

**155**

**Annales  
Universitatis  
Paedagogicae  
Cracoviensis**

**Studia Geographica V**

**edited by**

**Sławomir Kurek  
and Tomasz Rachwał**



**Editor-in-chief:**

Sławomir Kurek

**Associate – managing editor:**

Tomasz Rachwał

**Editorial Board**

Gideon Biger (Israel), Zbigniew Długosz (Poland), Anatol Jakobson (Russia), Sławomir Kurek (Chair, Poland), Roman Malarz (Poland), Keisuke Matsui (Japan), Ana María Liberali (Argentina), Tomasz Rachwał (Vice-chair, Poland), Aleksandar Petrovic (Serbia), Natalia M. Syssoeva (Russia), Zdeněk Szczyrba (Czech Republic), Wanda Wilczyńska-Michalik (Poland), Witold Wilczyński (Poland), Bożena Wójtowicz (Poland), Mirosław Wójtowicz (Poland), Jiuchen Zhang (China), Zbigniew Zioło (Poland)

**List of reviewers**

Krystyna German, Jerzy Kitowski, Włodzimierz Kurek, Rene Matlovic, Piotr Pachura, Joanna Pociask-Karteczka, Eugeniusz Rydz, Przemysław Śleszyński, Zygmunt Szymła, Elżbieta Szkurłat, Marek Więckowski, Zdeněk Szczyrba, Andrzej Zborowski, Bogdan Włodarczyk, Tomasz Komornicki

**Definition of primary version**

The primary version of the journal is the printed version.

**Journal website with information for authors and access to the full-text electronic versions of archive papers:**

<http://annalesgeo.up.krakow.pl>

**Journal contact**

Kamila Ziółkowska-Weiss (Secretary)  
Institute of Geography, Department of Tourism and Regional Research  
Dariusz Nowotnik (Deputy Secretary)  
Institute of Geography, Department of Socio-Economic Geography  
Pedagogical University of Cracow  
ul. Podchorążych 2, 30-084 Kraków, p. 537  
tel. (+48) 12 662 62 67  
e-mail: [annalesg@up.krakow.pl](mailto:annalesg@up.krakow.pl)

© Copyright by Wydawnictwo Naukowe UP, Kraków 2014

ISSN 2084-5456

**Publisher:**

Wydawnictwo Naukowe UP  
30-084 Kraków, ul. Podchorążych 2  
tel./fax 12 662 63 83, tel. 12 662 67 56  
e-mail: [wydawnictwo@up.krakow.pl](mailto:wydawnictwo@up.krakow.pl)  
<http://www.wydawnictwoup.pl>

## Introduction

This volume of *Annales Universitatis Paedagogicae Cracoviensis Studia Geographica* covers nine articles presenting contemporary research problems in social-economic geography and in geographical education. The main aim of this publication was to acquaint the foreign reader with a wide array of research done in the Institute of Geography, Pedagogical University of Cracow. The set of articles was published on the occasion of International Geographical Union Regional Conference which will be held in Cracow in August 2014. The previous IGU Regional Conference in Poland was held in 1934 in Warsaw. The volume tackles the issues of methodology of geography, history of geographical thought, the issues of gentrification, housing development and urban sprawling in metropolitan areas as well the problems of tourism development, ethnic segregation. Finally, the last article is analysed motives for choice of geography as an additional subject in Mature examination in last years.

Zbigniew Ziło in his conceptual article gave an insight into the functioning and changes of geographical space, allowing for the synthesis of research results of the specialised geographical disciplines. The proposed concept should be regarded as an attempt to seek a pattern of conducting research. It will allow for a holistic approach to processes of change taking place in the structure of geographical space. In the article the author showed that an important role in functioning and transformation of geographical space is played by the natural conditions that enable the formation of socio-economic and cultural processes in accordance with the rules of economic development and as a result of deliberate actions on the basis of socio-economic policy. Finally, the author divided the structure of the functioning and development of geographical space into three basic categories of space, namely natural (physical-geographical) space, socio-economic space and cultural space.

Witold Wilczyński showed the contribution of Eugeniusz Romer (1871–1954), a great Polish geographer, to human geography. The author showed the geopolitical concept of Romer on the individual character of Polish lands. According to the author, this concept should create the basis for a discussion concerning the international position of Poland.

Next paper attempts to answer the question whether and to what extent spatial transformations of small towns in Poland show symptoms of gentrification. Agnieszka Kwiatek-Sołtys and Krzysztof Wiedermann refer contemporary processes of gentrification to small towns in Małopolska province, showing its demographic changes and redevelopment. The paper written by Anna Winiarczyk-Raźniak and Piotr Raźniak shows diversification of housing conditions in two selected metropolitan areas: Warsaw, Krakow and potential Rzeszów Metropolitan Area. On the basis of housing conditions indexes, a typology of municipalities within the metropolitan areas was created. Finally, the fluctuations in the population and in the number of apartments in the area were analysed.

One of the most important features of modern urban areas is the process of decentralization of manufacturing activities, high-order producer services, cultural services as well as advanced informational services, usually accompanied by the process of residential suburbanization. On this basis, Sławomir Kurek, Tomasz Rachwał and Mirosław Wójtowicz tackle the issues of urban sprawling in the Kraków Metropolitan Area with particular attention paid on the changing role of industry as one of the key elements of development and metropolisation of cities in post-socialist, emerging economies. The process of industrial and commercial suburbanisation is shown with the use of data on employment, investment and location of shopping centres.

The following two papers presents research on tourism development. Renata Rettinger and Małgorzata Bajgier-Kowalska show the tourist potential of a historical city on the example of Pistoia in Tuscany and the possibilities of further development of tourist movement in light of the current tendencies of the world tourist market. The paper also includes an attempt to analyze the structure of a tourist product of the city of Pistoia based on its location as a neighbour of such large tourist centers as Florence or Pisa. The concept of tourism product on the example of a spa town of Krynica Zdrój in Poland is shown in the paper written by Sławomir Dorocki and Paweł Brzegowy. The authors point out that medicinal function of Krynica Zdrój spa resort was joined by leisure and recreational functions developed due to favourable natural conditions (mountains, forests and climate). They also refer to the concept of tourism cluster (or cluster of health and tourism) which involves the development of both medical services and tourism as well as sports, leisure, conference, educational and industrial functions.

Agnieszka Świątek identifies and describes the following symptoms of social exclusion experienced by Roma people in Poland: lack of tolerance in Polish majority, problems related to the functioning on the labour market and access to education, low standard of living as well as the need that some actions for Roma people in Poland be taken by governmental authorities. The author refers in the article to numerous results of current surveys on the attitude adopted by Poles towards Roma people, which prove intolerant attitude of Poles to this minority.

The final paper in this volume, written by Mariola Tracz, refers to the role of geography in the group of optional subjects to choose in School Leaving Examinations at upper secondary level (Matura exam) after the reform of education in 1999. The study shows the results of a survey carried out among those Matura grade students who chose geography for Matura in 2012. The gathered results also allowed the Author to estimate how the alterations introduced by Ministry of Education into the procedures of examination subjects' choice influence students' choice in relation to geography.

We hope that the articles from this issue of *Annales Universitatis Paedagogicae Cracoviensis Studia Geographica* will raise an interest in research done in the Institute of Geography of Pedagogical University in Cracow. We look forward to your comments and cooperation which may contribute to the improvement of our research and the quality of our journal.

*Sławomir Kurek, Tomasz Rachwał*

# Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica V (2014)

*Zbigniew Ziolo*

## The concept of geographical space

### Abstract

In the process of shaping the geography as a science there appeared two research trends. One of them is reflected in ongoing scientific specialization and isolation of new disciplines, while the other is characterized by making attempts to synthesize the results achieved by the specialized disciplines. Against this background, this paper is trying to find a frame to synthesize the phenomena through the relations between the natural, socio-economic and cultural elements of geographical space. More and more precise study of the processes of the geographical space is necessary to understand and make rational decisions concerning the transformation of spatial systems.

**Key words:** cultural space; geographical space; natural space; socio-economic space

The ongoing development of science strives to study its subject more and more precisely. This manifests itself in undertaking new, narrower and more deeply recognised research issues. Learning more and more detailed characteristics of the structure, functioning and development of the analyzed phenomena leads to progressive narrowing of the subject and the need to develop new, often more precise analytical methods. This allows for the progressive specialization and the emergence of new sciences, which develop within the structures of more general, traditional science disciplines. In this process we often see overlapping of research areas as well as addressing specific problems from the position of various scientific disciplines<sup>1</sup>. In addition, much work is undertaken to synthesise the results of specialized disciplines, which enables us to gain knowledge on their functioning as well as changes of a larger and more complex whole<sup>2</sup>.

The process of progressive specialization in science research also refers to geography. Within its structure a number of disciplines, which undertake specific

---

<sup>1</sup> An example of this can be the isolation of more specific scientific disciplines in the fields of biology, physics or chemistry, which then show some tendencies for partial integration of the subject of research, e.g. in the field of biophysics or biochemistry. In these new fields, new discoveries are made that allow for better understanding the object of research.

<sup>2</sup> In medicine there are many sciences and specialties studying the functioning and health of individual organs. It often happens that the medicine applied to remove the disease of one organ leads to negative effects in other organs. In this situation, there is a need for an overall analysis, which is to answer the question of how by healing one organ not to evoke the deterioration of the others.

research and draw from their new research methodologies, have been identified (Maik, Rembowska, Suliborski, 2005, 2006, 2007). The following considerations will give an insight into the functioning and changes of geographical space, allowing for the synthesis of research results of the specialised geographical disciplines. The proposed concept should be regarded as an attempt to seek a pattern of conducting research. It will allow for a holistic approach to processes of change taking place in the structure of geographical space. Developing a new concept of synthetic approach to the results of the various geographical disciplines is of significant cognitive importance, for because of this we can accurately know the relations between the individual elements of geographical space. This creates the right conditions for making certain decisions related to changes in the natural environment influenced by human activities, as well as for stimulating economic growth, and raising the level and quality of living conditions and of culture.

An important role in the functioning and transformation of geographical space is played by natural conditions that enable the formation of socio-economic and cultural processes in accordance with the rules of economic development and as a result of deliberate actions on the basis of socio-economic policy. This is particularly important during the development of information society, which is increasingly knowledge-based. Synthetic approaches to transition processes in shaping the structure of geographical space is undertaken by both geographical (incl. Dobrowolska 1962, 1978; Kuciński 1990; Lisowski 1999, 2003; Liszewski, Łoboda, Maik 2008) and economic sciences (e.g. Domański 1982, 1992, 2010; Kudłacz, Wrona 2010). These considerations also relate to the author's earlier work in which this issue has been considered in terms of both geographical and economic research (Zioło 1996, 1999, 2003).

The issue of geographical space was addressed by other authors, who consider it from different points of view. This is shown by works many authors including Bittner & Frank, (1999), Chojnicki (1989), Gattrel (1983), Harvey (1991), Jones (2009), Mark, Frank (1996), Massey (1999, 2001), Meentemeyer (1989), Nunes (1991), Peuquet (1988) and Withers (2009).

### **Basic directions of geographical research**

In the development of geography as a science, as it is in the case of other scientific disciplines, the trend towards more and more precise knowledge of the complexity of the natural, social, economic, cultural and political reality is going to continue. This is accomplished by studying new, more specific problems and research objectives, developing and applying new and more precise methods for measuring the potential, and identifying internal relations between the leading elements of the structure. Consequently, these trends, as in other sciences, have led to progressive specialization and isolation of new geographical disciplines. This process refers to the famous thesis that learning more and more new content influences blowing up

old forms and leads to the formation of new patterns of research. In connection with this idea two main directions of research have developed in geography.

The first one seeks to find new, more specific research problems, leading to narrower and narrower scientific specialization that allow for more precise knowledge of new developments. As a result, many new sciences that deal with the individual elements of the natural, social, economic, cultural and other environments have been identified and isolated in geography<sup>3</sup>.

The second line of research seeks to build syntheses of partial results delivered by not only the specialist geographical sciences but also by economic, social, historical, cultural, technical and other related sciences, the research achievements of which are shaping the geographical space of the world. The synthesis that is being built cannot be simply the sum of the individual research disciplines, but it must take into account the quality and seriousness of substantive as well as methodological and functional linkages between them. This requires an attempt to build and improve coherent research concepts that apply the synthetic approach to transition processes of the geographical space as a whole and of different scales of spatial systems such as groups of countries, individual countries, regions, local systems, or other areas, delimited by the object and purpose of the study<sup>4</sup>.

In building syntheses related to the development of certain phenomena occurring in geographical space, the main trends include those leading towards a possible precision in (Domański, 1982, 1992; Chojnicki, 1991; Liszewski, Łoboda, Maik, 2008; Ziolo, 2009):

- understanding and explaining the undergoing processes,
- identifying future trends of changes,
- identifying opportunities to control them in relation to the assumed objectives and directions of development that can be implemented in existing or changing conditions.

In studying the functioning and development of geographical space we observe a partial takeover of research issues, traditionally regarded as geographical, by social, economic and technical sciences. To a large extent this is due to the fact that these fields were unoccupied and unused by geography. This was partly due to some conservatism and lack of courage to seek new research problems. Additionally,

---

<sup>3</sup> In the field of geography, there are also some centrifugal forces manifested, for example, in attempts to create separate societies, and the artificial extension of the research field of geography of the Institutes of Geography adding a new determinants, such as 'and spatial management' or 'and spatial planning', forgetting that these research problems should be developed within geography, assuming that the newly discovered contents and application needs require the creation of new models and research methods.

<sup>4</sup> Such attitude is represented by, *i.a.*, Bański, 2005; Falkowski, 2009; Gorzelak, 1995; Korcelli, Degórski, Drzazga, Komornicki, Markowski, Szlachta, Węclawowicz, Zaleski, Zaucha, 2010; Kudełko, 2007; Parysek, 2004; Rydz, 2006; Węclawowicz, Bański, Degórski, Komornicki, Korcelli, Śleszyński, 2006.

a lot of work undertaken by geographers was treated as non-geographical<sup>5</sup>. Thus, geographical sciences are relatively less prone to look for research issues in other disciplines, such as those related to spatial differentiation of capital, revenues, budgets, or crisis phenomena.

Depending on their location in the geographical space, different-scale spatial systems are often characterised by different conditions as well as trends and the level of social, economic, cultural and political relationships<sup>6</sup>. Therefore, it seems that geographers must boldly enter the fields of other sciences, with a view to study comprehensively and solve specific problems – already encountered or just emerging – in spatial systems, which often differ in terms of natural, social, economic, cultural, or political aspects. In every spatial system of the focus is put on various processes, studied by different scientific disciplines (such as geography, economics, history and social and technical sciences) which do not, however, give the overall synthetic approach. This convention requires expanding and deepening of synthesized geographical research, improving and adapting new research methods and meeting new targets of not only cognitive but also applied character. In recent years there has been an increased social need for a comprehensive analysis of various processes of change of spatial systems of diverse scale, such as the formation of the European space diversity, and spatial diversity of individual countries, regions and local systems<sup>7</sup>. As diagnostic work, they should serve by marking out the objectives and building a strategy for the rational development. There is therefore a need for continued discussion on the ordering of the existing and proposed new research approaches in the field of geography, especially referring to synthesizing the results of studies obtained by the more specialized scientific disciplines<sup>8</sup>. It seems that in

---

<sup>5</sup> A good example here was criticism of undertaking commuting issues in the Department of Economic Geography of the Pedagogical University in Cracow by Prof. Maria Dobrowolska at the end of the 1950s, as it was considered a sociological rather than geographical subject. Only after several years did this problem widespread in many national and international geographic centers (incl. Herma, 1966, Lijewski, 1967).

<sup>6</sup> The expression of this can be poverty of relatively rich countries in Africa. Despite significant mineral resources they remain at a low level of development, although their leaders are often well educated at European or American universities. The main obstacle in this respect are defined resources of spiritual culture resulting from the traditions that are maintained by the already educated elite.

<sup>7</sup> It seems that a certain conservative attitude of the representatives of geographical sciences contributed to the emergence of, for example, spatial economy, which, in principle, was undertaken by geographers who did not find their place in the institutional structure of geographical sciences. In co-operation with representatives of economic sciences, the good resulting from the “annuity of space” was discovered and thus a new discipline was created. Ecology developed in a similar way. It was established on the basis of natural sciences in connection with representatives of technical and economic sciences. What should be emphasized here is the work on the place of Poland within the European space (e.g. Kukliński, 1995, 1997).

<sup>8</sup> An interesting attempt in this regard was the concept of alternative development of economic geography by R. Domański (1982), who to some extent ordered the research



the near future other sciences, through more precise methods, may still take over the current research areas of geographical sciences, expanding their interest by the element of space, and subordinating them to the objectives of management.

### **Concept of functioning of geographical space**

In studying the rules of functioning and transformation processes of geographical space, there is a need to try and build model approaches that will allow to define a hierarchy of its structural elements and to test the relations between them. In line with previous works of the author it must be assumed that geographical space is a dynamic whole that includes a variety of elements which satisfy the specified functions and interact with each other.

We assume that the knowledge on the quality and intensity of interrelations between the structural elements of geographical space, in addition to the cognitive values, also provides important evidence for taking rational decisions on its restructuring. What is essential in this respect is the analysis of the functioning of modern structures, the process of its formation in a given period of time, the prediction of further directions of change, their evaluation in light of the objectives of development and creation of appropriate instruments of control, with reference to the circumstances and the resources available (Ziolo, 2009).

This discussion will be limited to the analysis of the functioning and transformation of geographical space, which take place as a result of changes in terms of quality and size of potential of individual components, as well as changes of their functions and the intensity of relations between them (Ziolo, 1996, 1999, 2003, 2001).

The structure of the functioning and development of geographical space is characterized by three basic categories of space, namely:

- natural (physical-geographical) space,
- socio-economic space,
- cultural space.

It is assumed that the basic elements of the physical-geographical (natural) space structure include: geological substrate, climatic conditions, water conditions, relief, soil, flora and fauna. In the structure of the socio-economic space the essential elements include: spatial structure of agriculture, spatial structure of industry, transportation network, services and institutions, demographic structure, settlement pattern and the capital and financial resources of businesses and citizens. In the structure of the cultural space there are: material and spiritual resources of culture (including religious and philosophical ones), the level of education of the population, aspirations of the society, intellectual resources and, within their structure, human capital, social capital as well as political, social and cultural awareness.

---

activity and gave the basis for analysing the processes of change (Ziolo, 2009), but little of it has been used in the field of geography.

The individual elements of geographical space are not isolated units, various relations between them occur in the process of their functioning and development.. The first group consists of internal relations within the structures that occur over the delimited categories of space (natural, socio-economic, cultural). Their structural elements are characterized by diverse quality and potential. They function under the influence of certain regularity essential for individual items.

1. Functioning of the natural space is presented in Table 1. The processes that shape its elements are illustrated by relations along the table's diagonal. For instance, the processes taking place in the structure of the geological substrate ( $X_1$ ), are represented by relations  $[x_{11}]$ ; those in the structure of climatic conditions ( $X_2$ ) by relations  $[x_{22}]$ ; similarly, those in the vegetal structure ( $X_6$ ) by relations  $[x_{66}]$ .

