

# Characteristic Features of Urbanization in the Area of Silesian Province (Poland) at the Beginning of 21st Century

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**Abstract:** *The article discusses the specific problems of urbanization development in the area of the Silesia Province in Poland. The specifics of historical and economic development, as well as the characteristic arrangement of towns, determine the shaping of many specific phenomena and processes relating to urbanization. These processes are unusual for Poland, and also not often encountered in other European metropolises. The article describes the phenomenon of transformation of the Katowice Conurbation, the functioning of the so called "non-metropolitan" agglomerations, or the collapse of the hitherto prevailing administrative structures, due to the separation of some of their districts. A characteristic phenomenon is also city shrinkage and the specific trajectories of the suburbanization process. Some of these phenomena, such as shrinking cities in the opinion of the authors are particularly worrisome. Constant depopulation in most large and medium size cities in the Katowice Conurbation and The Rybnik Agglomeration depreciates these forms on the settlement map of Poland. A phenomenon which has no equivalent in any other place in Poland is the 'internal' suburbanisation, which develops in areas located between cities of the core of the Katowice conurbation.*

**Keywords:** Urbanization; Poland; Silesia province; shrinkage; agglomeration; suburbanization.

**Cuvinte-cheie:** urbanizare; Polonia; Provincia Silesia; depopulare urbană; aglomerare; suburbanizare.

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## Introduction

The Silesia Province covers an area of 12.3 thousands km<sup>2</sup> and belongs to the group of the smallest provinces in Poland. Simultaneously, within the borders of the region, there are located as many as 71 cities, including 12 with a population exceeding 100 thousand (Krzysztofik, 2008). In 2009, the Silesia Province was populated by 4,640,725 people, which comprised 12.2% of the population of Poland. At the same time, cities were populated by 3,624,410 people, which comprised 78.1% of the province population, and 15.6% of the urban population of Poland. This fact, among many, indicates that the problem of contemporary city development in the Silesia Province constitutes an important element of research in the national urban settlement system.

After 1989, the Silesia Province found itself in an extremely difficult situation. The range of problems brought about by the economic and social transformation was unprecedented in any other region, both in quantity and quality aspects. The most important ones were the following:

- restructuring and liquidation of a significant part of industry – nowhere in Poland were such a large number of industrial plants, employing over 2,000-3,000 workers, liquidated. Many cities that used to be traditionally mining cities, lost this feature over ten years ago (e.g. Dąbrowa Górnicza, Chorzów, Będzin);
- unemployment – in that period was not present in Poland in such large urban units (here: above 100 thousand inhabitants), and in which unemployment levels significantly exceeded the national average. No other region of Poland had so many large (over 15 thousand people) unemployment centers, concentrated in cities of the area, not larger than 100 km<sup>2</sup>;
- decentralization, reorganization, and, in many cases, the decrease of income, and in particular, the income of city budgets.

It was visible, especially in the *per capita* count;

- inherited, and still partially continued degradation of natural environment elements;
- de-capitalizing of housing infrastructure, transport or commune infrastructure to the extent not encountered in other regions. It is also caused by local factors, exceptionally rare in Poland, such as mining damages for example;
- highlighting the negative features of the geographical location of many meaningful urban centers in polycentric arrangements, which was characterized by, e.g., visible inter-urban competitive tendencies taking undesirable form. This aspect was additionally intensified by the issue of historical and cultural contiguity, with its most measurable fact being that only 48% of the Silesia Province lies in the area of the historical Silesia;
- intensification of the depopulation process of the province, and in particular, the Katowice Conurbation area, started as early as the 1980s (Kłosowski, Runge, 1999), and continued in the system and economy transformation period (Spórna, 2010).

These and many other phenomena and socio-economic processes, have clearly modified or redefined the structures of urban settlement, as well as the models of urbanization development in the Silesia Province, in the a period of 20 years (Runge, 2005; Spórna, 2011).

