of%20transfrontier%20co-operation.pdf>.

information associated with it. This results in the replacement of location space by flow space. This in turn, denotes that the nation ceases to be the sole and primary object in international economic relations in “boundaryless world,” open global markets with no trade barriers. On the other hand, in the moderate postmodern approach, we may observe not so much the disappearance of national boundaries, but changes in functions performed by these (Golunov 2014).

The transgression from the dividing (closed) boundary, via the filtrating to joining (open) boundary is protracted, complex, multifaceted, and not necessarily unidirectional. As a consequence, reversions to the previous status are possible, frequently violent and dramatic in character. It is difficult to imagine that the evolution of the boundary would stop at hostility or coexistence and result in the break away from the peripherality of border regions and degradation of cities. In addition, the period of time required for the transgression from hostility to cooperation and codependence is significant. This is due to the fact that prolonged and excessive hostility may result in the emergence of irreversible trends (e.g., in terms of demographic changes), which despite the change of the boundary’s character, will hinder or preclude the development of border cities and regions.

The boundary becoming open constitutes a stimulus for the development of divided cities (so-called island effect), especially if favorable historical, topographic and multicultural factors emerge, along with a comparable size of “national elements” and the lack of significant language barriers. Other effects may include the following:

- Continuance effect associated with the redevelopment of cities located in the border region. The redevelopment commences where the disintegrative boundary delimitation occurred. However, the effect may only be achieved if the “hostile” boundary existed for a relatively short period of time.
- Leap effect. It involves the development of large cities (metropolises), distanced from the border (on both sides), at the expense of smaller border cities. The process is facilitated by the free flow of workforce and capital.
- Exclusion effect. It emerges due to developmental differences (salaries, costs) as a result of long-lasting maintenance of the disintegrative boundary. Cities located exclusively on one side of the border benefit from it becoming open.

### 3 Synthesis

When combining the static and dynamic approaches, an attempt at a synthesis may be made. The synthesis may include criteria associated with both the genesis of the border as well as the evolution of its character and effects (tab. 2 on next page). Such an approach enabled 18 theoretical and potential types of border cities to be developed. The actual number of these existing in reality is significantly lower. Due to the volume restriction, the further section of the paper discusses merely three Polish case studies (Cieszyn, Przemyśl and Chełm).

### 4 Case studies

Cieszyn constitutes the first case. It is a city of limited functional relations (SII type). Until 1918, Cieszyn was one of the more notable Silesian cities. It was the capital of the Duchy of Teschen. In 1920, due to Polish and Czechoslovakian claims to the city, an arbitrary division was conducted on the basis of an international treaty. The boundary was demarcated along the Olza River. The Polish part of the city lost a railway station and several industrial plants. On the other hand, Český Těšín (Czech Cieszyn) was separated from its historical center: the old town, theater, places of worship, offices and educational institutions. As a consequence, the missing functions had to be supplemented. The division of Cieszyn into the Polish and Czech city was maintained after WWII. Initially, the Polish-Czechoslovakian border was of hostile character. Subsequently, the status changed into coexistence which contributed to a gradual degradation of the city’s significance both in Polish and Czechoslovakian parts. The integrative character of the border emerged when the Republic of Poland and the Czech Republic became members of the EU (in 2004) and the Schengen Area (in 2007).

**Tab. 2.** Synthesis of the typology of border cities

Type of city (acronym)	Abbreviation components		
	Border genesis	Border development phase	Result of border becoming open
ADN	Antecedent	Disintegrative	No result
ACEN	Antecedent	Coexistence	No result
ACC	Antecedent	Cooperating	Continuance
ACL	Antecedent	Cooperating	Leap
ACE	Antecedent	Cooperating	Exclusion
AIC	Antecedent	Integrative	Continuance
AIL	Antecedent	Integrative	Leap
AIE	Antecedent	Integrative	Exclusion
SDN	Subsequent	Disintegrative	No result
SCEN	Subsequent	Coexistence	No result
SCI	Subsequent	Cooperating	Island
SCC	Subsequent	Cooperating	Continuance
SCL	Subsequent	Cooperating	Leap
SCE	Subsequent	Cooperating	Exclusion
SII	Subsequent	Integrative	Island
SIC	Subsequent	Integrative	Continuance
SIL	Subsequent	Integrative	Leap
SIE	Subsequent	Integrative	Exclusion