Tab. 1. Relations between elements of natural space

Elements of natural space			$X_1$	$X_2$	$X_3$	$X_4$	$X_5$	$X_6$	$X_7$
Geology	$X_1$	$x_{11}$	$x_{12}$	$x_{13}$	$x_{14}$	$x_{15}$	$x_{16}$	$x_{17}$	
Climate	$X_2$	$x_{21}$	$x_{22}$	$x_{23}$	$x_{24}$	$x_{25}$	$x_{26}$	$x_{27}$	
Water	$X_3$	$x_{31}$	$x_{32}$	$x_{33}$	$x_{34}$	$x_{35}$	$x_{36}$	$x_{37}$	
Relief	$X_4$	$x_{41}$	$x_{42}$	$x_{43}$	$x_{44}$	$x_{45}$	$x_{46}$	$x_{47}$	
Soils	$X_5$	$x_{51}$	$x_{52}$	$x_{53}$	$x_{54}$	$x_{55}$	$x_{56}$	$x_{57}$	
Vegetation	$X_6$	$x_{61}$	$x_{62}$	$x_{63}$	$x_{64}$	$x_{65}$	$x_{66}$	$x_{67}$	
Animals	$X_7$	$x_{71}$	$x_{72}$	$x_{73}$	$x_{74}$	$x_{75}$	$x_{76}$	$x_{77}$	

Source: own compilation

In the structure of natural space the individual elements are not isolated but exist as a result of certain active and passive relations occurring between the individual elements.

- a) Active relations are illustrated by the table's horizontal lines, which show the influence of a given element on other elements. For example, the influence of the geological substratum ( $X_1$ ) on relief ( $X_4$ ) is presented by the relation  $[x_{14}]$ , and on soil conditions ( $X_5$ ) by the relation  $[x_{15}]$ . Similarly, the influence of water conditions ( $X_3$ ) on other elements of the natural space ( $X_1, \dots, X_7$ ), are represented in the lines from  $[x_{31}]$  to  $[x_{37}]$ , and the influence of vegetation ( $X_6$ ) on other elements by the line of the relations  $[x_{61}], \dots, [x_{67}]$ .
- b) The columns of the table represent passive relations of a given element of the natural environment in relation to other elements. For instance, climatic conditions ( $X_2$ ) are influenced by other elements as illustrated by the column of relations  $[x_{12}], \dots, [x_{72}]$ , while the influence exerted over fauna is represented by the relations columns from  $[x_{17}], \dots, [x_{67}]$ .

As a result of the foregoing considerations, it can be assumed that in the process of functioning of natural space, a fundamental role is played by potential and quality

of individual elements ( $X_1, \dots, X_7$ ), as well as active and passive relations between them, as shown in (Table 3):

$$[x_{ij}^x] \quad (i = j = 1, \dots, 7)$$

2) Similarly, the relations between the elements of the socio-economic space ( $Y_1, \dots, Y_8$ ) can be presented, such as the relations:

- in spatial structure of agriculture ( $Y_1$ ) as represented by relations  $[y_{11}]$ ,
- in spatial structure of industry ( $Y_2$ ) as relations  $[y_{22}]$ ,
- and in the structure of settlement network ( $Y_7$ ) by relations  $[y_{77}]$ .

There are also active and passive relations that occur between different elements of socio-economic space, for example:

- influence of industry ( $Y_2$ ) on capital and financial resources ( $Y_8$ ) is presented by the relation  $[y_{28}]$ ,
- influence of communications network ( $Y_5$ ) on other elements of the socio-economic space are represented by relations  $[y_{51}], \dots, [y_{58}]$ ,
- and the influence of the individual elements on the services ( $Y_3$ ) is illustrated by the relations column  $[y_{13}], \dots, [y_{83}]$ .

In the process of functioning of socio-economic space, thus, the elements of diverse quality and potential ( $Y_1, \dots, Y_8$ ) take part as both active and passive relations between them (Tab. 3):

$$[y_{ij}^y] \quad (i = j = 1, \dots, 8)$$

3) Also in the cultural space there exist inner relations between the individual elements ( $Z_1, \dots, Z_8$ ), such as the relations:

- in terms of spiritual culture  $[z_{22}]$ ,
- in the structure of intellectual resources  $[z_{55}]$ ,
- or cultural awareness  $[z_{88}]$ .

The influence of, for instance, the education level ( $Z_4$ ) on other elements of the cultural space is represented by the relations lines  $[z_{41}], \dots, [z_{48}]$  and the influence of the cultural elements ( $z_8$ ) on other elements by the relations  $[z_{81}], \dots, [z_{87}]$ .

The columns, however, represent the influence exerted on a given element of cultural space by the other elements, such as social aspirations ( $Z_3$ ) under the influence of other elements  $[z_{13}], \dots, [z_{83}]$ .

Thus it can also be accepted that individual structural elements of various quality and potential ( $Z_1, \dots, Z_8$ ) take part in the process of functioning of the cultural space, as do relations between them (Tab. 3):

$$[z_{ij}^z] \quad (i = j = 1, \dots, 8)$$

The second group consists of matrices defining the relations between different categories of geographical space. The relations between elements of natural space

and the elements of socio-economic space are presented in Table 2, which reflects the functional interrelation between their structural elements.

Tab. 2. Relations between elements of socio-economic space and elements of natural space

Elements of space		Structure of farming	Structure of industry	Services	Institutions	Transport and communication	Demo-graphy	Settlement pattern	Capital resources
		$Y_1$	$Y_2$	$Y_3$	$Y_4$	$Y_5$	$Y_6$	$Y_7$	$Y_8$
Geology	$X_1$	$x_{11}^y$	$x_{12}^y$	$x_{13}^y$	$x_{14}^y$	$x_{15}^y$	$x_{16}^y$	$x_{17}^y$	$x_{18}^y$
Climate	$X_2$	$x_{21}^y$	$x_{22}^y$	$x_{23}^y$	$x_{24}^y$	$x_{25}^y$	$x_{26}^y$	$x_{27}^y$	$x_{28}^y$
Water	$X_3$	$x_{31}^y$	$x_{32}^y$	$x_{33}^y$	$x_{34}^y$	$x_{35}^y$	$x_{36}^y$	$x_{37}^y$	$x_{38}^y$
Relief	$X_4$	$x_{41}^y$	$x_{42}^y$	$x_{43}^y$	$x_{44}^y$	$x_{45}^y$	$x_{46}^y$	$x_{47}^y$	$x_{48}^y$
Soils	$X_5$	$x_{51}^y$	$x_{52}^y$	$x_{53}^y$	$x_{54}^y$	$x_{55}^y$	$x_{56}^y$	$x_{57}^y$	$x_{58}^y$
Vegetation	$X_6$	$x_{61}^y$	$x_{62}^y$	$x_{63}^y$	$x_{64}^y$	$x_{65}^y$	$x_{66}^y$	$x_{67}^y$	$x_{68}^y$
Animals	$X_7$	$x_{71}^y$	$x_{72}^y$	$x_{73}^y$	$x_{74}^y$	$x_{75}^y$	$x_{76}^y$	$x_{77}^y$	$x_{78}^y$

Source: own compilation

For instance, the influence of water conditions ( $X_3$ ) on the structure of agriculture ( $Y_1$ ) is illustrated by the relation  $[x_{31}^y]$ , and their influence over the other elements of socio-economic space ( $Y_1, \dots, Y_8$ ) by relations  $[x_{32}^y], \dots, [x_{38}^y]$ . Similarly, the influence of relief ( $X_4$ ) on other elements of socio-economic space ( $Y_1, \dots, Y_8$ ) is illustrated by relations  $[x_{41}^y], \dots, [x_{48}^y]$ , and the influence of vegetation ( $X_6$ ) on the socio-economic elements ( $Y_1, \dots, Y_8$ ) by relations  $[x_{61}^y], \dots, [x_{68}^y]$ . Passive relations are represented in columns; for example, the influence exerted on the transportation network ( $Y_5$ ) by individual elements of natural space ( $X_1, \dots, X_7$ ) is shown in the relations column  $[x_{15}^y], \dots, [x_{75}^y]$ . The relations between elements of natural space ( $X_j$ ) and the elements of socio-economic space ( $Y$ ) are described by (Tab. 3):

$$[x_{ij}^y] \quad (i = 1, \dots, 7); (j = 1, \dots, 8).$$

A synthetic model of functioning of the geographic space is illustrated in Table 3. It shows the active and passive relations that occur between the distinguished categories of geographical space. Active relations determine the effect of a given element on other elements:

- the influence of natural elements on socio-economic space are represented by the relations  $[x_{ij}^y]$ , and on cultural space by  $[x_{ij}^z]$ ,

- the influence of socio-economic space on the natural space are described by the relations  $[y_{ij}^x]$ , and on the cultural space by  $[y_{ij}^z]$ ,
- the influence of the elements of the cultural space on the natural space are illustrated by the relation  $[z_{ij}^x]$ , and on the elements of the socio-economic space by the relations  $[z_{ij}^y]$ .

Tab. 3. Geographical space model

Elements of geographical space			Geographical space		
			Natural space	Socio-economic space	Cultural space
			$X_1, \dots, X_7$	$Y_1, \dots, Y_8$	$Z_1, \dots, Z_8$
Geographical space	Natural space	Geology	$X_{ij}^x$	$X_{ij}^y$	$X_{ij}^z$
		Climate			
		Water			
		Relief			
		Soils			
		Vegetation			
		Animals			
	Socio-economic space	Structure of farming	$Y_{ij}^x$	$Y_{ij}^y$	$Y_{ij}^z$
		Structure of industry			
		Services			
		Institutions			
		Transport and communication			
		Demography			
		Settlement pattern			
		Capital resources			
	Cultural space	Material culture	$Z_{ij}^x$	$Z_{ij}^y$	$Z_{ij}^z$
		Spiritual culture			
		Aspirations of the society			
		Education			
		Intellectual resources			
		Social awareness			
		Political awareness			
		Cultural awareness			

Source: Ziolo 1976, 1999

Passive relations represent the impact of other space on a given space:

- the natural space under the influence of socio-economic space is represented by the relation  $[y_{ij}^x]$ , and under the influence of cultural space by  $[z_{ij}^x]$ ,
- the socio-economic space under the influence of the natural space is represented by the relation  $[x_{ij}^y]$ , and under the influence of the cultural space by  $[z_{ij}^y]$ ,

- the cultural space under the influence of the natural space is represented by the relation  $[x^z_{ij}]$ , and under the influence of the socio-economic space by  $[y^z_{ij}]$ .

All the above means that the relations  $[x^y_{ij}]$  and  $[y^x_{ij}]$  are not equal. The relations  $[x^y_{ij}]$  represent the influence of the elements of natural environment ( $X_i$ ) on the elements of the socio-economic space ( $Y_j$ ), while relations  $[y^x_{ij}]$  represent the influence of the elements of socio-economic space ( $Y_j$ ) on the elements of natural space ( $X_i$ ).

Moreover, the presented model of geographical space indicates that between the various structural elements of individual spaces there are certain active and passive relations. For instance, in the geological substratum ( $X_1$ ) there are certain inner processes  $[x^x_{ii}]$  taking place, and its role in the structure of the geographical space should be considered from the position of the active relation, namely to what extent it influences the other elements of the natural space  $[x^x_{12}]$ , ...,  $[x^x_{17}]$ , the elements of the socio-economic space  $[x^y_{11}]$ , ...,  $[x^y_{18}]$ , and the elements of the cultural space  $[x^z_{11}]$ , ...,  $[x^z_{18}]$ , and the other way around, i.e. to what extent the geological structure is under the influence of the other elements of the natural space  $[x^x_{21}]$ , ...,  $[x^x_{71}]$ , the elements of the socio-economic space  $[y^x_{11}]$ , ...,  $[y^x_{71}]$  and the cultural elements  $[z^x_{11}]$ , ...,  $[z^x_{81}]$ . A similar convention should be used to analyze the functions of the individual elements (natural, socio-economic, cultural) in the geographical space.

The delimited elements of the geographical space ( $X_i$ ,  $Y_j$ ,  $Z_k$ ) make specific aggregates which include a large number of more specific features. For example, within the demographic relations ( $Y_6$ ) we can delimit various population structures, e.g. by sex, age, education, births, deaths, influx or outflow of population. Similarly, the education level ( $Z_4$ ) includes people with or without certificates from primary, vocational, secondary or higher educational institutions. Therefore, depending on the research or application purpose different kinds of disaggregation can be made, highlighting interesting, more specific variables. In these works we should seek to determine the relations between the more detailed features and other elements of geographical space. In previous research projects and specialist literature, not all relations have been fully understood. Therefore, the proposed model may also contribute to opening new research areas and filling gaps for a more detailed study of the processes of the geographical space functioning.

## Transformation of geographical space

Functioning usually refers to a short period of time in which no significant changes take place in the quality and potential of the structural elements and the relations between them. In the long term, however, quality and potential of the individual elements of the geographical space and the intensity of relations between them undergo changes. This is due to changes in circumstances and factors shaping the behavior of the individual structural elements and the relations between them. Consequently, this affects the processes of change in the geographical space, which

can manifest themselves in the processes of growth, stagnation or recession. At a certain time, a variety of factors influencing the behavior of individual components and intensity of relations between them:

- may have disappeared and in the coming years will no longer play any role,
- may have a tendency to lose significance,
- may keep their current position in geographical space in terms of capacity and developed relationships,
- may increase their importance,
- there may also be new factors appearing, previously unknown, that affect the potential for more dynamic development of certain elements, and the emergence of new relations between them.

As a result of the specific operation of various factors, individual elements of geographical space:

- may reduce their potential and importance in the structure of geographical space,
- may maintain their relevance at the same level,
- may increase their importance and play an increasingly important role<sup>9</sup>.

As a consequence, five types of behavior of the elements in the processes of changes may be delimited, namely: those which have disappeared as well as those disappearing, stagnating, developing and emerging. The relations between them may behave similarly. At this stage of study there are sometimes difficulties in measuring the value of the potential of individual elements as well as in presenting the qualitative features metrically. However, before the target idea of measuring all the qualitative elements is fulfilled, their role in the geographical space through adopting conventional scales of values can be defined.

In the process of changes of geographical space taking place in a specific time interval there also occurs a change in the value of the potential of individual elements and the relations between them. In the analyzed time intervals ( $t_1$ ) and ( $t_2$ ) the potential of a given element of space changes, e.g. in the structure of natural space a change in water conditions ( $X_3$ ) is represented by:

$$X_3^{t2} - X_3^{t1} = \Delta X_3^{t2-t1}$$

---

<sup>9</sup> For example, mineral resources may be subject to exhaustion, or they may be on decline in market demand; in the settlement network towns could lose or regain their city rights, be characterised by stagnation or growth, but also new towns may appear; in the spatial structure of industry companies can be liquidated, may limit their production and seek to liquidate, they can stagnate, exhibit developmental trends but there also may appear new businesses referring to the progress of civilisation, which will take over the function of boosting factors and influence the social and economic growth; the society can also work towards improving their political consciousness, it may not show political interest, or reduce it significantly. Many empirical examples in this area were provided by the research conducted in the former Department of Economic Geography of the former Pedagogical University in Cracow, conducted by the team of Prof. Dr. Maria Dobrowolska (e.g. Dobrowolska, 1962 1978; Rajman, 1969; Ziolo, 1978)

In the structure of the socio-economic space a change in financial resources of businesses and population ( $Y_8$ ), is illustrated by:

$$Y_8^{t2} - Y_8^{t1} = \Delta Y_8^{t2-t1},$$

while inner changes of the relations taking place in the values of financial resources of businesses and population is represented by:

$$[y_{88}^{yt2}] - [y_{88}^{yt1}] = [\Delta y_{88}^{yt2-t1}]$$

The changes which take place in all the relations are presented in Table 3. For instance, the changes in intensity of the relation between the elements of natural space  $[x_{ij}^x]$  are illustrated by:

$$\begin{bmatrix} x_{11}^{xt2}, x_{12}^{xt2}, \dots, x_{17}^{xt2} \\ x_{21}^{xt2}, x_{22}^{xt2}, \dots, x_{27}^{xt2} \\ \dots\dots\dots \\ x_{71}^{xt2}, x_{72}^{xt2}, \dots, x_{77}^{xt2} \end{bmatrix} - \begin{bmatrix} x_{11}^{xt1}, x_{12}^{xt1}, \dots, x_{17}^{xt1} \\ x_{21}^{xt1}, x_{22}^{xt1}, \dots, x_{27}^{xt1} \\ \dots\dots\dots \\ x_{n1}^{xt1}, x_{n2}^{xt1}, \dots, x_{77}^{xt1} \end{bmatrix} = \begin{bmatrix} x_{11}^{xt2-t1}, x_{12}^{xt2-t1}, \dots, x_{17}^{xt2-t1} \\ x_{21}^{xt2-t1}, x_{22}^{xt2-t1}, \dots, x_{27}^{xt2-t1} \\ \dots\dots\dots \\ x_{n1}^{xt2-t1}, x_{n2}^{xt2-t1}, \dots, x_{77}^{xt2-t1} \end{bmatrix} = [x_{ij}^{xt2-t1}]$$

that is:

$$[x_{ij}^{xt2}] - [x_{ij}^{xt1}] = [\Delta x_{ij}^{xt2-t1}] \quad (i = j = 1, 2, \dots, n)$$

A synthetic approach to the change of relations between the elements of geographical space in two time intervals is illustrated by Table 4. For example, changes in relations between elements of the socio-economic space is illustrated by:

$$[\Delta y_{ij}^{yt2-t1}],$$

the changes in the impact of the components of the cultural space on the elements of the natural space (e.g. due to the increased environmental awareness) are represented by:

$$[\Delta z_{ij}^{zt2-t1}],$$

while changes in health impact are represented by:

$$[\Delta x_{ij}^{zt2-t1}]$$



Tab. 4. Changes in relations between elements of geographical space

Elements of geographical space				Geographical space		
				Natural space	Socio-economic space	Cultural space
				$X_1, \dots, X_7$	$Y_1, \dots, Y_8$	$Z_1, \dots, Z_8$
Geographical space	Natural space	Geology	$X_1$	$\Delta X_{ij}^{xt2-t1}$	$\Delta X_{ij}^{yt2-t1}$	$\Delta X_{ij}^{zt2-t1}$
		Climate	$X_2$			
		Water	$X_3$			
		Relief	$X_4$			
		Soils	$X_5$			
		Vegetation	$X_6$			
		Animals	$X_7$			
	Socio-economic space	Structure of farming	$Y_1$	$\Delta Y_{ij}^{xt2-t1}$	$\Delta Y_{ij}^{yt2-t1}$	$\Delta Y_{ij}^{zt2-t1}$
		Structure of industry	$Y_2$			
		Services	$Y_3$			
		Institutions	$Y_4$			
		Transport and communication	$Y_5$			
		Demography	$Y_6$			
		Settlement pattern	$Y_7$			
		Capital resources	$Y_8$			
	Cultural space	Material culture	$Z_1$	$\Delta Z_{ij}^{xt2-t1}$	$\Delta Z_{ij}^{yt2-t1}$	$\Delta Z_{ij}^{zt2-t1}$
		Spiritual culture	$Z_2$			
		Aspirations of the society	$Z_3$			
		Education	$Z_4$			
		Intellectual resources	$Z_5$			
		Social awareness	$Z_6$			
		Political awareness	$Z_7$			
		Cultural awareness	$Z_8$			

Source: own compilation

The outlined relations between individual elements are realised in different areas of geographical space to a different extent. As a result of varying potential and quality of individual structural elements and the relations between them, in the geographic space there are relatively similar spatial configurations (e.g. regions). Due to that, the proposed concept allows to identify the similarities and differences between them, which creates certain conditions for the application of actions to achieve the developmental goals.