The effects of the economical, social and political transformations of the late 1980s, expressed in the range of their diversification and escalation, were particularly visible in the process of citification, in the aspect of its quantitative grounds, as well as functional or administrative ones. The key-phenomena and processes connected with citification and urbanization of the region, according to the authors, were compiled as the following problems: the evolution of typologically

diverse settlement forms present here – polycentric and monocentric; the shaping of “non-metropolitan” agglomerations and polycentric scattering of metropolitan space in the Katowice Conurbation; moreover, the collapse of the legacy administrative structures of some large and medium-sized cities, and the specific features of the emergence of so-called, new cities, the issue of shrinking cities.

In the last decade, on the other hand, the exceptionally crucial issue was the process of “city shrinkage” (Krzystofik and others, 2011), and also the specific spatial arrangement of the suburbanization phenomenon, which may best be explained by the oxymoron: the “inner” suburbanization and the “shifted” suburbanization.

### **From conurbation to monocentric agglomeration**

The Silesia Province is the only one in Poland containing the three basic types of prevailing settlement form types: the monocentric agglomeration, the polycentric agglomeration in the strict sense, and the urban conurbation. In the real geographic and economic space, these are: the Katowice Conurbation, the polycentric Rybnik Agglomeration, the monocentric agglomeration of Bielsko-Biała and the monocentric agglomeration of Częstochowa. Next to the settlement forms mentioned above, the urban complex in the area of Zawiercie shall be mentioned, which consists of five centers, populated altogether by nearly 100 thousand inhabitants, within administrative continuity of the cities.

All four largest agglomeration arrangements consist of the core and the peripheral zones, including their inner and outer zones. The cores of the mentioned settlement forms are constituted of cities with district [*poviat*] rights, as follows: Bielsko-Biała in the Bielsko Agglomeration, Częstochowa in the Częstochowa

Agglomeration, Rybnik, Jastrzębie Zdrój and Żory in the polycentric Rybnik Agglomeration and Bytom, Chorzów, Dąbrowa Górnicza, Gliwice, Jaworzno, Katowice, Mysłowice, Piekary Śląskie, Ruda Śląska, Siemianowice Śląskie, Sosnowiec, Świętochłowice, Tychy and Zabrze in the Katowice Conurbation. In the core of the largest urban region of the Silesia Province there are two centers which are not cities with district (*poviat*) rights: Będzin and Czeladź (Figure 1).

The inner zones of the agglomeration arrangements in the Silesia Province contain the majority of the remaining cities lying in proximity of the core centers. The outer zones consist of urbanized rural communities and some small towns (Figure 1).