At present, the city of Cieszyn is inhabited by 63 thousand (36 thousand in the Polish part of the city, and 27 thousand in the Czech part). Despite the city being composed of two local governments, it operates jointly in several fields. For example, Poles buy cheaper apartments in Český Těšín, and frequently set up companies in this part of the city. The following constitute success factors of the integration of Polish and Czech Cieszyn:

- shared past when functioning as a single city
- functioning in a single integrative body (the EU)
- similar development level of both parts of the city
- complementary functions
- shared culture, no language barrier (Cieszyn Silesian dialect)

On the other hand, Przemyśl constitutes an example of the SCE city type. In the period of the Partitions of Poland, it was a vital administrative, communicative, economic and military center in Galicia. The railway line linking Lviv with Cracow ran through the city. In the interwar period, Przemyśl was located in the Lviv Voivodship. Functional relations with Lviv facilitated the development of the city. When the Polish-Russian (Polish-Ukrainian) border was established 5 km east of the city in 1945, the city became peripheral. It was separated from Lviv. The Polish-Russian border was hostile in character despite the border crossing in Medyka being open (with limited accessibility). Currently, the Polish-Ukrainian border is becoming cooperative in character. The Polish side benefits from the situation more than the Ukrainian side does. However, this constitutes a relatively weak development stimulus for Przemyśl. The degradation of the city's position seems to be acknowledged by its fluctuating population. In 1880 the city's population was 20,7 thousand. In 1910 it was 54,7 thousand, in 1939—1960 thousand, in 1946—36,8 thousand, 1980—61,3 thousand, and finally in 2016—62,2 thousand (i.e., slightly more than in 1939).<sup>3</sup>

3. [In the journal European practice of number notation is followed—for example, 36 333,33 (European style) = 36 333.33 (Canadian style) = 36,333.33 (US and British style).—Ed.]

Chełm is the final example of a peripheral city with regard to its accessibility (SCL type). The city was a vital railway hub in the interwar period. Between 1928 and 1939 it was the headquarters of the East Regional Directorate of the Polish National Railways (moved from Radom). This was due to the fact that the following strategic railway lines crossed paths in the city-connection from Lviv to Brest (Litowsk) by the Bug River, to Białystok and Vilnius, and from Warsaw (via Lublin and Kovel) to Kiev. Due to railway development between 1926 and 1939, a modernist district named Nowe Miasto (New Town) was established in the city. It encompassed 432 ha of land (i.e., 7 times more than the original area of Chełm). The district was fitted with waterworks and sewage system with a sewage treatment plant. The headquarters of the Directorate occupied the central position of the district. The headquarters were located in a five-story office building. The development of the Nowe Miasto may be considered- with regard to its scale- as one of the largest investments of independent Poland in the interwar period.

Due to the fact that the Polish-Russian border established in 1945 assumed the disintegrative character, and due to the track gauge in USSR (and post-Soviet states) becoming changed, Chełm's significance as a railway hub radically declined. The railway line to Lviv terminated in Bełżec and was of local character. Similarly, the line to Brest and Vilnius terminated in Orchówek near Włodawa (because the railway station in Włodawa remained on the Belarussian side). An additional hindrance for the reactivation of the Chełm- Brest railway line was the lack of a railway bridge in Włodawa. The bridge was never reconstructed after WWII. The connection to Kiev was the only one reactivated in the 1990s. It is operated by a pair of trains running from Warsaw West via Lublin, Chełm, to Kiev Pass. As a consequence, the Chełm railway hub function shifted to Lublin, which is a typical example of a leap effect.

## Conclusions

To conclude the discussion, it ought to be noted that the strongest determinants of a socio-economic success or degradation of border cities include the character and the function of the border. The discussion undertaken in the present paper takes into consideration both the establishment of the boundary (the static approach) and its evolution (dynamic approach). The synthesis of both approaches, which includes the genetic type of the boundary (antecedent, subsequent), phases of its development (disintegrative, coexistence, cooperation, integrative), and effects of the boundary becoming open (islands, continuance, leap, exclusion), resulted in the development of an original typology of border cities encompassing 18 potential city types. Certainly, the typology requires verification. Surely, not all theoretical types of border cities exist in reality. Authors were able to illustrate the discussion with three case studies of Polish border cities convergent with the presented typology.

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