### **Concluding remarks**

In the light of these considerations it must be assumed that geographical space is a complex system of natural, socio-economic and cultural components. They show a great qualitative, potential and functional diversity, as well as diversity in terms of active and passive relations occurring between them. The proposed concept allows for:

- identifying new fields of research on functional relations existing between the various elements of geographical space; pointing out the ways to build a synthesis of the results of research conducted by various geographical sciences; and emphasizing the unity of geography as a science;
- systematizing the diagnostic work on the area of natural, socio-economic and cultural relationships, and changes between them in the processes of transformation which are of major significance both as fundamental studies as well as application work for determining the projected trends of change of developmental conditions, setting objectives and directions of change;
- identifying changes in the potential and functions of individual elements and the relations between them, taking place as a result of natural processes and management methods used by humans in the geographical space;
- determining places and changes in the behaviour of a given element in the geographical space, by analysing its potential and the active and passive relations occurring with the individual elements of the natural, socio-economic and cultural space;
- adopting any hierarchical level of a group of elements for analytical works and determining their place in geographical space;
- giving the possibility of a comprehensive examination of research issues with taking into account the analysis of quantitative and qualitative variability and the relations between the delimited structural units.

This approach can also be a way of selecting variables relating to a specific level of generality. It also indicates the necessity of examining the interesting elements (research problems) along with the changing relations occurring within a given space (natural, socio-economic, cultural) as well as changing relations occurring between individual elements of different spaces.

The proposed model seems to be a good research model for the implementation of diagnosis, which should be the foundation for building the strategy of socio-economic

and cultural development, and for the analysis of changes in natural, socio-economic and cultural conditions in regional systems. This is particularly important in transition economies, intensifying processes of European integration and globalisation, and the ever-increasing rate of the development of civilisation, which seek to shape the knowledge economy and balance the spatial developmental processes.

## References

- Bański, J. (2005). *Przestrenny wymiar współczesnych procesów na wsi*. Studia Obszarów Wiejskich. Warszawa: IGiPZ PAN, PTG, 9.
- Bittner, T., Frank, A. (1999). On the design of formal theories of geographic space. *Journal of Geographical Systems*, 1, 3, 237–275.
- Chojnicki, Z. (1991). *Podstawowe problemy metodologiczne rozwoju polskiej geografii*. Poznań: Wydawnictwo Naukowe UAM.
- Chojnicki, Z. (1989). Koncepcja terytorialnego systemu społecznego. *Przegląd Geograficzny*, 60, 3, 491–510.
- Dobrowolska, M. (1962). Czynniki kształtowania się, przeobrażania i rozpadu społeczno-ekonomicznych struktur regionalnych, Księga pamiątkowa ku czci prof. dra Wł. Antoniewicza. Warszawa: Światowid, t. XXIV, 127–158.
- Dobrowolska, M. (1978). Procesy industrializacji i urbanizacji jako czynniki wzrostu i przemian struktury przestrzennej rejonu uprzemysławianego. In: Z. Ziolo (ed.), *Przemiany społeczno-ekonomiczne Tarnobrzeskiego Rejonu Uprzemysławianego*. Warszawa: Polska Akademia Nauk, Komitet Badań Rejonów Uprzemysławianych, PWN, 11–23.
- Domański, R. (1982). *Teoretyczne podstawy geografii ekonomicznej*. Warszawa: PWE.
- Domański, R. (1992). Systemy ekologiczno-ekonomiczne. Modelowanie współzależności rozwoju, *Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN*, XCI.
- Domański, R. (2010). Nowa geografia ekonomiczna według Paula Krugmana. In: T. Kudłacz, J. Wrona (ed.), *Geografia w naukach ekonomiczno-przestrzennych*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, 19–39.
- Falkowski, J. (2009b). *Zagospodarowanie podmiejskiej przestrzeni geograficznej w Polsce*. In: I. Jażewicz (ed.), *Współczesne problemy przemian strukturalnych przestrzeni geograficznej*. Słupsk: Akademia Pomorska, 217–232.
- Gattrel, A.C. (1983). *Distance and space: a geographical perspective*. Oxford: Oxford University Press.
- Gorzelać, G. (1995). *Transformacja systemowa a restrukturyzacja regionalna*. Warszawa: Uniwersytet Warszawski. Katedra UNESCO Trwałego Rozwoju.
- Harvey, D. (1990). Between space and time: Reflections on the geographical imagination. *Annals of the Association of American Geographers*, 80, 3, 418–434.
- Herma, J. (1966). *Dojazdy do pracy w Polsce Południowej*. Kraków: Wydawnictwo Naukowe WSP.
- Jones, M. (2009). Phase space: geography, relational thinking, and beyond. *Progress In Human Geography*, 33, 4, 487–506.
- Korcelli, P., Degórski, M., Drzazga, D., Komornicki, T., Markowski, T., Szlachta, J., Węclawowicz, G., Zaleski, J., Zaucha, J. (2010). Ekspertycki projekt Koncepcji Przestrzennego Zagospodarowania Kraju do 2033. *Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN*, CXXVIII.
- Kudełko, J. (ed.). (2007). *Uwarunkowania rozwoju Rzeszowskiego Obszaru Metropolitalnego w systemie społeczno-gospodarczym i innowacyjnym województwa podkarpackiego*. Prace Komisji Nauk Ekonomicznych, Sekcja Gospodarki Przestrzennej PAN Oddział w Krakowie, vol. 25. Kraków: Wydawnictwo Oddziału PAN.

- Kudłacz, T., Wrona, J. (eds.). (2010). *Geografia w naukach ekonomiczno-przestrzennych*, Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie.
- Kukliński, A. (1995). Europejski kontekst przekształceń polskiej przestrzeni. In: J. Kołodziej-ski (ed.), *Koncepcja polityki przestrzennego zagospodarowania kraju. Polska 2000 plus, hipoteza*, I.
- Kukliński, A. (1997). *Problematyka przestrzeni europejskiej*, Warszawa: Euroreg.
- Lijewski, T. (1967). Dojazdy do pracy w Polsce. *Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN*, XV.
- Lisowski, A. (ed.). (1999). *Geografia na przełomie wieków – jednorodność w różnorodności*. Warszawa: Wydział Geografii i Studiów Regionalnych Uniwersytetu Warszawskiego.
- Lisowski, A. (2003). *Koncepcje przestrzeni w geografii człowieka*. Warszawa: Uniwersytet Warszawski Wydział Geografii i Studiów Regionalnych.
- Liszewski, S., Łoboda, J., Maik, W. (ed.). (2008). *Stan i perspektywy rozwoju geografii w Polsce*. Bydgoszcz: Wydawnictwo Wyższej Szkoły Gospodarki.
- Maik, W., Rembowska, K., Suliborski, A. (ed.). (2005). *Geografia jako nauka o przestrzeni, środowisku i krajobrazie. Podstawowe Idee i koncepcje w geografii*, vol. I. Łódź: Zakład Geografii Społecznej i Turystyki UMK w Toruniu, Zakład Badań Społecznych i Regionalnych Uniwersytetu Łódzkiego w Łodzi, Łódzkie Towarzystwo Naukowe.
- Maik, W., Rembowska, K., Suliborski, A. (ed.). (2006). *Człowiek w badaniach geograficznych, Podstawowe idee i koncepcje w geografii*, vol. II. Bydgoszcz: Instytut Geografii i Gospodarki Przestrzennej WSG w Bydgoszczy, Zakład Geografii Społecznej i Studiów Regionalnych Uniwersytetu Łódzkiego w Łodzi.
- Maik, W., Rembowska, K., Suliborski, A. (ed.). (2007). *Geografia a przemiany współczesnego świata, Podstawowe Idee i koncepcje w geografii*, vol. III. Bydgoszcz: Instytut Geografii i Gospodarki Przestrzennej WSG w Bydgoszczy, Zakład Geografii Społecznej i Studiów Regionalnych Uniwersytetu Łódzkiego w Łodzi.
- Mark, D.M., Frank, A. (1996). Experiential and Formal Models of Geographic Space. *Environment and Planning*, B, 23, 3–24.
- Massey, D. (1999). Space-time, 'science' and the relationship between physical geography and human geography. *Transactions of the Institute of British Geographers*, 24, 261–276.
- Massey, D. (2001). Talking of space-time. *Transactions of the Institute of British Geographers*, 26, 2, 257–262.
- Meentemeyer, V. (1989). Geographical perspectives of space, time, and scale. *Landscape Ecology*, 3, 3–4, 163–173.
- Nunes, J. (1991). Geographic space as a set of concrete geographical entities. In: D.M. Mark, A.U. Fran (ed.), *Cognitive and Linguistic Aspects of Geographic Space*. Dordrecht: Kluwer Academic Publishers, 9–33.
- Parysek, J. (ed.). (2004). *Rozwój regionalny i lokalny w latach 1989–2002*. Poznań: Bogucki Wydawnictwo Naukowe.
- Peuquet, D.J. (1988). Representations of Geographic Space: Toward a Conceptual Synthesis. *Annals of the Association of American Geographers*, 78, 375–394.
- Rajman, J. (1969). *Procesy urbanizacyjne w obrzeżu Górnośląskiego Okręgu Przemysłowego po II wojnie światowej*. Kraków: Wydawnictwo Naukowe WSP.
- Rydz, E. (2006). *Przemiany struktur społeczno-gospodarczych w okresie transformacji systemowej na Pomorzu Środkowym*. Słupsk: Akademia Pomorska.
- Sack, R.D. (1980). *Conceptions of space in social thought: a geographic perspective*. Minneapolis: University of Minnesota Press.
- Węclawowicz, G., Bański, J., Degórski, M., Komornicki, T., Korcelli, P., Śleszyński, P. (2006). *Przestrzenne zagospodarowanie Polski na początku XXI wieku*. Warszawa: PAN IGiPZ, 6.
- Withers, C.J. (2009). Place and the "Spatial Turn". Geography and in History. *Journal of the History of Ideas*, 70, 4, 637–658.

- Ziolo, Z. (ed.). (1978). *Przemiany społeczno-ekonomiczne Tarnobrzieskiego Rejonu Uprzemysłowanego*. Warszawa: PWN.
- Ziolo, Z. (1996). Model funkcjonowania przestrzeni geograficznej i jego znaczenie dla gospodarki przestrzennej. In: U. Wich (ed.), *Gospodarka, przestrzeń, środowisko*. Lublin: Wyd. UMCS.
- Ziolo, Z. (1999). Model funkcjonowania przestrzeni geograficznej jako próba integracji badań geograficznych. In: A. Lisowski (ed.), *Geografia na przełomie wieków – jedność w różnorodności*. Warszawa: Wydział Geografii i Studiów Regionalnych Uniwersytetu Warszawskiego, 122–131.
- Ziolo, Z. (2003). Przestrzeń geograficzna jako miejsce realizacji idei ładu przestrzennego. In: T. Ślęzak, Z. Ziolo (eds.), *Spółeczno-gospodarcze i przyrodnicze aspekty ładu przestrzennego*. Biuletyn Komitetu Przestrzennego Zagospodarowania Kraju PAN, 205, 25–42.
- Ziolo, Z. (2009). Model badań procesu transformacji elementów w przestrzeni geograficznej. In: I. Jażewicz (ed.), *Współczesne problemy przemian strukturalnych przestrzeni geograficznej. Książka dedykowana Profesorowi Eugeniuszowi Rydzowi w 70. rocznicę urodzin*. Słupsk: Akademia Pomorska, 103–117.

**Zbigniew Ziolo**, Prof., Pedagogical University of Cracow, Institute of Geography, Department of Entrepreneurship and Spatial Management. Sc.D., Ph.D. and Professor of Economics. His research interests are: land management, economic geography, socio-economic policy, economics and policy of regional development.

**Contact details:**

e-mail: [ziolo@up.krakow.pl](mailto:ziolo@up.krakow.pl)

adres/address: Uniwersytet Pedagogiczny w Krakowie,

Instytut Geografii, Zakład Przedsiębiorczości i Gospodarki Przestrzennej,

ul. Podchorążych 2, 30-084 Kraków, Polska (Poland)

# Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica V (2014)

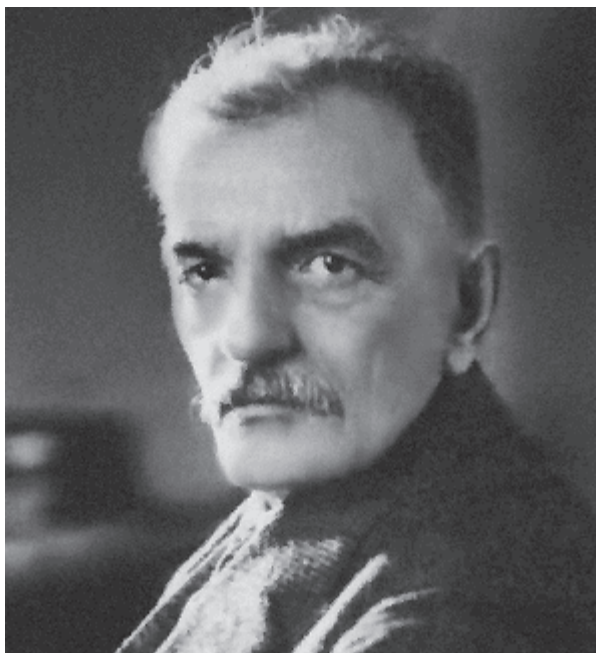
*Witold Wilczyński*

## Human geographical ideas of Eugeniusz Romer

### Abstract

Eugeniusz Romer's contribution to the development of Polish geography has been extensively appreciated. Historians of geography emphasized however his contribution in the field of physical geography and map making. Meanwhile, Romer's human geographical concepts seem to be no less original and valuable. One of the most popular ones is the geopolitical controversy between Romer and Wacław Nałkowski concerning the individual character of Polish lands. This broadly commented dispute has been showed as an example of logomachy. On the other hand, the geopolitical concept of Romer, despite the passage of 60 years since his death, should create the basis for a discussion concerning the international position of Poland.

**Key words:** Eugeniusz Romer; geopolitics; human geography; Poland



Fot. 1. Eugeniusz Romer

Source: own source

Eugeniusz Romer (1871–1954) is believed to be the greatest personage in the entire history of Polish geography. A student of Eugen Oberhummer, Alfred Kirchhoff, Albrecht Penck, and Ferdinand von Richthofen, and professor at the Jan Kazimierz University of Lwów from 1911, and at the Jagiellonian University from 1946. Romer was also the founder of the Cartographical Institute in Lwów and the author of many maps and atlases, which became the prototype for many authors, both Polish and foreign alike. Many of the cartographical conventions used to this day were thought of and developed by Romer and his co-workers. Romer also traveled extensively to the Far East and to the Cordilleras of North America. As a professor he left behind the great volume of works as well as large gathering of students, known as the “Romerides’ generation”. They took responsibility for the development of geography in Poland in the period after World War II.

The literature on Romer and his scientific achievements is quite extensive. The majority of it emphasizes his contribution in the field of cartography and physical geography, especially climatology. He formulated the foundations for climatic geomorphology in 1899, and the morphogenetic model which equaled the famous theories of William M. Davis and Albrecht Penck. Quite less has been written about his work in human geography and, on the other hand his contribution to the methodological debate was ignored. For many years those who were involved in historical research were arguing about Romer’s lack of interest in the philosophy of geography. Instead, they concluded that Romer was strongly engaged in purely empirical and specialistic research. This should be interpreted as a manifestation of the tendency to idealize the scientific approach in the history of geography (Wilczyński 2011, pp. 42–43). A very different set of Romer’s scientific interest is displayed in an almost unknown publication from 1969, under the title *“Historical and Philosophical Discourses on the Subject of Geography”*, compiled and published by August Zierhoffer, one of Romer’s students (Romer, 1969). This work contains basically the lectures of Romer which he was to deliver at the Jan Kazimierz University for the academic year of 1918–1919. The efforts of August Zierhoffer that led to the publication of Romer’s work, however, was neither truly appreciated nor exploited. Historical and philosophical issues such as the problem of the essence of geography, were not very popular at the time among Polish geographers, who were interested mostly in the purely natural and economic topics and in research conducted under the guidance of scientific methodological conventions. In these circumstances, the publication of Romer’s work, which to this day remains quite unknown, must be regarded as an exceptional and unprecedented event.

The opportunity to change this unfavorable situation appeared in connection with preparations for the IGU Regional Conference in Kraków in 2014. The Consortium that is preparing this important event decided to release a special historical publication aimed to promote the Polish classical geography abroad. As intended, this publication was to contain concepts of the main founders of Polish



geography<sup>1</sup>. The above-mentioned work of Romer happened to be one of the most important sources used. It is worth noting that the planned IGU Regional Conference will be the first geographical event of this magnitude in Poland since 1934, when the IGU Congress took place in Warsaw, the main initiator and co-organizer of which was Eugeniusz Romer.

Eugeniusz Romer is a monumental figure in Polish science. Despite the passage of 60 years since his death, his name is still surrounded by an aura of extraordinary nobility and mystery. This nobility comes from his huge achievements, both in academic and in the field of socio-political activity. These achievements gave him great authority among scientific circles in Poland and abroad. In spite of the fact that Romer avoided political involvement he has become a very influential person. As an expert of the Polish delegation at the peace conferences in Paris and Riga, he was primarily responsible for the shape of the borders of the Polish state (born anew after 123 years of partition), after World War I, and after winning the bloody war of 1920 against the Soviet Union<sup>2</sup>.

In turn, the mysterious character of Eugeniusz Romer is probably due to the fact that for many years after his death, his memoirs and diaries were not published, and the studies devoted to his achievements and career explicitly avoided certain topics. Up to this day no publication concerning the characterization and interpretation of Romer's works in the field of human geography appeared, although even if fifty years ago this need was demonstrated<sup>3</sup>. In these circumstances, for researchers who do not comprehend the vast Romer's interests and characteristics of his mentality, his great achievements may seem amazing and difficult to understand. It is because his achievements were not understandable in the light of the works showing Romer as a follower of empirical and mathematical methods only, who avoided philosophical considerations and theoretical discussions<sup>4</sup>. The truth about many events in the life of Romer and about his views on the nature of geography was revealed no earlier than in the mentioned 1969 publication edited by A. Zierhoffer. New light on Romer's personality was shed by the records of Romer's whereabouts and activities at the Paris Peace Conference. This has been released thanks to the efforts of historians in

---

<sup>1</sup> I mean the publication entitled "*A Source Book of the Polish Classical Geography*", edited as the second volume of the "Lelevel Society" Research Group (Wilczyński, 2012).

<sup>2</sup> The report of Romer from the Paris Peace Conference contains *Pamiętnik Paryski (Paris Diary)*, published for the first time in 1989 (second edition: Romer, 2010).

<sup>3</sup> In spite of the fact that geographical institutes or faculties exist at some fourteen Polish universities, we have no one official division dealing with the history and philosophy of geography. An attempt to fill this gap was the establishment of the "Lelevel Society" Research Group in 2009. During the Fourth Special Session of the Group in 2011, the most important ideas of Wacław Nałkowski were discussed and their value was assessed from the point of view of contemporary scientific and philosophical ideas. Nevertheless the volume which has been edited as an effect of the session remains quite unknown (Wilczyński, 2011a).

<sup>4</sup> Such was the way of presentation of Romer's scientific profile during the IGU Commission on the History of Geographical Thought Symposium in Utrecht in 1991. The author of the presentation was J. Babicz.



the late 1980's (Romer, 2010). The true character of Eugeniusz Romer was revealed by his *"Memoirs"* with significant subtitle *"Problems of conscience and faith"*, written in the last years of his life, and published only in 1988 (Romer, 1988). They show a profound spiritual evolution of Romer and are an expression of his inner need to describe the experienced grace of conversion. These *"Memoirs"* later became the basis for the analysis, aimed at the investigation of the factors that determined the radical returning to God in the last dozen years of Romer's life (Misiniec, 1998).