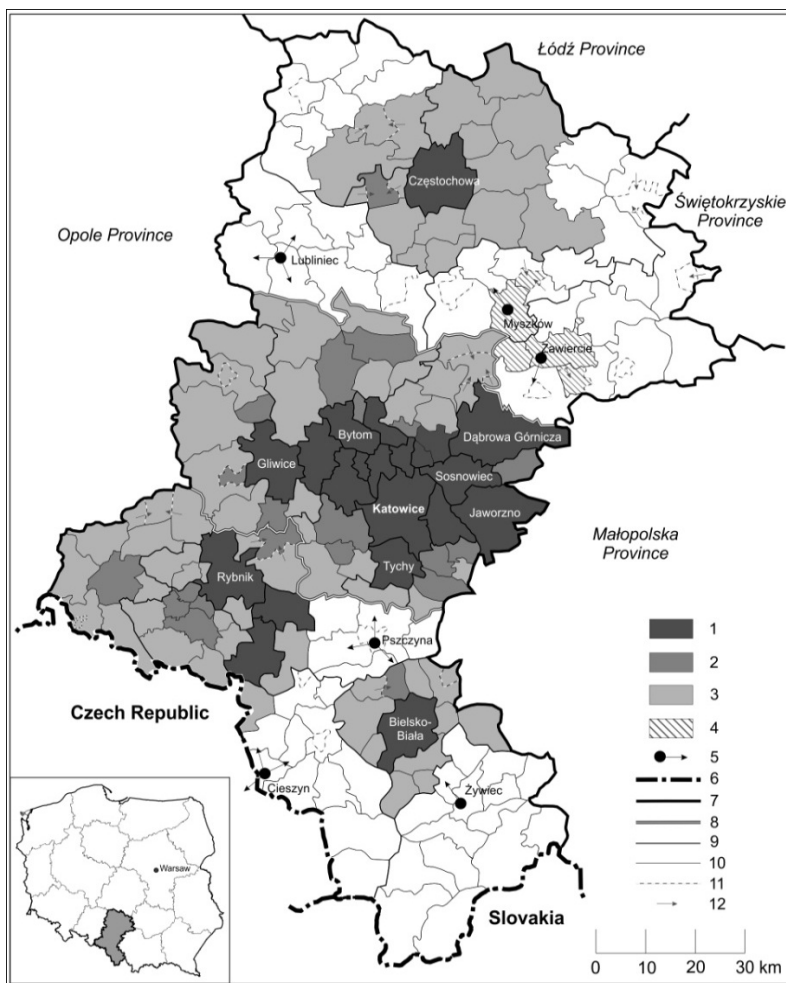
A characteristic feature of the Silesia Province is the fact that all urban agglomerations, in the broad sense, take up 6827 km<sup>2</sup>, which comprises 55.4% of its area. From another point of view, it is also noted that within these urban complexes, there are as many as 28 municipalities (of various types) which share borders with the neighbouring provinces or the administrative area of the Czech Republic. The same number of border communities are located outside the structures of the discussed agglomerations.

The case of the Silesia Province undoubtedly presents a lack of consistency of the administrative area, with the spatial and administrative system of the agglomerated urban complexes. This remark particularly refers to the central and eastern part of the Silesia Province, where two cities of the core and three cities of the inner zone lie on the border of the neighbouring Małopolska Province. The Katowice Conurbation here merges with the smaller urban complexes of the western part of the Małopolska Province of Chrzanów, Olkusz and Oświęcim.

The phenomena referred to give evidence for two major processes. The first of them is the evolution of administrative

structures of the agglomeration, which forms a type of conglomerate of various city arrangements located across the border in Poland and the Czech Republic, and stretching from Opole and Wrocław, through the Katowice area, up to Kraków and Tarnów, and from the Silesian and

Moravian Ostrava, through Rybnik and Katowice, up to Częstochowa. This complex of urban agglomerations in the south of Poland (Polish megalopolis), comprising nearly 7.5 million inhabitants, is one of the largest areas of this type in Europe.



**Figure 1:** Urban Agglomerations on the area of Silesia province, Poland. Source: Krzysztofik, 2008.

Explanations: 1 – cores of urban agglomerations, 2 – inner zones of urban agglomerations, 3 – outer zones of urban agglomerations, 4 – other urban agglomeration, 5 – regional centers and directions of main connections, 6 – borders of countries, 7 – borders of the Silesian Province, 8 – borders of urban agglomerations, 9 – borders of counties, 10 – borders of administrative units (*gminas*), 11 – borders of towns localized inside of urban-rural units, 12 – directions of administrative hierarchy inside administrative units.

The other issue is the fact that, in contrast with the remaining 15 provinces, the Silesia Province is, in fact, a so-called urban province, using terminology prevailing before 1999. Within the frames of urban provinces, there were separate units, which consisted of urban agglomeration areas, leaving out the less urbanized areas in the satellite provinces, gravitating towards metropolises. In this case, it is slightly different. The urban complexes located within the province create arrangements that complement each other within the borders of the province. It results from the fact of a limited rank of some agglomeration cores, e.g.: Częstochowa, and the competition between other cores in the neighbouring provinces. From this point of view, the Silesia Province may be described, more accurately, as an agglomerated province, rather than urban province.

### **“Non-metropolitan” agglomerations and “scattered” metropolity**

The basic problem of the agglomerated arrangements located within the Silesia Province is their low level of metropolitan institutions and functions (Sokołowski, 2006; Smętkowski et al., 2008; *Is a metropolis...*, 2009). The principle according to which, in Polish conditions, each metropolis creates an agglomeration, but not every agglomeration is a metropolis (Parysek, 2010), particularly refers to the Silesia Province. The Katowice Conurbation is the only metropolitan arrangement here, and although it is the most populated urban complex in Poland, it does not have a similar rank as far as the metropolity index is concerned (Smętkowski and others, 2008; *Is a metropolis...*, 2009).

Three remaining agglomerations – Bielsko-Biała, Częstochowa and Rybnik –

may be described as “non-metropolitan” (Krzysztofik and Szmytkie, 2011). In the gradation of the following further levels of metropolitan functions, the cities of Bielsko-Biała and Częstochowa rank the highest. Rybnik has a very low index (Sokołowski, 2006; Smętkowski et al., 2008).

The level of metropolitan functions in Bielsko-Biała and Częstochowa enhance to the biggest extent the elements relating to higher education, domestic and foreign tourism (mainly in Częstochowa), and partially to economy (mainly in Bielsko-Biała). The range of these phenomena does not predispose them to be described as metropolises. It is intensified due to the barriers that weaken such a point of view. The first, and at the same time the key one, is the small demographic potential of the agglomerations, as well as their core cities. The same refers to both the 240 thousand Częstochowa, as well the 170 thousand Bielsko-Biała. Another question is, undoubtedly, the proximity of the Katowice Conurbation, as well as the Kraków Agglomeration.

A difficulty for the potential evolution of metropolitan structures was created by the depriving of the centers of the province city status, in 1999. The affiliated institutions of the Silesia Province hardly compensate for the lost status. They do not, in any way, strengthen the degree of centrality and metropolity of these two cities.

A different state is present in the polycentric Rybnik Agglomeration. Even though the region is populated by nearly 600 thousand inhabitants (as many as, for example, the Szczecin agglomeration), due to its mining and industrial character, polycentricity, a low index of development for the central functions of the largest city – Rybnik – and the proximity of the Katowice Conurbation and the Ostrava-Karvina Agglomeration, institutions of metropolitan character have not developed here. Their rank is significantly lower than in Bielsko-Biała or Częstochowa.

Problems connected with the very low level of development of the metropolitan function here act as a barrier for the inclusion of the region into the group of agglomerations, pending for being subject to the so-called metropolitan act or the agglomeration act. Although the act shall be directed particularly towards the polycentric urban arrangements, where the specific and multi-centric settlement background significantly weakens the concentration of development impulses and creating the privileged city, almost all governmental and non-governmental plans exclude the Rybnik agglomeration from the project.

The governance of monocentric urban agglomerations is not easy. It is highlighted by M. Lackowska (2009). This range of problems is clearly visible in concrete actions (or their negligence) taken by local governments and other stakeholders. The situation of extreme difficulty takes place in the multi-centric arrangements, where, next to the larger-smaller relationship, a crucial role is played by the larger-other larger interaction. This problem is present in both the polycentric Rybnik Agglomeration and the Katowice Conurbation.

Rivalry and interurban conflicts, weakening the governance idea in its regional (agglomeration) context, have their primary ground in poly-centricity, however, one of the factors is the dispersion of the metropolitan functions and institutions in the administrative area of several cities.

The problem especially refers to the enterprises established after 1990. At present, apart from Katowice, the most developed functions and metropolitan institutions are present in Gliwice. The following cities in the hierarchy are: Sosnowiec, Bytom, Zabrze and Tychy. With the exception of Katowice, the metropolitan functions are built on the basis of the existing entities, in the fields of higher education, culture and healthcare.

They are connected with the economy to a lesser extent.

Currently, the rivalry between Katowice and Gliwice (the sports and recreation hall with more than a regional range of influence), or Katowice and Sosnowiec (the international trade fair and exhibition centre) may be sensed. However, the privileged and primary position of Katowice is, thus, far unchanged.