The only human geographical problem derived from the works of Romer, which has been broadly discussed in the literature, is his geopolitical dispute with Wacław Nałkowski. This great founder of Polish geography published the doctrine of the transitional nature of Polish territory in 1887. This publication became the reason of the controversy, which has never been resolved ultimately. Nałkowski believed that the Polish lands are transitional and undefined, mainly due to the physiographic conditions. In a deterministic manner he deduced then, that the transitional nature and indefinableness of Polish lands make a threat to the existence of the state and the nation, or a handicap in its development. He wrote:

Poland is a shallow dike that remained after rinsing the political sandbank which the waves are trying to deepen. The flat shape of the surface does not provide the shelter for small nations and states, the necessary geographical point of support. In this infinite, flat, transition area, the international struggle for existence takes place with great fierceness [...] Nations which are weaker, less persistent are bound to disappear as islands of soft earthy masses under the constant onslaught of waves in the ocean (Nałkowski, 1887: 601–603).

This view, characterized by the strong determinism, was formulated in the most difficult period for Polish culture, and was an expression of defeatism that gripped the minds of a large part of the Polish intelligentsia in the Russian sector of partitioned Poland after the failure of the January National Uprising (1863–64). In the next paragraphs however this determinism was essentially alleviated. Namely Nałkowski ascertained that *"on the plains without natural limits the ethnographic boundaries can be shaped only by way of hard work"* (Nałkowski, 1880: 650). The doctrine of transitional character and the indefinableness of Polish lands has been formulated by Nałkowski again in the last years of his life and published after his untimely death (Nałkowski, 1912). The meaning of the doctrine, however, was significantly revised.

The doctrine of transitional character of Polish lands has been effectively utilized by foreign scholars, especially in Germany. German geographers generally denied the thesis that Poland possessed any traits of geographical individuality. For them, the boundary between Eastern Europe and Western Europe ran across the Polish lands, or they placed Poland in what was referred to as *"transitional"* Europe (germ. *Zwischeneuropa*), which had no defined boundaries and where the features of the East and West overlapped. Moreover in use among those of the German school was the concept of a *"Central Europe"* (*Mittleuropa*), which were to be controlled by Germany, and where there was no place for free-standing units such as Poland.

Transitionality of Polish lands from west to east which was identified as the main feature of the country (*qualité maîtresse*) has been shown as the essence of Polish territory treated as a geographical unit. It should be noted that Nałkowski (probably influenced by discussions with Romer), essentially changed his view of the importance of geographical transitionality. Unless he previously stated that this is a feature which effectively hinders the development of the nation and the state, he then saw the transitionality as the characteristic which does individualize the historical Polish territory.

While agreeing with the thesis of the transitional nature of the Polish lands, Romer understood this concept only in the physiographic sense:

The transitionality of Poland between East and West, I have always considered as a problem analogous to the problem of the eastern steppe flora for which the entire space of Europe [...] may be considered as a land of transition [...] So, also Poland can be called a land of transition (Romer, 1946: 3).

However, he vividly objected to Nałkowski's idea, that the transitionality could be a basis for Poland's geographical individuality. He showed to be unable to imagine that transitionality, or indefinableness, can be the basis for determining the geographical nature of country. According to his logic, indefinableness could not be a source of a definition. On the contrary, he believed that Poland is not a physiographic individuality, but a cultural one, since he believed that the crucial role in shaping the country's geographic character belongs to humans and human activities. While you can say that in terms of climate and flora, Poland includes the eastern and western features in certain proportions and, therefore, is a land of transition, it is no longer transitional in terms of people and their typical way of handling with the land and with other people. And the latter terms are decisive from the point of view of the country's geographical individuality definition. The Commonwealth of Poland is a country belonging entirely to Western civilization, and, since the thirteenth century, it constitutes its easternmost outpost. In examining the socio-cultural phenomena of the pre-war Polish provinces (based on a sample of almost 5000 individuals) Romer demonstrated that the differences between urban and rural areas are much more essential than the differences between individual, western and eastern provinces. Moreover, he showed a lack of incremental differences in intensity of socio-cultural phenomena in the east-west direction. So then, the examination of the Polish people themselves lends no support to the doctrine of "transitional character" of Poland.

The vivid opposition of Romer to the doctrine of transitionality as the basis of geographical individuality means that he was aware of the need that the national territory (state) should be defined in inherently natural terms, and this definition is the task of geography. At present, issues of this kind are recognized as a part of geopolitics. In addition, Romer's opposition to the principle of transitionality was the result of his fears for the future of the Polish Commonwealth, exposed to pressures from foreign cultures. These fears could have their sources in Romer's personal observation of negative manifestations of acculturation processes or of diffusion of

German culture, and especially Russian culture among Polish communities. Scientific justification for such fears emerged with the basics of the science of civilization, formulated by Feliks Koneczny only in the thirties of the last century. Koneczny indicated, inter alia, the negative effects of the mixing of cultures belonging to different civilizations. Here are grounds for finding that Romer contacted Koneczny during the years of World War I, but there is no documentary evidence of cooperation between the two researchers<sup>5</sup>. Topics concerning civilization were undoubtedly very close to Romer, as is clear from his knowledge of the current French geographical literature (publications by P. Vidal de la Blache and his disciples on the geography of civilization). Romer himself is the author of an important, but hardly known in Poland study in the field of civilization geography, which combines theses drawn from the French classical geography, with the achievements of Polish science of civilization by Koneczny (Romer, 1920). According to the results of previous research French geography of civilization and Polish science of civilization developed at the same time independently of each other (Wilczyński, 2011: 120–125 ). Eugeniusz Romer turns out to be so far the only link between the two centers of development of the idea, which was marginalized during the next half-century, and in recent decades has a period of its great development<sup>6</sup>.

In order to formulate the “inherent natural fundamentals” of Polish national territory, which would be better than proposed by Nałkowski principle of transitionality, Romer formulated the alternative doctrine of the bridge, or the platform between two seas. He believed that Polish territories included the area of the Eurasian continent which narrows between the Black and Baltic Seas, forming a sort of bridge between these two bodies of water, and simultaneously a gateway from the West to the East.<sup>7</sup> Romer claimed this to be the main feature of the area under examination, instead of transitionality proposed by Nałkowski. He also pointed out the extremely close physiographic relationship of Polish territories to the land of Europe, emphasizing Poland’s distinctive geographical position in relation with the East. In the frontier zone separating historic Polish lands from Russia Romer proposed a natural boundary line whose positioning was dependent on climatic, hydrographic, and morphological differentiations. This concept seemed to be basically consistent with the intuitive assumptions of the Polish society, for whom (even with no scientific evidence) the natural Polish territories extended from sea to sea, stretching from the Oder to the Dvina-Dnieper frontier zone (Romer, 1917, 1964).

---

<sup>5</sup> Geographical chapter in the study entitled *„Poland and the general culture”* edited by Feliks Koneczny is written by Stanisław Pawłowski and Eugeniusz Romer (Koneczny, 1918).

<sup>6</sup> It does not mean unfortunately that geography restored the importance of civilization as one of its key notions. The civilization concept has become the subject of debate mainly due to the engagement from the side of historians and politologists. The contribution of geographers to this interesting and important discussion remains quite imperceptible.

<sup>7</sup> Geopolitical ideas of Romer are the subject-matter of the extensive study by Furmański (2011).

Since both Nałkowski and Romer emphasize the key role of society in shaping geographical reality, the controversy between these great researchers is limited to whether the expression "transitionality" is correct to designate the individual character of the area. So it is mainly the linguistic problem and, therefore, the Nałkowski – Romer dispute takes on the character of logomachy. It is true since there is no significant controversy between the Piast idea of Poland, the proponent in the light of the literature is Nałkowski, and the Jagiellonian idea, for which in the opinion of many authors opted Romer. This issue is resolved by Eugeniusz Romer, who argued that there was no difference between the two opposing visions of Poland: "For there are only two ideas of Poland possible: the Piast and the Jagiellonian one. Although the Piast Poland constitutes only the original creation, which, after all, entered the Jagiellonian tracks" (Romer, 2010: 186).

The concept of Romer was in the thirties of the last century effectively developed by Jerzy Smoleński (2012). Just as Nałkowski's doctrine, it has its weak points, particularly in the circumstances of the contemporary political division. The crucial area for the bridge concept was Eastern Galicia, linked by rivers to the Black Sea and to the Baltic, that is nowadays almost entirely located within the boundaries of Ukraine. In spite of that the bridge concept may give rise to foreign policy and become a basis for interesting geopolitical programs. It should create the basis for a discourse concerning the international position and role of Poland.

## References

- Furmański, P. (2011). *Indywidualność geograficzna Polski w koncepcjach Eugeniusza Romera (Geographic individuality of Poland in Eugeniusz Romer's concepts)*. Geopolityka.net, Polskie Towarzystwo Geopolityczne.
- Koneczny, F. (1918). *Polska w kulturze powszechnej (Poland and the general culture)*. Kraków: Krakowska Ekspozytura Biura Patronatu dla Spółek Oszczędnościowych i Pożyczek.
- Misiniec, S. (1998). *Dar nawrócenia. Doświadczenie łaski w procesie nawrócenia Eugeniusza Romera (The gift of conversion. The experience of grace in the process of conversion of Eugeniusz Romer)*. Kraków: Wyd. Św. Stanisława BM Archidiecezji Krakowskiej.
- Nałkowski, W. (1887). Polska. Obraz geograficzny Polski historycznej (Poland: geographical effigy of the historical Polish lands). In: B. Chlebowski and W. Walewski (ed.), *Słownik geograficzny Królestwa Polskiego i innych krajów słowiańskich (Geographical Dictionary of the Kingdom of Poland and the other Slavonic Countries)*, vol. VIII. Warszawa: Władysław Walewski.
- Nałkowski, W. (1912). *Terytorjum Polski historycznej jako indywidualność geograficzna (Geographical individuality of the historic Polish territory)*. Warszawa: Towarzystwo Krajoznawcze.
- Romer, E. (1917). *Polska. Ziemia i państwo (Poland. The Land and the State)*. Lwów: Gebethner.
- Romer, E. (1920). *Études de civilisation comparée (Polonais, Ruthènes et Allemands)*. Paris: Henri Barrère.
- Romer, E. (1946). Czy Polska była do r. 1939 „krajem przejściową”? (Was Poland a „transitional country” before 1939?). *Przegląd Geograficzny*, XX, 1–7.
- Romer, E. (1964). Le Caractère et la Vie du Paysage Polonais. In: E. Romer, *Wybór prac (Selection of writings)*, vol. IV. Warszawa: PWN, 255–266.

- Romer, E. (1969), *O geografii. Rozważania historyczne i metodologiczne (Historical and Philosophical Discourses on the Subject of Geography)*. A. Zierhoffer (ed.), *Travaux de la Société des Sciences et des Lettres de Wrocław*, Seria B, No 153.
- Romer, E. (1988). *Pamiętniki. Problemy sumienia i wiary (Memoirs. Problems of conscience and faith)*. Kraków: Wydawnictwo Znak.
- Romer, E. (2010). *Pamiętnik paryski 1918–1919*, cz. I i II (*Paris diary 1918–1919*, part I and II), ed. S. Sierpowski. Wrocław: OW Foka.
- Smoleński, J. (2012). Questions concerning the political geography of Poland. In: W. Wilczyński (ed.). *A Source Book of the Polish Classical Geography*. Kraków: Dehon, 87–99.
- Wilczyński, W. (2011). *Ideowe źródła i tożsamość geografii (Conceptual Sources of Geography and Its Identity)*. Kraków: Wydawnictwo Naukowe UP.
- Wilczyński, W. (2011a). Introduction. In: Concept of Wacław Nałkowski in the light of contemporary science and philosophy. *Annales Universitatis Paedagogicae Cracoviensis, Studia Geographica II*, 3–10.
- Wilczyński, W. (2012). *A Source Book of Polish Classical Geography*. Kraków: Dehon.

**Witold Wilczyński**, Assoc. Prof., Pedagogical University of Cracow Institute of Geography, Department of Entrepreneurship and Spatial Management.

Professor of Geography at the Pedagogical University of Cracow, as well as co-founder and head of the “Lelevel Society” Research Group. The member of the Polish Geographical Society. His main research interests are history and philosophy of geography, regional geography, political geography, and geopolitics. Follower of the classical concept of geography. He has published several monographs and handbooks including: *Concepts of Nature in the History of Geographical Thought*, 1994, 1996 (Polish, English); *Religion, Ideology, and Geographical Thought*, 1998 (co-edited by Ute Wardenga, English); *Autonomy and Unity of Geography: A Methodological Study*, 2003 (Polish); *Conceptual Sources and Identity of Geography*, 2011 (Polish); *Concepts of Wacław Nałkowski in the Light of Contemporary Science and Philosophy*, 2011 (Polish); *A Source Book of the Polish Classical Geography*, 2012 (English).

**Contact details:**

e-mail: witoldwilczynski@yahoo.com

adres/address: Uniwersytet Pedagogiczny w Krakowie,

Instytut Geografii, Zakład Przedsiębiorczości i Gospodarki Przestrzennej,

ul. Podchorążych 2, 30-084 Kraków, Polska (Poland)

# Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica V (2014)

*Agnieszka Kwiatek-Sołtys, Krzysztof Wiedermann*

## **Spatial structure transformations in small towns in view of rehabilitation and gentrification processes**

### **Abstract**

During the time of centrally controlled economy Polish cities were shaped by processes and structures typical of a socialist state. When changes in the economic, social and political system in Poland begun, Polish cities and towns entered a transformation process.

The aim of the paper is to answer the question whether and to what extent spatial transformations of small towns in Poland show symptoms of gentrification. Authors analyse the problems of towns genesis, population changes, changes in the spatial and functional structures of towns as well as the modernization of the central districts of small towns in Małopolska Province. In view of present changes that take place in the structures of small towns in Europe and the widely undertaken actions towards the revitalization of small towns' centres in Poland, the authors attempted to analyse spatial, economic and social transformations in the light of wider processes of gentrification, however at the present stage of development of small towns it is difficult to speak of gentrification processes itself.

**Key words:** gentrification; Małopolska; rehabilitation; revitalization; small towns; spatial and functional development

### **Introduction**

During the time of centrally controlled economy Polish cities were shaped by processes and structures typical of a socialist state, characterized by centralization, which significantly reduced the powers of local governments. This led to a subordination of urban space to ideological priorities. As a rule, urban area was industrialized or filled with residential units that were in line with the egalitarian city concept (Węclawowicz, 2003). When changes in the economic, social and political system in Poland begun, Polish cities entered a restructuring process. Introduction of market economy mechanisms, return of land rent and decentralization changed the methods of organization and management of urban space. The number of entities competing for urban space increased. Another significant factor affecting the transformation of urban space was the land ownership situation of urban areas and buildings (Kwiatek-Sołtys, 2010).

In this study, the authors attempted to answer the question whether and to what extent spatial transformations of small towns in Poland show symptoms of gentrification. Therefore, it seems important to elaborate on the concept of gentrification and on its changing meaning in the literature. Traditionally, gentrification was understood as the process of the middle class and upper class taking over buildings abandoned or inhabited by the working class, gradual rehabilitation of those buildings and the process of degraded or threatened by degradation fragments of inner-city areas being consistently transformed into areas inhabited by the middle and upper class and not showing any symptoms of degradation (Smith, Williams, 1986). The positive effect of gentrification is a significant improvement in the quality of urban space in these areas, while the negative effect, from the point of view of the society, is the significant change in the population structure caused by ousting the households with lower incomes (Jadach-Sepiolo, 2007).

Contemporary processes of gentrification described in the literature referred to the big cities of the world and have not yet been widely discussed in the context of small cities. Some authors have limited the occurrence of gentrification to largest metropolitan cities in post-communist countries such as Prague (Matlovic, Ira, Sykora, Szczyrba, 2001), while noting that this process often occurs in the inner city and less frequently in the historical city core.

Limitations for the development of small towns' gentrification result from the lacking or significantly low incidence of certain functions characteristic of large urban centres. Such functions may include, for example, presence of a university, which promotes processes of gentrification. There is already a separate term for this phenomenon in the literature – studentification (Murzyn-Kupisz, Szmytkowska, 2012). Studentification is a spatial concentration of students (also in dormitories) that affects the cultural landscape of the city. And the concept here is not whether students are “quartered” in one place (e.g. in the city centre), but whether their presence adds color to the city. Therefore, a question arises whether the presence of students in some parts of the city can promote the processes of revitalization. Examples of Hamburg or Dresden show that the presence of students in poorer districts resulted in revival, increased security and more colorful appearance of those districts. On the other hand, there is often a tendency to create university campuses on the outskirts of large cities. At the same time, small towns in the immediate functional range of the metropolis offer more affordable and often better accessible accommodation for students.

In view of present changes that take place in the structures of small towns in Europe and the widely undertaken actions towards the revitalization of small towns' centers in Poland, the authors attempted to analyze spatial, economic and social transformations in the light of a wider processes of gentrification. Urban renewal in cities, including the smallest towns, may in fact result in starting the process of gentrification (Jadach-Sepiolo, 2009), which can have particularly severe social effects in the case of small towns.



## Demographic changes in small towns of Malopolska

The study group of small towns of Malopolska province includes 47 entities (2013). It is a very diverse collection of urban entities, in terms of origins, population size and dynamics, area, and functional and spatial diversity. All these elements have an effect on contemporary changes occurring in urban space.

Among small towns of Malopolska province, the oldest one is Stary Sącz, which received city rights in 1260. Other towns dating back to the thirteenth century include Skała, Kęty, Wojnicz, Nowe Brzesko, Miechów and Zator. A large group of small towns (17 entities) received city rights in the fourteenth century (including Wadowice, Myślenice, Biecz).

In the sixteenth and seventeenth centuries, 6 small towns were founded in this area, the largest of which today is Limanowa. In the eighteenth and nineteenth centuries the network of towns had expanded by 7 new entities (Sucha Beskidzka, Szczucin, Ryglice, Maków Podhalański, Niepołomice, Alwernia, Krynica Zdroj), and yet another one, Krzeszowice, received city rights before the World War II.

The post-war political and economic changes have led to the creation of nine new towns, almost all of them with specialized functions (health resort and recreation: Rabka-Zdrój and Szczawnica, industrial functions: Brzeszcze, Bukowno, Chełmek, Libiąż, Sułkowice and Świątniki Górne).

Not all of the above-mentioned small towns in the province of Malopolska had urban functions continuously. Eight of the investigated towns lost their city rights in the nineteenth century or in 1934 and then regained those rights in the 1980s (Skała in 1986), 1990s (Alwernia in 1993, Nowy Wiśnicz in 1994, Ciężkowice in 1998) or even in twenty-first century (Czchów in 2000, Ryglice in 2001, Zakliczyn in 2006 Wojnicz in 2007, Szczucin and Bobowa in 2009 and Nowe Brzesko in 2011). The results of towns existing without their city rights, often since 1869/1870 or even since the 1930s, include the loss of urban functions, low rate of economic growth after World War II, the weakening role of the centre, etc. On the other hand, the process of restitution of city rights can be interpreted as a sign of increased economic and social activity of town's residents and authorities. As a result of changes associated with the development of industry, location of new industrial plants and construction of new housing estates, the centre of some cities shifted towards those developments. Such a situation can be observed in Alwernia, where the former market square serves only as a historic place today.