Unfortunately, from a different point of view, the dispersion of functions, institutions and establishments connected with creating metropolitaneity that is present in many cities, weakens the position of Katowice as the centre of the region to a large extent. Katowice, being the privileged city of the largest urban region, constitutes a secondary, and according to some rankings, third-rate metropolitan centre in the country.

### **Urban shrinkage**

There are 71 cities located in the Silesia Province, including 45 (63%) with a depopulation index equal to or exceeding -2% (in the period of 1988-2009). These cities are defined in the thesis as shrinking. It shall be highlighted, however, that among 10 largest cities which are losing their population there are 9 in the area of Silesian province. The group includes Katowice, which in the indicated period lost 57.4 thousand inhabitants. A larger decrease of population in Poland happened only in the 700 thousand Łódź city.

The group of shrinking cities includes both large cities, with over 100 thousand inhabitants, as well as very small cities, where the further decrease in population might question their urban future.

The most advanced shrinking process is observed in the Katowice Conurbation, in the area of the historic Upper Silesia and in some smaller cities facing labor market problems.

The Katowice Conurbation, in the period of 1988-2009, decreased by over 250 thousand inhabitants and 10 out of 16 cities of the conurbation core have lost over 11% of their inhabitants. Neither urban centre noticed an increase of population.

The reasons for city shrinkage in the Silesia Province are various. In some cities, these are single reasons, in the majority, however, they are of a complex nature.

The most frequent – regional – reason for population decrease were problems of the labour market, together with

unemployment and the critical perception of the cities experiencing demographic and economical regress. It is worth noticing that the perception refers to both the inhabitants (potential emigrants), and people from other provinces (would-be immigrants). In the historic Upper Silesia – especially in the cities that belonged to Germany before World War II, there also happened economic and social migrations connected with the departures to that country. Hence the high indexes for Toszek (-39%) or Sośnicowice (-13%).

**Table 1:** Ranking of shrinking towns by population decline, 1988-2009

Town	Population decline, 1989-2009 (in thousands)	Percentage of decline, 1989-2009
<i>Wodzisław Śląski</i>	-62.1	-56
<i>Tychy</i>	-58.1	-31
Katowice	-57.4	-19
<i>Bytom</i>	-55.6	-23
Sosnowiec	-37.4	-17
Ruda Śląska	-23.9	-17
Chorzów	-21.4	-19
<i>Będzin</i>	-18.5	-24
Gliwice	-17.0	-9
<i>Mysłowice</i>	-16.9	-18
Częstochowa	-14.8	-6
<i>Tarnowskie Góry</i>	-13.4	-18
Zabrze	-13.2	-7
<i>Pszczyna</i>	-12.8	-34
Piekary Śląskie	-9.4	-16
Dąbrowa Górnicza	-8.3	-6
Siemianowice Śląskie	-8.1	-11
Jastrzębie Zdrój	-8.1	-9
Knurów	-5.8	-15
Świętochłowice	-5.8	-11
Racibórz	-5.0	-9
Czeladź	-3.8	-11
Zawiercie	-3.5	-7

Explanations: Towns which lost administrative area (administrative separation) in the period of 1989-2009 have been italicized.

Source: Krzysstofik and Szmytkie, 2011.

### **The collapse of administrative structures of cities and the emergence of the so-called “new cities”**

The key-reasons for the depopulation of the cities have been connected with the problems of labour market and industry restructuring, as well as the social and economic consequences of these perturbations: unemployment, lack of perspectives for the future, low salary index in the newly built industrial plants, limited municipal budgets, lack of finances for urban infrastructure, etc. The list is complemented by the elements that refer to the degradation of spatial structures of the selected fragments of cities (undeveloped brownfields, inner-city wastelands, vacant buildings, the degraded transport infrastructure and, partially, also municipal infrastructure or the low level of land rent, which, contrary to appearances, does not attract new inhabitants). One may also add migration relating to the suburbanization and departure of people, who, having received social welfare, returned to their home towns, mainly in eastern, southern and central Poland.