The size of the population is another factor influencing the differentiation of social and spatial transformations in cities. On the one hand, small towns have a quite homogeneous structure in this respect, however, the development of a town in size category up to 5,000 residents is different than the development of a town with population close to 20,000. The functional and spatial structure of larger urban entities is generally more diversified, although there are many homogeneous cities in this group in the Malopolska province, in which industry was the only basis of



economic development for many years (e.g. Libiąż). Another important factor is the dynamics of population, which often reflects the current condition of small towns.

In terms of population size, the largest of the investigated cities is Wadowice. Wieliczka exceeded the threshold of 20,000 inhabitants in 2010, thus formally becoming a medium-sized city. The group of the largest small towns of Malopolska province includes Kęty, Myślenice, Libiąż, Brzesko and Limanowa. The smallest urban entities in the region, not exceeding 5,000 inhabitants account for 38.3% of all small towns, with Zakliczyn being the smallest one, with a little more than 1,600 people. The smallest towns are the newly created ones or towns with restored city rights (Rajman, 2000–2001).

It should also be noted that in more than one-third of the cities studied there is a negative population growth, and in another 17% the population size is in stagnation. The process of depopulation occurs in very different entities. Reduction of population is noticeable in towns with various functions, especially in industrial cities like Bukowno, Wolbrom, Libiąż or Brzeszcze, or in the spa resort of Krynica Zdrój. Population decline can also be observed in multifunctional cities such as Wadowice and Kęty. The process of depopulation or stagnation occurs in urban entities with different geographical locations. It applies to both towns with agricultural function located north of Kraków (stagnant Proszowice, Słomniki, Miechów), and to towns with peripheral location (e.g. Wolbrom). This process is even visible in towns under the metropolitan influence of Kraków, e.g. Krzeszowice. Although in the years 2004–2012 the rate of population growth in Krzeszowice was 101.5, since 2008 the town recorded a continuous reduction of population, and only a slight increase in later years, which may, however, be only a statistical change, resulting from the different method of collecting data on permanent and actual place of residence of inhabitants, introduced by the Central Statistical Office. Stagnation and decrease of population in many of these cities can be caused by people moving to neighboring areas located in rural parts of municipalities.

At the other extreme are cities with increasing population. These entities are small towns located within Krakow metropolitan area (Niepołomice, Dobczyce, Świątniki Górne, as well as Wieliczka – not included in this analysis). In this regard, Niepołomice outdistances other towns (its population growth rate in the period 2004–2012 reached the level of 129). Świątniki Górne in the Wieliczka county took the second position in this ranking. It is located only a few kilometers away from Kraków, in the geographically and scenically attractive area of Wieliczka Foothills.

Today, the direct cause of the above mentioned disparities in population dynamics is mainly migration (Kwiatek-Softys, 2011). More than half of the surveyed cities represent depopulation types under Webb typology. Although twenty-one cities in the period 2010–2012 belonged to the development type (A–D), 10 of them are cities representing type A, so despite the negative net migration, the still/ traditionally positive population growth put those towns on a better position (e.g. Bobowa, Kalwaria Zebrzydowska, Czychów, Dąbrowa Tarnowska), as it was the case with depopulating towns of type H located in the southern part of the region (e.g.

Limanowa, Muszyna or Piwniczna). Moreover, it seems that in the case of small towns low net migration does not directly reflect the low attractiveness of the city due to the often favorable conditions for settlements and for building a new home (opportunity to purchase a larger parcel) in an area that is adjacent to the city but still formally rural area. This direction of development is indicated, for example, by changes taking place in Krzeszowice (the attractive Tenczynek).

However, for the entire group of small towns in the province of Malopolska it can be concluded that housing construction in these towns is of no significant extent. In terms of new dwellings completions per 1 thousand inhabitants, the clearly distinct first position is taken by the often mentioned Niepołomice (13 dwellings per 1 thousand inhabitants). Another town with a high rate is Myślenice (10 dwellings per 1 thousand residents in 2007). Locating the new housing on the outskirts of cities, away from the compact city buildings, which can be observed when analysing the distribution of multifamily housing (property developers housing), often exacerbate spatial chaos, increase the cost of both creation of new infrastructure and continued maintenance of the city.

### Processes of modernization and gentrification

Transformations of internal functional and spatial structures in the light of gentrification processes should be considered in the *core-periphery system* (Baldwin, 2001; Borgatti, Everett, 1999; Freeman, 1979). The development of peripheral areas in some small towns also occurs in external areas associated with the development of rural areas adjacent to the small town. This phenomenon, referred to as *urban sprawl* (Brueckner, Fansler, 1983; Brueckner, 2000; Brueckner, 2001) developing spontaneously often aggravates the already existing spatial chaos and leads to excessive straggling of the small town, with undeveloped spaces often located in the central area or in its immediate vicinity. This process often makes peripheral areas more attractive to residents, although they are often areas unequipped for investment, lacking adequate technical and social infrastructure.

On the other hand, many towns are working on making their central districts more attractive (Kwiatek-Sołtys, 2007). Market squares and central areas are being redeveloped (Fig. 1). Studies suggest, however, that at the moment these changes apply only to the physiognomy of cities and do not entail any changes of functional or social nature. In small towns, there are clearly visible manifestations of unsustainable development, which, at the spatial level, include uncontrolled urbanization, architectural disorder, low construction standards, consolidation of unfavourable land ownership structure, lagging infrastructure for urban development, etc. (Markowski, 2009) as well as "unsuitable flexibility of management principles in central area in view of the need to introduce new, highly variable functions and the lack of adequate instruments to encourage efficient use of areas of the central zone" (Markowski, 2009). As noted by professor Markowski, unsustainable urban development is also reflected in the social sphere by depopulation of central areas of

cities, land speculation and inefficient land use in central zones, deficiencies in social infrastructure of urbanized areas.

Present activities of local authorities often result in an intensification of this process. Numerous investments in urban public space and infrastructure, investments for organization of residents' leisure take place in areas external to the city centers. Redevelopment of down town areas, often carried out simultaneously, causes limitations for the development of central functions in these areas. It is also the result of limiting the vehicular traffic in city centers and transferring it to ring roads bypassing down town. This process is often accompanied by moving of sales and service activities to areas with better transport accessibility. Transformation processes observed in the centres of small towns are further accelerated and strengthened by locating small shopping malls and large stores on the outskirts of towns. This is another factor limiting the attractiveness of the centre of the small town, whose "life", every day contacts and meetings of its residents were historically dependent on trade in the market square (Polko, 2013).

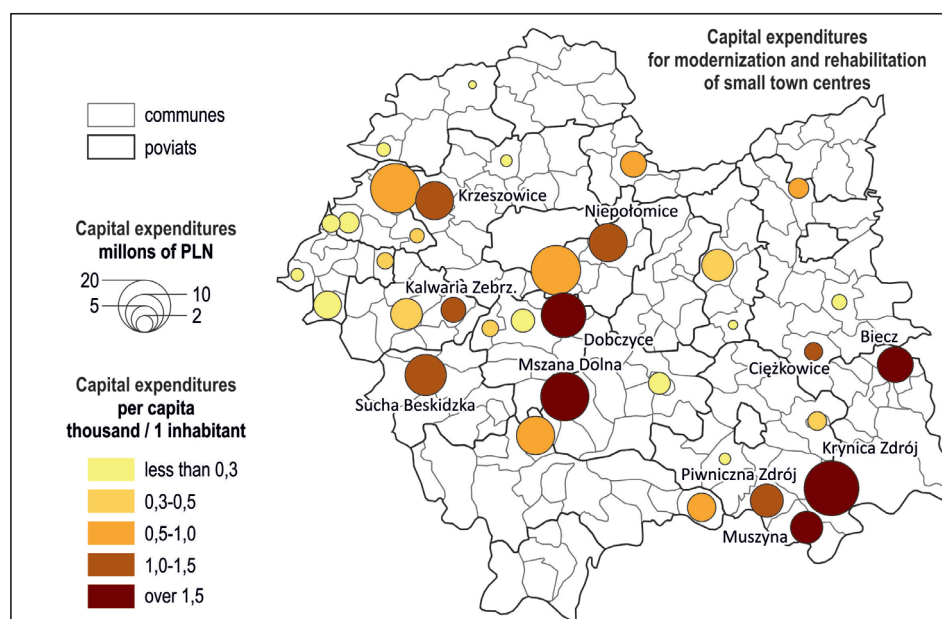


Fig. 1. Capital expenditures for modernization and rehabilitation of small town centers in Malopolska province in the years 2004–2012

Source: own study

Therefore, projects of modernization and renovation of market squares or central areas that are currently implemented in small towns cannot really be called a revitalization process, despite the fact that individual subsidized projects usually operate under this name. There are of course positive examples of full revitalization

process, where, after modernization of the area, a number of recurring artistic performances and cultural programs were introduced to attract residents and sometimes even visitors to the area (Fig. 2).



Fig. 2. Modernization and rehabilitation of Krzeszowice market square

Source: photo by A. Kwiatek-Sołtys

Nevertheless, there is a long way from the fully implemented process of revitalization to gentrification of an area. This process is particularly difficult in small towns where the more affluent population usually lives in residential neighborhoods that are often located not far from the centre of the town. From the point of view of those residents, multi-family tenement buildings located in the centre do not seem to be attractive for residential purposes. It is hard to expect an exchange of population even after a thorough revitalization of the area. It should be expected that, even in the long term, processes of gentrification occurring in small towns in the province of Malopolska will be at most isolated cases and limited to less affluent population moving out from individual buildings located in the centre. But even in these cases it will be rather related to the location of new central functions (hotels, restaurants and offices) but not residential functions. Such situation has already taken place in Niepołomice (Fig. 3), where after the resettlement of people from the Royal Castle located in the centre and after the renovation of the castle, it was turned into a hotel, offices and showrooms of a museum.



Fig. 3. Modernization and rehabilitation of Niepołomice castle as an example of gentrification processes

Source: photo by A. Kwiatek-Softys

For Malopolska region, it should also be noted that some small towns have not yet begun to implement revitalization programs, thus not all entities are illustrated in Figure 1. This map shows investment expenditures made before the end of 2012. In some towns such as Zakliczyn investments in revitalization of the centre begun only in 2013. Other towns have planned to implement such investments in the near future. There are also cities (Maków Podhalański or Jordanów) with ready concepts and revitalization projects but they postpone their implementation until the construction of bypasses for the main roads running through market squares. In these cases it is not possible to speak of potential gentrification at this stage.

## Conclusions

The analysis of the processes of modernization and revitalization taking place in small towns in the province of Malopolska presented in this article allowed the authors to formulate the following conclusions regarding potential processes of gentrification.

At the present stage of development of small towns it is difficult to speak of gentrification processes. Many investments made by local governments cause the historic central areas to loose their urban functions. New investments in urban centers usually improve aesthetic qualities of the area, but this is usually not sufficient for the location of new functions.

Housing emerging in areas peripheral to the town centre attract more entrepreneurial and mobile population, however, this population often seeks employment in larger cities. Residential substance of central areas often forms municipal housing resources that are inhabited by less affluent parts of the local community, and older, settled residents of small towns.



## References

- Baldwin, R.E., (2001). Core-periphery model with forward-looking expectations. *Regional Science and Urban Economics*, 31, 1, 21–49.
- Borgatti, S.P., Everett, M.G. (1999). Models of core/periphery structures. *Social Networks*, 21, 375–395.
- Brueckner, J.K., Fansler, D. (1983). The Economics of Urban Sprawl: Theory and Evidence on the Spatial Sizes of Cities. *Review of Economics and Statistics*, 55 (August), 479–482.
- Brueckner, J.K. (2001). Urban Sprawl: Lessons from Urban Economics. *Brookings-Wharton Papers on Urban Affairs*, 65–97.
- Brueckner, J.K. (2000). Urban Sprawl: Diagnosis and Remedies. *International Regional Science Review*, 23 (April), 160–171.
- Freeman, L.C. (1979). Centrality in social networks: I. Conceptual clarification. *Social Networks*, 1, 215–239.
- Jadach-Sepiolo, A. (2007). Gentryfikacja miast. Problemy rozwoju miast. *Kwartalnik Naukowy Instytutu Rozwoju Miast*, 3.
- Jadach-Sepiolo, A. (2009). Gentryfikacja w kontekście rewitalizacji. In: A. Zborowski (ed.), *Demograficzne i społeczne uwarunkowania rewitalizacji miast w Polsce*. Kraków: Instytut Rozwoju Miast, 125–135.
- Kwiaterek-Sołtys, A. (2007). Place and role of the centre in the spatial structure of a small town in Poland. *Moravian Geographical Reports*, 15(4), 31–36.
- Kwiaterek-Sołtys, A. (2010). The land ownership and land use structure of small towns in Poland. In: *Developpement durable des territoires: de la mobilisation des acteurs aux demarches participatives*. Sixieme colloque franco-polonais, Presses Universitaires Blaise Pascal, Clermont – Ferrand.
- Kwiaterek-Sołtys, A. (2011). Barriers and factors of growth of small towns of Poland. *Elsevier, Procedia*, 19, 363–370.
- Markowski, T. (2009). Polityka miejska państwa cele, priorytety, instrumenty. *Przegląd urbanistyczny year 1*, 1
- Matlovic, R., Ira W., Sykora L., Szczyrba, Z. (2001). Procesy transformacyjne struktury przestrzennej miast postkomunistycznych (na przykładzie Pragi, Bratysławy, Ołomuńca oraz Presova). In: I. Jażdżewska (ed.), *Miasto postsocjalistyczne – organizacja przestrzeni miejskiej i jej przemiany*. Łódź: University of Lodz.
- Murzyn-Kupisz, M., Szmytkowska M. (2012). *Procesy studentyfikacji w przestrzeni polskich miast: na przykładzie Krakowa i Trójmiasta. Konwersatorium Wiedzy o Mieście*. Łódź: University of Lodz.
- Polko, A. (2013). Impact of shopping malls on the functional and spatial structure of communes in the outer metropolitan zone. In: K. Heffner, M. Twardzik (eds.), *The impact of shopping malls on the outer metropolitan zones (the example of the Silesian voivodeship)*. Warszawa: Studia Regionalia, 37, Polish Academy of Science.
- Rajman J. (2000–2001). Sieć osadnicza województwa małopolskiego w okresie transformacji społeczno-gospodarczej. *Folia Geographica Ser. Geographica Oeconomica*, 31–32, 61–79
- Smith, N., Williams, P., (eds.). (1986). *Gentrification of the city*. Boston: Bo Allen and Unwin.
- Węclawowicz, G. (2003). *Geografia społeczna miast*. Warszawa: Wydawnictwo Naukowe PWN.

**Agnieszka Kwiatek-Softys**, Ph.D., Pedagogical University of Cracow, Institute of Geography, Department of Socio-Economic Geography.

The member of the Polish Geographical Society, graduated with a Master's and Ph.D. in Geography. Since 1993 working at the Institute of Geography of the Pedagogical University of Cracow, lecturing on the geography of settlement, urban geography and urban tourism. Author of the book 'Small Towns of Malopolska Province in Transition'. Author's research interests concentrate on issues related to the functioning of small towns, the place and role of small towns in the urban settlement system, the demography changes and the quality of life of small towns as well as the development issues of small district towns and also spa towns. The very recent works deal with the problem of land use and the ownership structure of land in small towns.

**Krzysztof Wiedermann**, Ph.D., Pedagogical University of Cracow, Institute of Geography, Department of Socio-Economic Geography.

The member of the Polish Geographical Society. Associate professor in the Department of Socio-Economic Geography at the Pedagogical University in Krakow since 2007. His research interests are focused on the issues of local and regional development, urban and regional economics, urban restructuring and industrial districts with particular emphasis on relocation of industry and services, foreign direct investment and instruments in support of economic development – the special economic zones, industrial parks.

**Contact details:**

**Agnieszka Kwiatek-Softys:**

e-mail: [akwiatek@up.krakow.pl](mailto:akwiatek@up.krakow.pl),

adres/address: Uniwersytet Pedagogiczny w Krakowie,

Instytut Geografii Zakład Geografii Społeczno-Ekonomicznej,

ul. Podchorążych 2, 30-084 Kraków, Polska (Poland)

**Krzysztof Wiedermann:**

e-mail: [kwiederm@up.krakow.pl](mailto:kwiederm@up.krakow.pl)

adres/address: Uniwersytet Pedagogiczny w Krakowie,

Instytut Geografii, Zakład Geografii Społeczno-Ekonomicznej,

ul. Podchorążych 2, 30-084 Kraków, Polska (Poland)

# Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica V (2014)

Piotr Raźniak, Anna Winiarczyk-Raźniak

## Housing conditions in selected metropolitan areas in Poland

### Abstract

Housing conditions are considered an element reflecting the living standard of the population. In addition, it is also an important index illustrating advancement of suburbanisation processes. The article presents diversification of housing conditions in two selected metropolitan areas: Warsaw, Kraków and Potential Rzeszów Metropolitan Area. Two indexes are analysed in the paper: the number of persons per apartment and the average floor space of apartments, in two time periods: 1995 and 2010. On the basis of the indexes, a typology of municipalities within the metropolitan areas was created with the housing conditions criterion. At the next stage, fluctuations in the population and in the number of apartments in the area were analysed as the element explaining the above-presented transformations.

**Key words:** housing; quality of life; metropolitan area; suburbanization

### Introduction

The concept of housing conditions comprises a whole array of issues describing apartments, buildings and their surroundings. In the literature on the field, they are referred to as the residential environment (Suliborski, 1976). Housing conditions are an important index defining one of important dimensions in population's standard of living (Zborowski, 2005). It can be measured with various indexes. These could be: a typology of apartments (their floor space, number of rooms, and type of title), available technical infrastructure (including water, sewage and gas systems, the Internet) and various types of material goods (see: Płaziak, 2004a, 2004b). Indexes for housing conditions are considered the most measurable of all the indexes which may be used to describe spatial differentiation of the standard of living. This is particularly important when identifying differentiation in the standard of living in the city space, also for its specific zones (Kaltenberg-Kwiatkowska, 1982). Suburbanisation processes are reflected through differentiation of housing conditions. It is a decentralised process manifesting itself in redistribution of inhabitants, firms and institutions, etc. (Zborowski, Raźniak, 2013; Pytel, Sitek, 2006). By improving its material status, the middle class demonstrates a growing desire to own a house, which is often coupled with housing and environmental



issues in big cities (Kok, Kovacs, 1999; *Murator*, 2004). This results in settlement and social transformations of suburban areas, creating ever-widening circles around the central city (Raźniak, 2007, 2013; Kilar, 2009; Warych-Juras, Gałka, 2011; Gałka, Warych-Juras, 2011; Raźniak, Brzoso-Sermak, 2014).

The exact number of Polish metropolitan areas has not been agreed on yet. Typically, authors mention Warsaw, Kraków, Wrocław, Poznań and the TriCity (Gdańsk, Gdynia, Sopot) Metropolitan Areas (Tab. 1.), while some papers also mention Katowice (Upper Silesian) and Łódź Metropolitan Area (Zuzańska-Żyśko, 2012, Zuzańska-Żyśko, Szajnowska-Wysocka, 2013). In turn, the broadest delimitation was presented by the Union of Polish Metropolises (The Union of Polish Metropolises, 2008), defining as many as 12 such territorial units; however, their

Tab. 1. Polish metropolitan areas in terms of different sources:

City/Author	Unia Metropolii Polskich (2008)	Jałowiecki (2006)	Parysek (2003)	Illicki (2003)	Gorzelać, Jałowiecki Smętkowski (2009)	Węclawowicz i in. (2006)	Zborowski (2005)	Markowski, Marszał (red.), (2006)	METREX (2000)	ESPON (2002–2006)	Beaverstock, Smith, Taylor (1999)	Taylor, Catalano, Walker (2002)	Taylor, Aranyahttp://www.lboro.ac.uk/gawc/rb/rb192.html - ft00#ft00(2008)	Taylor i in. (2010)	Derudder i in. (2010)
Warszawa	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Kraków	M	M	M	M	M	M	M	M	M	M				<i>m<sup>p</sup></i>	
Łódź	M	M			<b>M</b>	<b>M</b>	<i>m<sup>p</sup></i>	<b>M</b>		M					
Wrocław	M	M	M	M	M	M	M	M	M	M					
Poznań	M	M	M	M	M	M	M	M	M	M					
Trójmiasto	M	M	M	M	M	M	M	M	M	M					
Szczecin	M					<b>M</b>	<i>m<sup>p</sup></i>	<i>m<sup>p</sup></i>	<b>M</b>	<b>M</b>					
Bydgoszcz/Toruń	M					<i>m<sup>p</sup></i>		<i>m<sup>p</sup></i>							
Lublin	M					<i>m<sup>p</sup></i>	<i>m<sup>p</sup></i>	<i>m<sup>p</sup></i>							
Katowice	M				<b>M</b>	<b>M</b>	<i>m<sup>p</sup></i>	<b>M</b>	<b>M</b>	<b>M</b>					
Białystok	M					<i>m<sup>p</sup></i>	<i>m<sup>p</sup></i>	<i>m<sup>p</sup></i>							
Rzeszów	M							<i>m<sup>p</sup></i>							

M – metropolitan area, *m<sup>p</sup>* – potential metropolitan area

Source: Raźniak, Winiarczyk-Raźniak, 2013

delimitation was not based on any functional indexes and, for this reason, it can be hardly considered trustworthy. Only Warsaw is mentioned as a city with strong international connections (Taylor, Aranya, 2008, Derudder et. al., 2010), while one may see an increasing importance of Kraków as a centre with foreign relations growing over the past few years. For the purpose of this paper, the most important city in Poland, Warsaw has been selected, together with Kraków, which is a city mentioned in many Polish studies, and Rzeszów, which does not have too many metropolitan functions (Tab. 1).

The aim of this paper is to analyse housing conditions in selected metropolitan areas, with indication of the differences reflecting the advancement of suburbanisation processes.

### Differentiation of housing conditions in selected metropolitan areas

In this study, spatial differentiation of population density per apartment was analysed. To this end, the number of persons per apartment index was used. Spatial differentiation of the index in the selected metropolitan areas, per municipality, for 1995 and 2010, was analysed. A high value of the analysed index indicates unfavourable housing conditions in a metropolis. More people living together in an apartment are an indication of a lower standard of living. It also has an impact on the perceived quality of life in this aspect and influences its other aspects (Winiarczyk-Raźniak, 2004a, 2004b, 2008). The mean value of the index calculated for the analysed metropolitan areas for 1995 and 2010 shows that both in the initial and final research period, Warsaw Metropolitan Area had the most favourable conditions in this respect. It applies both to the averaged values for the whole metropolitan area (2.9 in 1995 and 2.3 in 2010, respectively) and when broken down into the central city and the metropolitan area (Tab. 2).

Tab. 2. Average values of indicators in metropolitan areas

	Number of persons per apartment		Average apartment size (m <sup>2</sup> )	
	1995	2010	1995	2010
Warsaw MA in total	2,9	2,3	52,6	66,4
city of Warsaw	2,7	2,1	48,7	58,0
MA	3,4	2,8	60,0	81,6
Kraków MA in total	3,4	2,7	59,1	70,4
city of Kraków	3,1	2,3	52,0	56,8
MA	3,9	3,3	69,7	91,2
Rzeszów MA in total	3,8	3,3	66,4	79,8
city of Rzeszów	3,3	2,8	55,6	65,7
MA	4,0	3,7	71,5	87,6

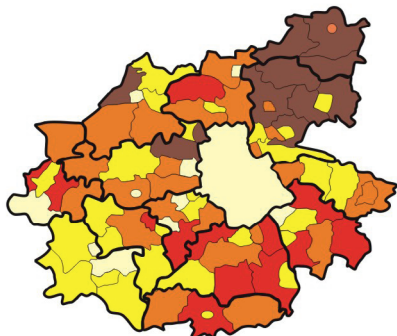
Source: own compilation based on GUS data

In consequence, Warsaw reported the fewest persons per apartment – 2.1 in 2010. A slightly higher mean value was reported for Kraków Metropolitan Area (on average, the value reached 3.4 and 2.7 person/apartment for the entire metropolitan region in the analysed years) and, also in this case, the central city ranked considerably lower than its surrounding area. In this respect, the Potential Rzeszów Metropolitan Area had the most difficult conditions with 3.8 people per apartment in 1995 and 3.3 people per apartment in 2010. As in case of the above-discussed areas, also in this area one can see a difference between the central city and the metropolitan area (or a potential metropolitan area, as in this case). In all three cases, there was a drop of the mean values of the discussed ratio reported in 2010. It indicates an improvement in the living standard in this respect in most municipalities in the discussed metropolitan areas. The biggest differences in terms of mean values of the number of persons per apartment in the years discussed in the paper were reported in Kraków Metropolitan Area while the Potential Rzeszów Metropolitan Area showed the lowest improvement of all three areas.

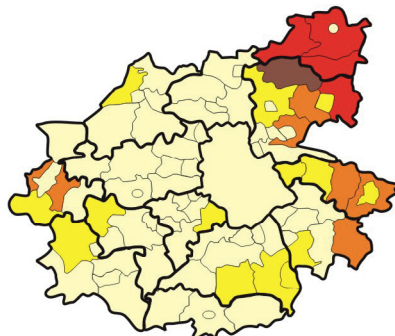
In addition, one may see a spatial regularity, indicating the areas characterised by a relatively most difficult housing conditions as reflected by the analysed index. Both in 1995 and 2010, the highest indexes were reported in north-eastern Warsaw Metropolitan Area (Wyszaków and Wołomin County; Fig. 1). As in the case of Kraków Metropolitan Area, a drop in the analysed index was reported. In 1995, a relatively high average number of persons per apartment was recorded for municipalities located predominantly in the southern part of the metropolitan area. 15 years later, the situation improved considerably – the highest values were reported solely for municipalities in the southern outskirts of Kraków Metropolitan Area (Tokarnia, Pącim and Lubień). However, the highest mean values of the indexes were reported for the Potential Rzeszów Metropolitan Area, although, also in this case, a drop from 4.0 to 3.7 person/apartment was reported. In 1995, nearly all municipalities forming the Area were classified to the range with the highest value of the index. In the second analysed period, the condition improved in the majority of municipalities; however, a drop in the index was not particularly significant. Generally speaking, from 1995 to 2010, nearly all municipalities in the metropolitan areas covered by the analysis reported a decrease in the persons per apartment index. A minimum increase was reported in two municipalities forming a part of Warsaw Metropolitan Area while only one municipality of the Potential Rzeszów Metropolitan Area showed stagnation in this respect.

Floor space of apartments is an important criterion to define a standard of an apartment, which is directly related to the standard of living (Winiarczyk-Raźniak, 2008; Zborowski, 2005). Its importance comes from potentially negative consequences for a family and its functioning, a development of an individual and may affect the entire society (Jałowiecki, Szczepański, 2002). This study analysed spatial differentiation of the average size of apartments in municipalities of the three metropolitan areas. The index was the best in the Potential Rzeszów Metropolitan Area both in 1995 and 2010 (66.4 and 79.6 m<sup>2</sup>, respectively, Tab. 2)

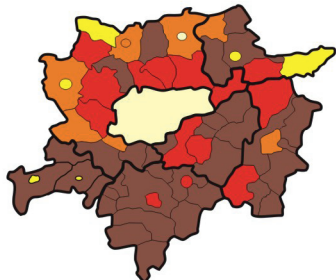
Warsaw MA, 1995



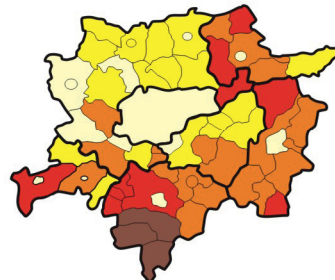
Warsaw MA, 2010



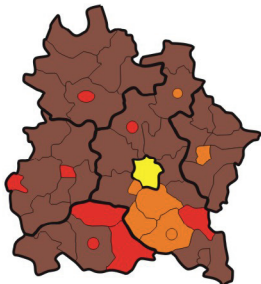
Krakow MA, 1995



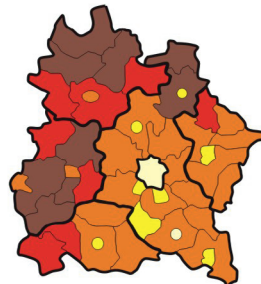
Krakow MA, 2010



Potential Rzeszów MA, 1995



Potential Rzeszów MA, 2010



0 10 20 km

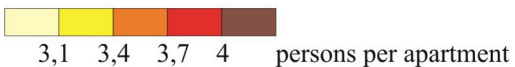
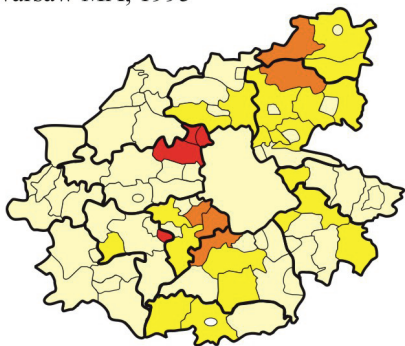


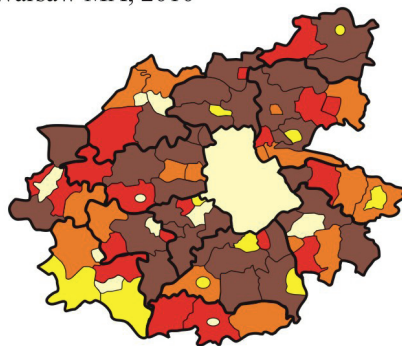
Fig. 1. Number of people in one apartment in selected metropolitan areas in Poland in 1995 and 2010

Source: own compilation based on GUS data

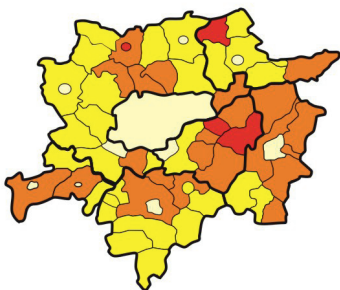
Warsaw MA, 1995



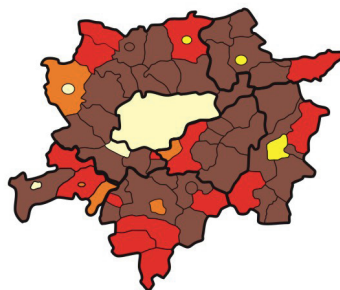
Warsaw MA, 2010



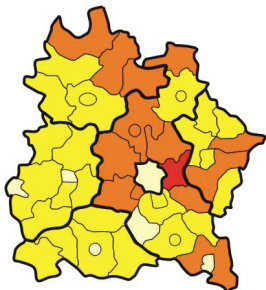
Krakow MA, 1995



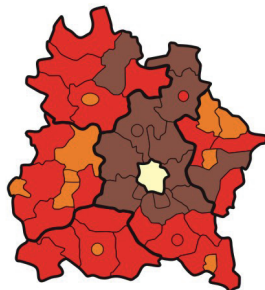
Krakow MA, 2010



Potential Rzeszów MA, 1995



Potential Rzeszów MA, 2010



0 10 20 km

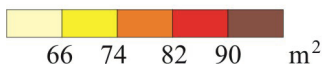


Fig. 2. The average size of an apartment in selected metropolitan areas in Poland in 1995 and 2010

Source: own compilation based on GUS data

in terms of its value averaged for the entire areas. Still, it may have been affected by large administrative inclusions into the central city, resulting from an increase in the number of detached/single family housing, which improved the means analysed in the study. Warsaw Metropolitan Area proved the least favourable for living when measured with the index. In the analysed period, apartments with the smallest floor space were characteristic for central cities and for Warsaw in particular (as small as 49 m<sup>2</sup> in 1995 and 58 m<sup>2</sup> in 2010). As regards the mean value of the index for the entire metropolitan areas, the highest growth in the floor space of apartments was reported for Warsaw Metropolitan Area and the lowest one for Kraków Metropolitan Area; however, when broken down into values for central cities and other areas, the highest growth was characteristic for the areas in the zones surrounding the main cities (a growth in excess of 21 m<sup>2</sup>).

In the spatial distribution of the index for Warsaw Metropolitan Area some specific features are visible, which show differences between the two analysed periods (Fig. 2). In 1995, among relatively low mean values of the index, a group of municipalities showing slightly better conditions in this respect could be found. These municipalities form corridors of radial lines from the main roads leading from the central city to the outskirts of the metropolitan area. In turn, in 2010, the highest value of the index was reported in municipalities surrounding the central city. They formed clusters of municipalities directly neighbouring Warsaw (with small exceptions) and subsequent rings, partially related to corridors formed in the previous research period. Similar spatial dependencies were also observed in Kraków Metropolitan Area. In Kraków Metropolitan Area, both in 1995, which saw the radial lines of corridors formed by municipalities demonstrating higher values of the index, and in 2010, one could see clusters of municipalities indicating the most favourable housing conditions in the discussed aspect. However, in this case, the clusters form a more compact area, which is more uniform in terms of the value of the index. Towns neighbouring on Kraków form an exception here, as the mean floor space of apartments both in 1995 and 2010 was lower than in other municipalities of the area.

### **Types of municipalities in analysed metropolitan areas**

At the next stage of the research, typology of municipalities was created in terms of their housing conditions (based on the above-analysed indexes). To this end, four types of municipalities were selected by their indexes both for 1995 and 2010. The most negative type of municipality is type 1, attributed to municipalities having small floor space of apartments (<75 m<sup>2</sup>) combined with a high number of persons living in these apartments (>3.5 person/apartment). Next come types fitting between these two extreme categories: type 2 – small floor space of apartments (<75 m<sup>2</sup>) with a small number of persons living in an apartment (<3.5 person) and type 3 – large floor space of apartments (>75 m<sup>2</sup>) and many persons living in an



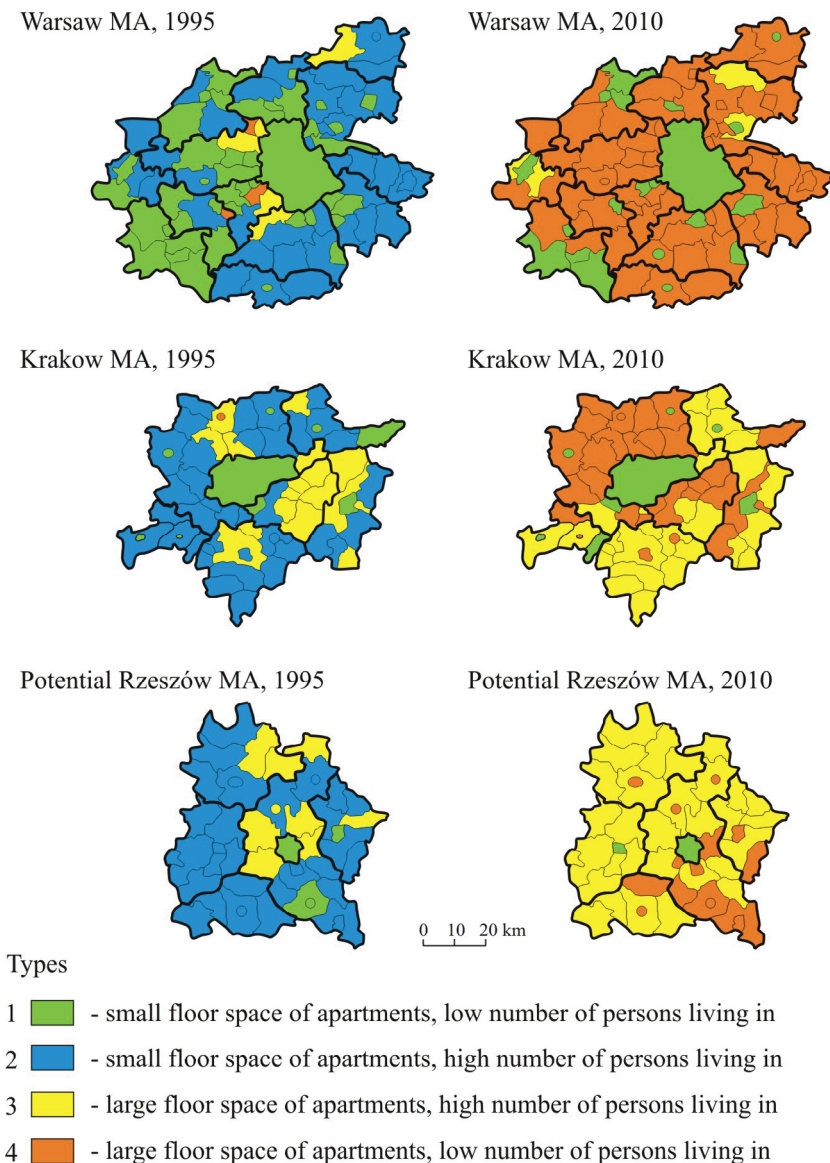


Fig. 3. Types of municipalities in selected metropolitan areas in Poland in 1995 and 2010

Source: own compilation based on GUS data

apartment ( $>3.5$  person). Type 4 is the most positive one, with apartments having the largest floor space ( $>75 \text{ m}^2$ ) and the fewest number of inhabitants ( $<3.5$  person). Spatial distribution of the above-mentioned types of housing conditions is presented in Fig. 3. In case of all three analysed metropolitan areas, differences between 1995 and 2010 can be observed. The first analysed period shows prevalence of type 2, which is the least favourable from the point of view of the standard of living.

Dominance of this type of municipalities was reported in all discussed metropolitan areas. Another characteristic feature is that type 1 – small floor space combined with high number of inhabitants – occurs in central cities. In 1995, the type could be found in some municipal communes typically located in Warsaw and Kraków Metropolitan Area as well as in some other municipalities in Warsaw Metropolitan Area. In this period, the most favourable type was represented in three municipalities only, all of them in the vicinity of Warsaw (Pruszków, Łomianki and Podkowa Leśna) and in a municipal commune which formed a part of Kraków Metropolitan Area, i.e. Skała (a rather unusual town with dominant rural type of development).

Things were very different in 2001 both in terms of the dominant types of housing conditions and in terms of differences among the 3 analysed metropolitan areas. Both central cities and the majority of municipal communes in the discussed metropolitan areas remained classified to type 2 i.e. unchanged since 1995 (characterised by a small floor space of apartments and relatively few inhabitants). Such condition is characteristic for cities in general, as non-availability of free space and high construction costs consequent upon expensive building plots, limit floor spaces of residential buildings and apartments in multi-family buildings. In addition, urban lifestyle characteristic for city communities reduces the number of persons in a household, with typically one or two generations living together (and, even in such case, there would be typically not more than one or two children). As a result of the above, city apartments have very few inhabitants. As for other municipalities, in general, types 3 and 4 clearly prevail but for different reasons in each metropolitan area. In case of Warsaw Metropolitan Area, only three municipalities have been classified to type 3, with relatively spacious apartments having relatively many inhabitants. These are municipalities which advanced from the type 1, so one could say that the housing conditions have improved to a relatively numerous households thanks to larger floor space of their apartments. However, type 4, which is the most positive type, is the most frequently reported in this area. The above indicates that the majority of municipalities in this area have a relatively large size of apartments which do not have excessive number of inhabitants. This is a characteristic feature of areas undergoing suburbanisation processes. Thanks to their increasing income, inhabitants of big cities move to suburban areas which offer apartments having larger floor space. Furthermore, households in these apartments continue to have few members only, as migrations to suburban areas comes with a partial transfer of consumer preferences and behaviour patterns (Szymańska, 2011, 2012) correlated with these preferences as well as a lifestyle which, in this aspect, is connected with families having only a few members. This could be a suburbanisation process (in the analysed housing dimension) occurring in the majority of municipalities in the discussed metropolitan area, located not only in the direct vicinity of the central city but also at a larger distance from the city.