In the case of some cities, the population decrease was connected with the separation of the hitherto prevailing districts and the creation of separate urban or rural units. This process took place in Wodzisław Śląski, Tychy, Pszczyzna or Mysłowice, among other places. The process of city disintegration was the most important factor of their demographic decrease. Nevertheless, in a majority of cities, the reasons for their shrinking were created by the previously-mentioned social and economic factors.

One of the most characteristic features of citification of the Silesia Province was the emergence of the so-called new cities, due to the collapse of administrative structures of some large and medium-sized urban centers. The cities of the central and south-western part of the province were

created according to this model. The restitution of municipal rights happened also in the process of village urbanization (Krzanowice, Pilica, Sośnicowice), with relation to those villages that used to have municipal rights (Krzysztofik, 2006). In this case, the acting principles were connected with the benefits of the agglomeration status, and most of all, the many centuries of municipal history and traditions of the ennobled towns.

However, the most frequent phenomenon was the emergence of new cities by their separation from the city, which incorporated the separating district in the 1970s, which fact shall be pointed out here. All these processes were of the rank-and-file character, and did not happen in such an intense manner, in any other province. On the whole, nine “new-old” cities were created in such a manner, after 1990 (Bieruń, Imielin, Łędziny, Miasteczko Śl., Pszów, Radlin, Radzionków, Rydułtowy, Wojkowice). This process started in the 1980s, however, with the restitution of Sławków and Poręba. The actions towards the same aim ended with no positive effect in Kazimierz Górniczy (Sosnowiec), Kochłowice (Ruda Śl.), Łabędy (Gliwice) or Żabkowice (Dąbrowa Górń.).

The “new cities” examined here emerged as a result of two primary reasons. The first premise was the crisis of the large cities they separated from, the crisis of their leading functions (mainly industrial) and their negative image. That, added to the issue of administrative overgrowth of the cities, and the fact that their inner-city spatial structures were inconsistent. The distances from the city centre and the peripheral district were considerable, reaching up to 10 kilometers. In the case of a city with no more than 100 thousand inhabitants, which, additionally, was becoming unattractive in many aspects, the natural consequence was to break the spatial bonds and, ultimately, to separate.



An important factor for the secession was also the clear increase of the autonomy spirit, demonstrated on the local forum. This element always constituted the final link of the decomposition process of the hitherto prevailing administrative structures of the cities. It may be considered, primarily, only in the case of administrative changes in the Pszczyna area, and only partially, in the Tychy area.

The strength of the above mentioned basic elements is confirmed by the fact that even rural units began to separate from the cities (the Bojszowy community, the Chelm Śl. community, the Goczałkowice Zdrój community, the Kobiór community, the Marklowice community, the eastern part of the rural community of Pszczyna, the western part of the rural community of Pszczyna, the Wiry community). Even though the secessions of this type were fewer than in the case of restituted cities, nowhere in Poland did they happen to the same extent. Altogether, in the process of separation, 17 new communes – municipal or rural structures – emerged in the period 1990-2010. Two of them were integrated within the frames of one rural community of Pszczyna.

The total balance of the post-war (here, 1945-2002): changes in the administrative borders of the present Silesia Province shows a number of 146. Out of them, 37 happened in the period of 1990-2002 (Runge, 2005).

### **“Inner” suburbanization and “shifted” suburbanization**

The characteristic settlement arrangement of the Katowice Conurbation, the features of economic and social development of the region, the specifics of natural environment components of the Silesia Province became the evolution basis for individual spatial planning of the suburbanization phenomenon (compare also: Runge, 2011).