In turn, Kraków Metropolitan Area municipalities clearly divide into two parts: the north-western part, together with municipalities directly neighbouring on Kraków, and the remaining area. The first group of municipalities are areas



experiencing intensive suburbanisation processes, obviously with type 4 prevailing. Over the period discussed in this paper, the area advanced from the type 1, having apartments with smaller floor space but more household members (more likely belonging to several generations, more children). The majority of other municipalities was classified to the type 3, with relatively large apartments used by households having relatively many members (with the traditional family model preserved in this case). In terms of housing conditions, the Potential Rzeszów Metropolitan Area had different characteristics in 2010. Analysing the housing conditions in the area, one may say that the Area does not experience any advanced suburbanisation processes. The vast majority of the area, including municipalities directly neighbouring on the central city, has been classified to type 3, which indicates that families with more members of their household remain a characteristic feature of the area. However, an improvement in the living standard i. e. the average floor space of apartments was reported. In the majority of rural municipalities, a shift from type 1 to type 3 was observed, which indicates an increase in the average floor space of apartments and continued higher number of family members in a household. In the southern part of the area, there are municipalities classified to type 4 in 2010; however, not as a result of suburbanisation. Characteristically, cities in this potential metropolitan area have also been classified to the best type (except for Rzeszów and Dębica), in contrast to the two areas discussed above.

### **Changes in the number of apartments and population, 1995–2010**

To explain the phenomena, cartograms presenting the growth in the number of apartments and population between 1995–2010 were used. In the analysed period, the majority of municipalities in Warsaw Metropolitan Area (including the central city) reported a growth in the number of apartments. A particularly high growth was reported for municipalities surrounding the central city, going down when moving towards the borders of the area (Fig. 4). In addition, a population growth was reported in the analysed area; however, not as distinctive as in the case of the growth in the number of apartments. The highest values, resulting from growing population, were shown for municipalities in the direct vicinity of Warsaw, in particular in the south-western part of the area. This area stretches towards the city of Łódź, so these could be processes leading to the merge of the two metropolitan areas: Warsaw and Łódź MA. In addition, Warsaw Metropolitan Area had some municipalities with decreasing population in the analysed period. However, these municipalities were located on the outskirts of the analysed area.

Similar trends related to changes in the number of apartments emerged also in Kraków Metropolitan Area, but at a slightly smaller scale. In addition, there is a phenomenon of deteriorating number of apartments reported for two municipalities in north-eastern part of the area. In Kraków Metropolitan Area, one can see a compact group of municipalities experiencing a decrease of their population from 1995 to 2010. These are municipalities in Proszowice County, which is, in

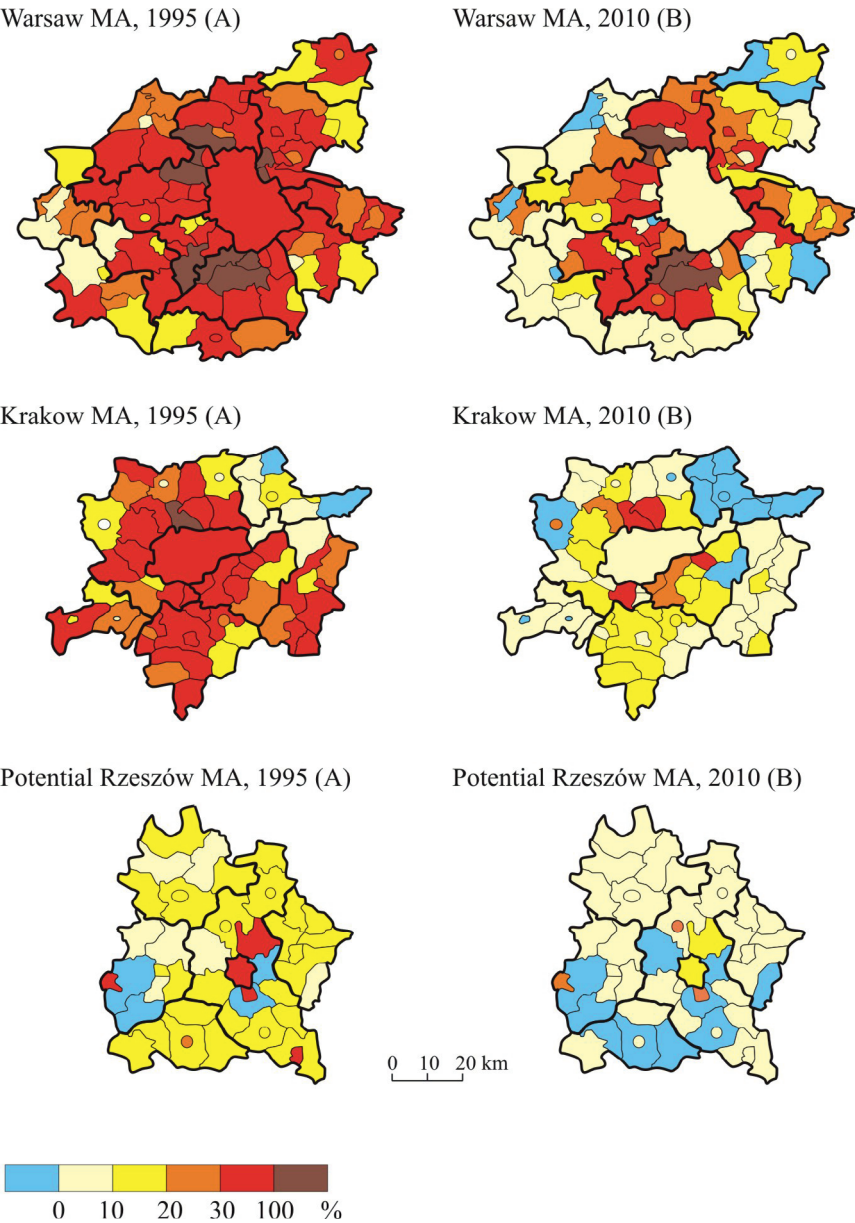


Fig. 4. The growth rate of the number of apartments (A) and population (B) in selected metropolitan areas in Poland in 1995 and 2010

Source: own compilation based on GUS data

relative terms, the poorest developed area dominated by farms. In contrast, weak positive rate of growth of the number of apartments and the loss of population

in rural community of Krzeszowice result in the inclusion of parts of rural areas to the Krzeszowice city, which resulted in reduction in the number of dwellings and population in rural area. In turn, a considerable growth of population was seen in municipalities adjacent to Kraków from north and south the process of suburbanization was the earliest (Gałka, Warych-Juras, 2011) The Potential Rzeszów Metropolitan Area had the most difficult situation in terms of changes in the number of apartments and population. Municipalities in this area demonstrated relatively small changes, with some reporting a decrease in the number of apartments (including two municipalities directly neighbouring Rzeszów). As in the case of municipalities, also in Krzeszowice the fall in the number of apartments and population in the municipalities surrounding Rzeszów was a result of the inclusion of parts of rural areas to the city of Rzeszów. Even lower growths were reported for the population, with 10 cases of negative growth.

### Concluding remarks

The analyses discussed in the study lead to the conclusion that each metropolitan area discussed in the paper is at a different stage of advancement in terms of suburbanisation processes, measured by living conditions over the period indicated in the research. The most advanced processes, related to increasing the floor space of apartments and a deteriorating number of household members, is characteristic for Warsaw Metropolitan Area. The situation of Kraków Metropolitan Area may be slightly more difficult in this respect; however, in this case, index fluctuations are relatively high, demonstrating intensity of this phenomenon. The last of the areas discussed in the paper was the Potential Rzeszów Metropolitan Area, where no significant transformations were reported that would indicate any advancement of the suburbanisation process. In addition, there were considerable differences in the value of the analysed indexes for central cities. This is characteristic for big cities, having apartments relatively small in terms of size and populated by families tending to have few members.

### References

- Derudder, B., Taylor, P.J., Ni, P., De Vos, A., Hoyler, M., Hansens, H., Basens, D., Huang, J., Witlox, F., Shen, W. and Yang, X. (2010). Pathways of Change: Shifting Connectivities in the World City Network, 2000–08. *Urban Studies*, 47, 1861–1877.
- Gałka, J., Warych-Juras, A. (2011). *Regionalne uwarunkowania suburbanizacji w Polsce*. In: J. Słodczyk (ed.), *Procesy suburbanizacji w wybranych miastach Polski*. Opole: Wydawnictwo Uniwersytetu Opolskiego, 147–158.
- Jałowiecki, B., Szczepański M.S. (2002). *Miasto i przestrzeń w perspektywie socjologicznej*. Warszawa: Scholar.
- Kaltenberg-Kwiatkowska, E. (1982). Koncepcje ekologii społecznej w socjologii polskiej. In: Z. Pióro (ed.), *Przestrzeń i społeczeństwo. Z badań ekologii społecznej*. Warszawa: Książka i Wiedza.
- Kilar, W. (2009). Korporacje informatyczne jako element struktury metropolii. *Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN*, 125, 136–153.

- Kok, H., Kovacs, Z. (1999). The Process of Suburbanization in the Agglomeration of Budapest. *Netherlands Journal of Housing and the Built Environment*, 14, (2), 119–141.
- Murator (2004). *Klasa średnia buduje domy*, 1(237), 34–39.
- Plaziak, M. (2004a). The Spatial Distribution of Living Standards in the Małopolskie Voivodeship. *Prace Geograficzne*, 114, 107–116.
- Plaziak, M. (2004b). Poziom życia ludności miast województwa małopolskiego, ze szczególnym uwzględnieniem miast małych i najmniejszych. In: I. Jażdżewska (ed.), *Zróżnicowanie warunków życia ludności w mieście*. Łódź: Uniwersytet Łódzki, 121–129.
- Raźniak, P. (2007). Migration processes in selected metropolitan areas of Poland in the years 2000 – 2005. *Bulletin of Geography. Socio-economic Series*, 8, 126–138.
- Raźniak, P. (2013). Procesy suburbanizacyjne w regionie miejskim Krakowa na tle rozwoju społeczno-gospodarczego województwa małopolskiego. In: P. Raźniak (ed.), *Społeczno-ekonomiczne przemiany regionów*. Kraków: Oficyna Wydawnicza AFM, 45–66.
- Raźniak, P., Brzosko-Sermak, A. (2014). Zmiany zasobów mieszkaniowych w regionie miejskim Krakowa. In: E. Kaczmarska, P. Raźniak (eds.), *Społeczno-ekonomiczne i przestrzenne przemiany struktur regionalnych*. Kraków: Oficyna Wydawnicza AFM (w druku).
- Raźniak, P., Winiarczyk-Raźniak, A. (2013). Spatial distribution and differences in migration patterns and revenues of gminas in the Kraków Metropolitan Area. *Bulletin of Geography. Socio-economic Series*, 19, 73–86.
- Sitek, S., Pytel S. (2006). Przemiany społeczno-przestrzenne małego miasta na przykładzie Libiąża. In: J. Słodczyk, R. Klimek (eds.), *Przemiany przestrzeni miast i stref podmiejskich*. Opole: Uniwersytet Opolski, 195–202.
- Suliborski, A. (1976). *Środowisko mieszkaniowe jako przedmiot badań geografii osadnictwa*. Łódź: Uniwersytet Łódzki.
- Szymańska, A.I. (2012). Preferencje konsumenckie i ich determinanty. *Zeszyty Naukowe WSEI*, 8, 67–86.
- Szymańska, A.I. (2011). Badania preferencji konsumentów z wykorzystaniem kompozycyjnej metody badań MDPREF. *Marketing i Rynek*, 10/2011, 23–30.
- Taylor, P.J., Aranya, P. (2008). A Global 'Urban Roller Coaster'? Connectivity Changes in the World City Network, 2000–04. *Regional Studies*, 42, 1–16.
- Unia Metropolii Polskich (2008). [www.selfgov.gov.pl](http://www.selfgov.gov.pl)
- Warych-Juras, A., Gałka, J. (2011). *Starzenie się ludności w polskich obszarach metropolitalnych*. In: M. Soja, A. Zborowski (eds.), *Człowiek w przestrzeni zurbanizowanej*. Kraków: IGiGP UJ, 99–110.
- Winiarczyk-Raźniak, A. (2004a). The Urban Quality of Life Assessment Along The Section: Cracow City Centre – Town of Skała. *Prace Geograficzne*, 114,
- Winiarczyk-Raźniak, A. (2004b). Zróżnicowanie przestrzenne warunków życia w Krakowie. In: I. Jażdżewska(ed.), *Zróżnicowanie warunków życia ludności w mieście*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego, 97–105.
- Winiarczyk-Raźniak, A. (2008). *Wybrane usługi a jakość życia mieszkańców w regionie miejskim Krakowa*. Kraków: Wyd. Naukowe Uniwersytetu Pedagogicznego.
- Zborowski, A. (2005). *Przemiany struktury społeczno-przestrzennej regionu miejskiego w okresie realnego socjalizmu i transformacji ustrojowej (na przykładzie Krakowa)*. Kraków: Instytut Geografii i Gospodarki Przestrzennej Uniwersytetu Jagiellońskiego.
- Zborowski, A. , Raźniak, P. (2013). Suburbanizacja rezydencjonalna w Polsce – ocena procesu. *Studia Miejskie*, 9, 37–50.
- Zuzańska-Żyśko, E. (2012). Funkcje metropolitalne Górnośląskiego Obszaru Metropolitalnego. *Studia Regionalne i Lokalne*, 2(48), 39–61.
- Zuzańska-Żyśko, E., Szajnowska-Wysocka, A. (2013). The Upper-Silesian conurbation on the path towards the "Silesia metropolis". *Bulletin of Geography. Socio-economic Series*, 21, 111–124.

**Piotr Raźniak**, Ph.D., assistant professor, Pedagogical University of Cracow, Poland Institute of Geography. Rankings of cities, problems of functioning of metropolitan areas, migrations of the population and suburbanization are included in research interests.

**Anna Winiarczyk-Raźniak**, Ph.D., assistant professor, Pedagogical University of Cracow, Institute of Geography. Research interests include level and quality of life, development and problems of functioning of metropolitan areas, suburbanization and social geography of Latin America.

**Contact details:**

**Piotr Raźniak:**

e-mail: prazniak@up.krakow.pl  
adres/address: Uniwersytet Pedagogiczny w Krakowie,  
Instytut Geografii,  
ul. Podchorążych 2, 30-084 Kraków (Poland)

**Anna Winiarczyk-Raźniak:**

e-mail: razny1@tlen.pl  
adres/address: Uniwersytet Pedagogiczny w Krakowie,  
Instytut Geografii,  
ul. Podchorążych 2, 30-084 Kraków (Poland)

# Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica V (2014)

*Sławomir Kurek, Tomasz Rachwał, Mirosław Wójtowicz*

## Industrial and commercial suburbanization in post-socialist city: the Kraków Metropolitan Area (Poland)

### Abstract

The subject of this paper is the issue of urban sprawling in the Kraków Metropolitan Area (Poland). Particular attention is paid on the changing role of industry as one of the key elements of development and metropolization of cities in post-socialist, emerging economies. The role of the industry in terms of activation of labor resources has been diminishing, which is connected to the automation of manufacturing processes and relocations of labor-intensive activities to regions with lower production costs. However, the industry, particularly high-tech manufacturing, plays a significant role in stimulating research and development sector and generate innovations as a key component of the knowledge-based economy. The innovative industrial companies are one of the most important elements of the structure of metropolitan cities. The analysis of this process is based on data on employment and the operation of selected industrial companies, with particular emphasis on their shift from the city to the suburbs. The process of decentralization of high-order producer services, cultural services as well as advanced informational services is one of the most important features of modern urban areas and has been identified by many researchers.

**Key words:** industry; Kraków Metropolitan Area; metropolization; Poland; relocation; suburbanization; urban sprawling

### Introduction

Global economy transformations in the process of building a knowledge-based economy and, in Polish conditions, also related to the economic transformation system and EU integration, affect the operation and transformation of economic sectors (farming, industry and service sectors) and enterprises that are the base entities of the economy. In this context, it is important to analyze the impact of the transformations on the operations and changes in the economy structures at different spatial scales (national, regional and local). Actually, we start from the assumption that enterprises – large industrial and commercial enterprises in particular, that demonstrate strong international relations – represent the key elements of the urban and metropolitan area structures and shape their

development. For the sake of analyzing development of metropolises, a diagnosis of transformation in industrial enterprises may be of key importance, in particular when focused on operational aspects of the enterprises that are related to creating technological, product and organizational innovations. Further on, in the light of previous considerations (Rachwał, 2005, 2009) we note that, although the industry-related features of a metropolis are emphasized, a relatively small role is attributed to industrial enterprises paying the role of important elements of the structure of the areas. Still, that role is not insignificant, as evidenced by the data on the share of industrial enterprises in the structure of the employed and revenue of enterprises in metropolitan cities in Poland, as Rachwał (2005, 2009) shows in previous research.

The process of decentralization of manufacturing activities, high-order producer services, cultural services as well as advanced informational services is one of the most important features of modern urban areas and have been identified by many researchers (Gaschet, 2002; Harrington, Campbell, 1997; Hermelin, 2007; Rubalcaba et al., 2013). It should be noted that in the period of socialist economy industrial enterprises were localized within the city or in areas that were later included in the administrative boundaries of the city. These companies quite often occupied attractive areas located in city centers, close to the historic area of "old town". In terms of economic transformation the processes of spatial deglomeration of industry started, i.e. the relocation of activities from the core city to the outskirts of metropolitan areas.

Simultaneously, in parallel to the process of residential suburbanization associated with the migration of the population within the KMA (Rettinger, Wójtowicz, 2009; Zborowski et al., 2011; Winiarczyk-Raźniak, Raźniak, 2012; Wójtowicz et al., 2014), the processes of commercial suburbanization diffused, as a result of the location of new shopping centers and business outside the city, mainly in the neighboring villages. Examples of such new centers were created in the north-western borders of Kraków, including municipalities: Zabierzów and Wielka Wieś. Still, the bulk of hypermarkets and other large commercial buildings were located within the city, which was in line with the strategies adopted by large retail chains operating on the Polish market, which preferred location in the large urban centers (Więclaw, 2000; Wilk, 2005; Gwosdz, Sobala-Gwosdz, 2008).

In the light of the above, the subject of the paper is the process of urban sprawling in the post-socialist city, based on the case of Kraków Metropolitan Area (KMA) in Poland. Particular attention is paid of the changing role of industry as one of the key elements of development and metropolisation of cities in post-socialist, emerging economies. The role of the industry in terms of activation of labor resources has been diminishing, which is connected to the automation of manufacturing processes and relocation of labor-intensive activities to regions with lower production costs (Gierańczyk, Rachwał, 2012; Rachwał, 2009, 2011a, b; Rachwał, Wiedermann, Kilar, 2009). As a consequence of this phenomenon and emergence of the so-called



disadvantage of agglomeration replacing advantages of agglomeration, industrial enterprises are relocated in metropolitan areas. One of the research objectives is to identify transformations of the economic structures of KMA and spatial changes in operating of industrial and commercial enterprises.