The study of the changes in the population of the Silesia Province, and case studies and field studies in the communities of the Katowice Conurbation, show a phenomenon which is not typical for any other Polish agglomerations. While in a majority of them, suburbanization is of a concentric layout, or a concentric and radial layout around the core of a metropolis, in the case of the Katowice Conurbation, the noticeable tendencies are towards the development of phenomena which may be defined as “shifted suburbanization” and “inner suburbanization”. In literal and critical relation to both terms, the question to be asked is about the real development of the phenomenon of suburbanization, according to its definition.

The term of “shifted suburbanization” is understood as the demographic and spatial development of communities located some distance (even up to 70 km) from the Katowice Conurbation, and showing direct connections in the relations between the core and the peripheries, similar to those observed in metropolises with the “classic” concentric and radial suburbanization model. Development zones for the “shifted suburbanization” are located in the Beskid Mountains, as well as in the Kraków-Częstochowa Upland.

The development of such a phenomenon is supported by: good and constantly improving transportation accessibility, a high level of social and economic development of the new settlement zones (especially in the Beskid Mountains), and above all, the factor described by G. Benko as the lure of the landscape in the southern and north-eastern part of the province. This problem in the case of the Katowice Conurbation is solved by the dilemma: to live 20 km away from Katowice and be frequently exposed to the view of large industrial plant chimneys of the Upper Silesia Industrial Area, or to live 70 km away from Katowice, but in the mountains or in the Kraków-Częstochowa Upland?

Another characteristic phenomenon is the oxymoron-like “inner suburbanization.” In the case of the Katowice Conurbation, it consists of “absorbing” development impulses that might create classic suburban zones to a centrally located area, frequently in the closest proximity of centres.

This phenomenon is related to the spatial and functional structure of the Katowice Conurbation as a whole, but is also visible in the case of single cities (model example in Sosnowiec). They can be directly referred to as the multi-centric model by Harris and Ullman (Krzysztofik et al., 2011). The characteristic, non-concentric arrangements of spatial inner-city structures, lead to the creation of peculiar location niches outside the city outskirts for new single-family developments. The undeveloped areas, both of the greenfields nature and the brownfields nature are conducive, as well as the level of ground rent, which is not much higher here, but is frequently rather lower than in the suburbs. Also, the lure of the landscape factor, which is extremely important in creating suburbial zones, is at a higher level here than in the suburbs. It results from the fact that a majority of the large industrial plants that have an effect on human beings and their environment are located in the peripheral areas. This time the dilemma is of a different kind – it is shaped by the question of the point of moving away from benefits and privileges of a big city, with a partial or doubtful environmental and landscape factor, decisive in the case of moving outside the core.

## Summary

The above presented outline describes the problems, which, according to its

authors, constitute the most important trends of changes in the process of citification of the Silesian province. Frequently, the character of the changes, due to widely understood and specific settlement, economic and social background factors, makes them unique in the national context. The study should undoubtedly become a starting point to further and more detailed research.

The Silesia Province, with 71 cities integrated within its borders, including the biggest number of large cities (of over 100 thousand inhabitants), several urban complexes representing all the basic morphological and functional types, and having the specific border location, make it one of the most interesting geographic areas for research in Poland and Europe.

The problems of city development in the Silesia Province took different shapes, at the turn of the centuries. These phenomena are totally new on the one hand (e.g. specific suburbanization models, city shrinkage), and on the other hand, they are well known phenomena, but they develop in new realities and conditions (e.g.: administrative changes of cities or issues connected with the level of metropolitity for the regional agglomerated arrangements).

Also, the evaluation of the observed phenomena variates. It is rather negative towards city shrinkage (cases that do not take into account the administrative collapse), and positive towards the attempts to move the rank of the metropolitity degree higher – through new institutions and trans-regional enterprises, especially in the Katowice Conurbation.

## References

Benko, G. (1993) *Geografia technopolii [Geography of technopolies]*, PWN, Warszawa.

Jałowiecki, B. (ed.) (2009) *Czy metropolia jest miastem? [Is metropolis the city?]*. Warszawa: Wydawnictwo Naukowe.

- Kłosowski, F. and Runge, J. (1999) Podział województwa katowickiego a kształtowanie się zróżnicowań demograficzno społecznych [Katowice Province and demographic-social differentiations]. *Czasopismo Geograficzne*, 3-4, 319-335.
- Krzysztofik, R. (2006) *Nowe miasta w Polsce w latach 1980–2007. Geneza i mechanizmy rozwoju. Próba typologii [New towns in Poland, 1980-2007. Genesis and drivers]*. Sosnowiec: WNoZ Uniwersytet Śląski.
- Krzysztofik, R. (2007) Aglomeracja rybnicka. Zarys typologii osadniczej, maszynopis udostępniony [The Rybnik Agglomeration. An outline of settlement typology]. Available at: [www.rybnik.pl/\\_files/aglomeracja\\_rybnika\\_opracownie.doc](http://www.rybnik.pl/_files/aglomeracja_rybnika_opracownie.doc). Accessed on February 2, 2011.
- Krzysztofik, R. (2008) Aglomeracje miejskie [Urban agglomerations], in M. Tkocz (ed.), *Województwo śląskie. Zarys geograficzno-ekonomiczny [Silesian Province. A geographical-economic outline]*, Wydawca; Sosnowiec: WNoZ Uniwersytet Śląski, 22-25.
- Krzysztofik, R., Runge, J. and Kantor-Pietraga, I. (2011) Paths of Shrinkage, in *The Katowice Conurbation. Case Studies of Bytom and Sosnowiec Cities*. WNoZ Uniwersytet Śląski, Sosnowiec.
- Krzysztofik, R. and Szymytkie, R. (2011) *Studia nad procesami i strukturami osadniczymi sieci miast Polski Południowej [Studies on settlement processes and structures in the urban network of the Southern Poland]*. Sosnowiec: WNoZ Uniwersytet Śląski.
- Lackowska, M. (2009) *Zarządzanie obszarami metropolitalnymi w Polsce. Między dobrowolnością a imperatywem [Governance of metropolitan areas in Poland. Between voluntary and imperative]*. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego (University of Warsaw Publishing).
- Parysek, J.J. (2010) Aglomeracje miejskie: struktury i funkcjonowanie [Urban agglomerations: structures and functions], in W. Maik (ed.), *Agglomeracje miejskie w Polsce na przełomie XX i XXI wieku. Problemy rozwoju przekształceń strukturalnych i funkcjonowania [Urban agglomerations in Poland at the turn of the 20th and 21st century. Problems of structural changes and functions]*. Bydgoszcz: Wydawnictwo Uczelniane WSG w Bydgoszczy (WSG in Bydgoszcz Publishing), 31-58.
- Runge, J. (2005) Urbanizacja i jej konsekwencje w regionie katowickim – mity a rzeczywistość [Urbanization and its consequences in the Katowice region – myths and real], in I. Jażdżewska (ed.), *Współczesne procesy urbanizacji i ich skutki [Contemporary urbanisation processes and their consequences]*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego, 193-202.
- Runge, J. (2011) Społeczno-gospodarcze oraz przestrzenne przejawy suburbanizacji w województwie śląskim [Social-economic and spatial elements of suburbanization in Silesian Province], *Studia Miejskie*, 3, 55-65.
- Smętkowski, M., Jałowiecki, B. and Gorzelak, G. (2009) Metropolitan Areas in Poland – Diagnosis and Recommendations, *Regional and Local Studies, Special Issue: Cities and Metropolises*, 37-58.
- Sokołowski D. (2006) *Funkcje centralne i hierarchia funkcjonalna miast w Polsce [Central functions and functional hierarchy of towns in Poland]*, Toruń: Wydawnictwo Uniwersytetu Mikołaja Kopernika.
- Spórna T. (2011) *Modele przemian urbanizacyjnych w województwie śląskim [Models of urbanization changes in Silesian Province]*. Sosnowiec: WNoZ Uniwersytet Śląski.

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