The industry, particularly high-tech manufacturing, plays a significant role in stimulating research and development sector and generating innovations, as a key component of the knowledge-based economy (Gierańczyk, 2009; 2010a, b; Gurbala, 2010; Rachwał, 2013; Ziolo, 2012). Effects of functioning and innovation processes in industrial enterprises are visible both in the results of the whole urban economy, affecting the size of the inflow of foreign direct investment, competitiveness of the city, the state of public finances and private companies, but also in functioning of municipal authorities, educational and research and development activities and higher quality of life (Rachwał, 2005, 2009a, 2012).

The analysis covers Kraków Metropolitan Area delimited by Zborowski (2004), to which the resolution of the Government of the Małopolska Region applies for statistical and planning purposes, by municipalities. The data include the working group defined as 'the employed' (in accordance with the public statistics: employees and business owners – self-employed). The analysis covers the period of 1989–2011, but not all data are available within this time section.

The analysis is limited by limitations caused by access to the statistical data and changes in the public statistics in Poland. Since 2004, there have been some serious changes happening in the access to the statistical data. Since 2004, there has been no access to data on employment per sector in municipalities (NUTS-5 European classification level) – this is why the analysis by municipalities starts in 1995 and ends in 2003. More recent data is available for *poviats* only – NUTS-4 level, for this reason, another part of the analysis covers the data for this spatial unit. In consequence, it is not possible to assess further changes in the KMA by municipality. In addition, since 2008 there has been a change in the business classification coding, i.e. transfer from NACE Rev. 1.1 (in Poland: PKD 2004) to NACE Rev. 2.0 (PKD 2007). The data comparable in accordance with NACE 2.0 are available since 2005. Moreover, 2010 was the year of the national agricultural census; as a result, there has been a considerable revaluation of 2011 data for people working in the agricultural sector (in case of some *poviats*, by more than 10%) which affects the share of other sectors (the industrial and service sector) in the employment structure. More about the limitations in the availability of statistical data on economic activity is covered in the works of Rachwał (2008, 2010).



## Location, spatial division and characteristics of KMA



Fig. 1. Location of KMA in the Małopolska Region

Source: authors' elaboration on the basis of data from: *Plan zagospodarowania przestrzennego województwa małopolskiego* (2003)

KMA is located in the central, north-western part of the Małopolska Region, one of 16 regions (NUTS-2 level), located in southern Poland (Fig. 1). Its central city is Kraków, which is also the administrative capital of the region, the former capital of Poland and one of the most important academic centers in Poland, which is also considered the cultural capital in Poland.

Apart from Kraków, KMA includes 50 municipalities of different types (1 urban, 14 urban-rural and 35 rural) (Fig. 2). These municipalities are located on the territory of 8 higher level administrative entities – *land poviats*. Kraków city is also the *urban poviat* and, for this reason, in the public statistics is on the level of a municipality (*gmina*) (NUTS-5), *poviat* (NUTS-4) and a subregion (NUTS-3).



Fig. 2. Spatial division of KMA

Source: authors' elaboration on the basis of the data from: *Plan zagospodarowania przestrzennego województwa małopolskiego* (2003)

The total area of KMA covers more than 4,000 square km, nearly 70% of which is a commuting zone, while about 22% is a suburban zone (Table 1). The area of Kraków represents 8% of KMA. The total population of KMA in 2010 was over 1.4 million, of which approximately half is inhabited in the central city of Kraków. The average population density is 367 persons per square km.

Tab. 1. Area and population of KMA

Area	Area		Number of municipalities	Population in 2012		Population density
	in sq. km	in %		in thous.	in %	
Kraków	326.8	8.0	1	758.3	50.8	2 320
Suburban zone	900.3	22.1	12	273.1	17.8	303
Commuting zone	2 841.4	69.9	38	461.6	30.8	162
<b>Total KMA</b>	<b>4 068.6</b>	<b>100.0</b>	<b>51</b>	<b>1 493.0</b>	<b>100.0</b>	<b>367</b>

Source: authors' elaboration on the basis of data from: Local Data Bank, Central Statistical Office

### Changes in the structure of industrial employment of KMA

The share of industry in the structure of employment (employed person) in 1995 and 2003 indicates that it ranges from several to more than 70% (Fig. 3). The indicator is lower in 2003 in Kraków while it is higher for some other KMA municipalities, in particular for those located south of Kraków. In the north of KMA, there is a belt of rural municipalities with farms, showing a large share of farming in the employment structure and a low share of the industry.

Figure 4 presents the dynamics of the employment changes in the industry, taking the initial year (1995) as 100. Employment in the industry is going down in the central part of KMA, including Kraków. As mentioned at the beginning of the paper, it comes as a consequence of deteriorating role of the industry in activating the work resources. It results from the increasing role of services in the economy as well as mechanization and automation of production. However, note that that was the time of intensive restructuring processes in enterprises in Poland to remove excess employment dating back to the times of the former socialist system. Growths have been observed in some peripheral municipalities of KMA and in Kraków's satellite town of Niepołomice. This area is particularly active in attracting investors and in many studies it is indicated as a successful city, which is largely associated with entrepreneurial attitudes of local authorities and residents (Jarczewski, 2007; Jarczewski, Huculak, 2011). However, generally there is a deteriorating trend in employment in the industry – the growth index for KMA is 70.

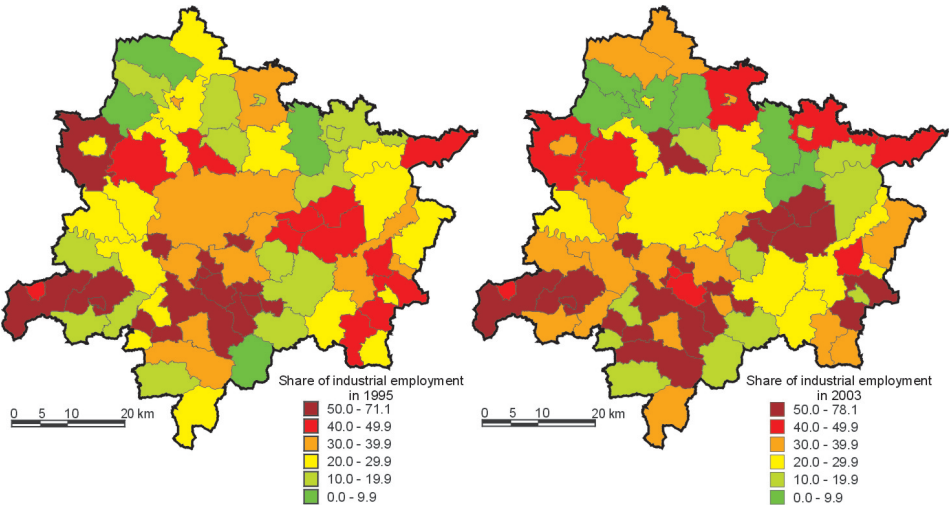


Fig. 3. Share of industry in employment in KMA municipalities in 1995 & 2003

Source: authors' elaboration on the basis of data from: Local Data Bank, Central Statistical Office

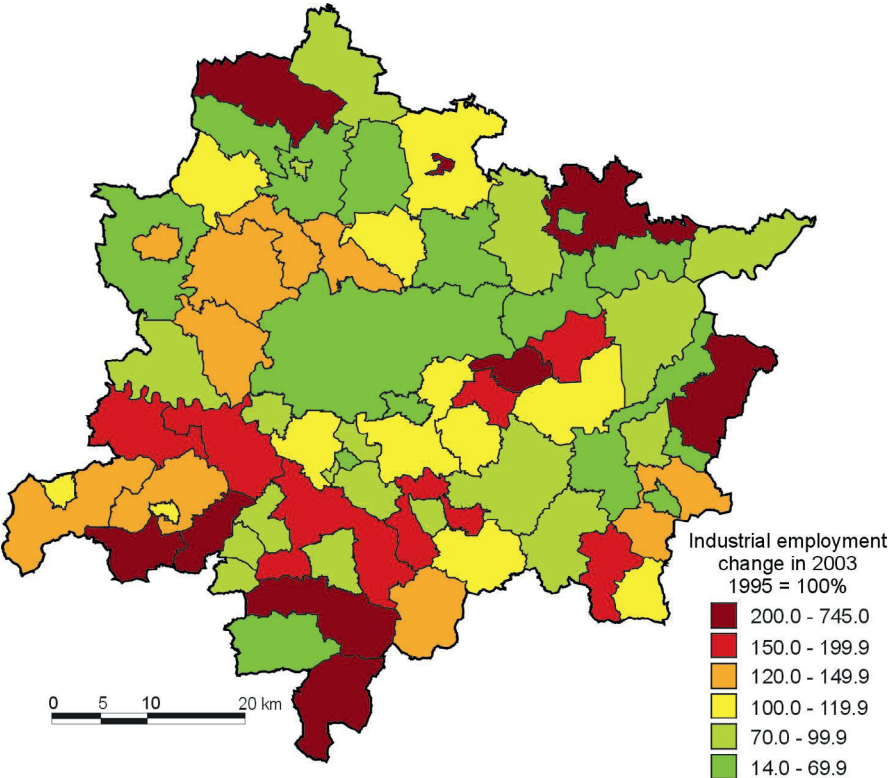


Fig. 4. Industrial employment change in KMA municipalities in 1995–2003

Source: authors' elaboration on the basis of data from: Local Data Bank, Central Statistical Office

As a result of the transformations, there has been a dropping share of industry in employment in many KMA municipalities, including Kraków, in some cases by as much as 24 p.p. (Fig. 5). The drop of the share for entire KMA is – 8 p.p. while it is higher in Kraków and reaches – 11 p.p. Furthermore, many municipalities outside of Kraków city, such as Niepołomice, report significant growths in the share of industry in employment going up to 20 p.p. or higher.

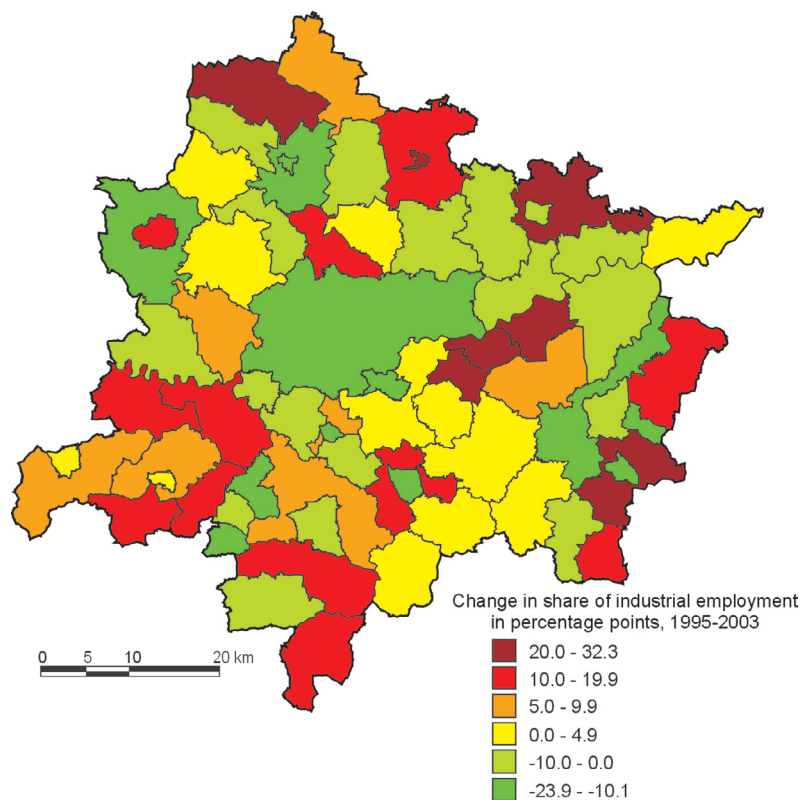
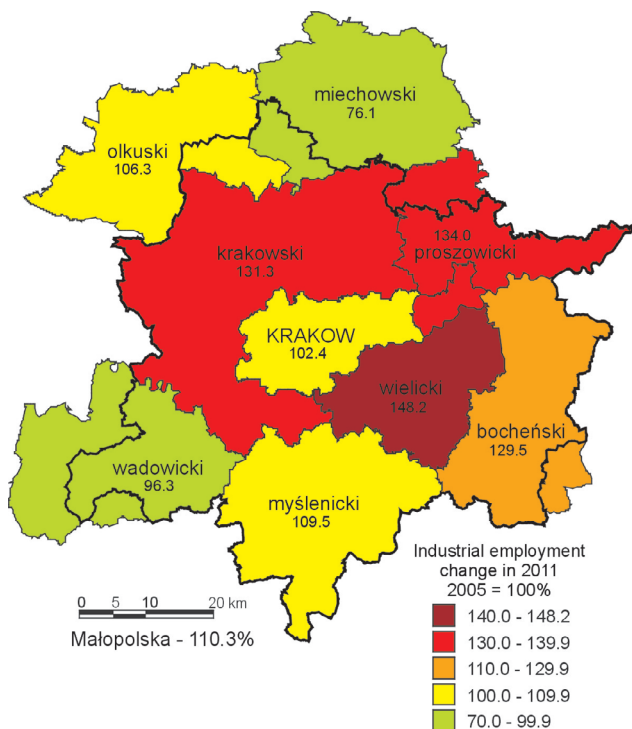


Fig. 5. Change in share of industrial employment in KMA municipalities in 1995–2003

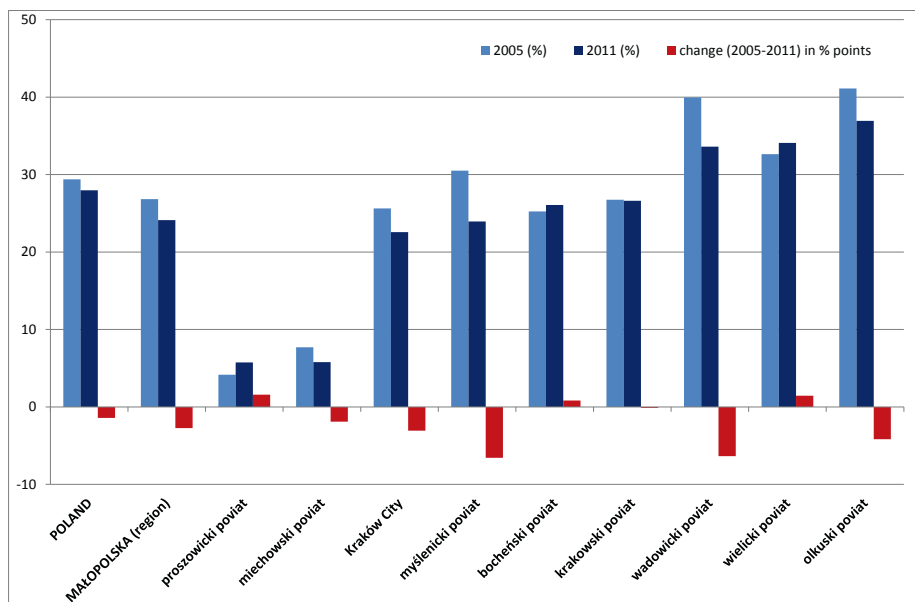
Source: authors' elaboration on the basis of data from: Local Data Bank, Central Statistical Office

Due to the above-mentioned limitations in access to the statistical data and changes in the business classification, the analysis covering following years may be continued by *poviats*. The analysis of data shows a small growth in changes in the industrial employment in Kraków (as low as 102.4%) and in some *poviats* in the northern or southern part of the analysed area and the growth in the *poviats* around Kraków: *krakowski* (land) *powiat*, *proszowicki* and *wielicki* *poviats* (Fig. 6).

Changes in employment have brought about changes in the share of the industry in the employment structure. This share in Kraków City and farming *poviats* (*proszowicki*, *miechowski*) is significantly lower than the average share reported for Poland and Małopolska Region (Fig. 7).

Fig. 6. Industrial employment change in Kraków City and neighboring *poviats* in 2005–2011

Source: authors' elaboration on the basis of data from: Local Data Bank, Central Statistical Office

Fig. 7. Industrial employment share in Kraków City and neighboring *poviats* in 2005 and 2011

Source: authors' elaboration on the basis of data from: Local Data Bank, Central Statistical Office

The data show a decrease in the share of the industrial sector in most *poviats*, including Kraków (Fig. 7, 8). *Proszowicki*, *wielicki* and *bocheński* *poviats* in the western part of KMA are the exception here, reporting a slight growth of the share of industry in employment. However, note that in some *poviats*, e.g. *wadowicki* and *myślenicki* *powiat*, a substantial drop in the share came as a result of the previous revaluation of employment in the agriculture sector based on the Census. Otherwise, the drop in the share of industry would be much lower.

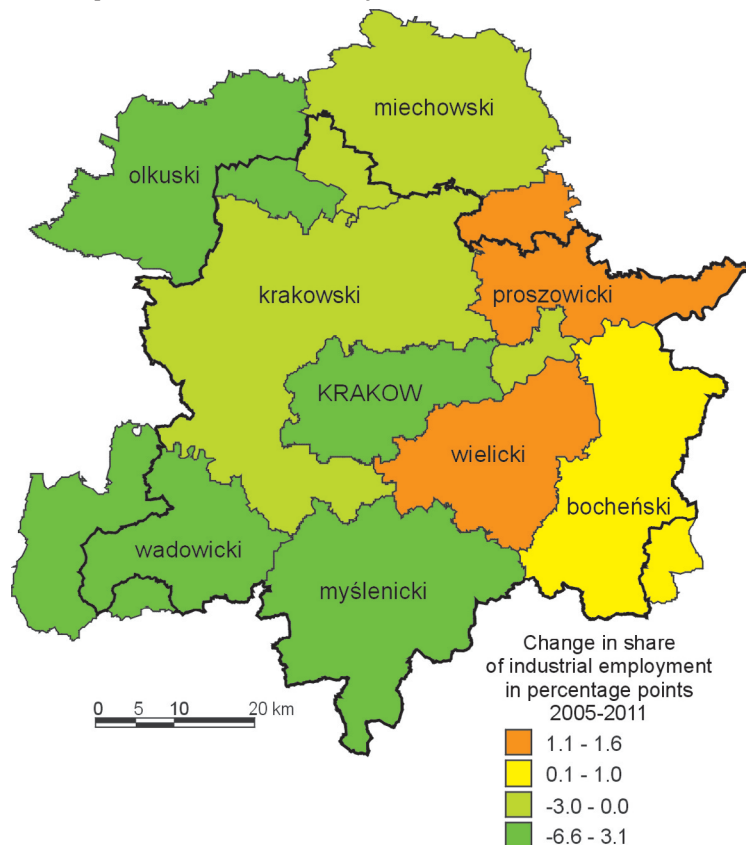


Fig. 8. Changes in industrial employment share in Kraków City and neighboring *poviats* in 2005–2011

Source: authors' elaboration on the basis of data from: Local Data Bank, Central Statistical Office



## The role of economic activity zones and foreign investment in industrial suburbanization

In *poviats* around Kraków, characterized by high dynamics of growth of employment in industry (Fig. 6), many municipalities have embarked on initiatives aimed at creating local economic activity zones or special economic zones and are active in attracting domestic and foreign investors (Fig. 9, 10). In addition, the area benefited considerably from setting up and expanding Kraków Special Economic Zone named “Krakowski Park Technologiczny” (Kraków Technology Park) by the central state authorities in collaboration with the municipalities.

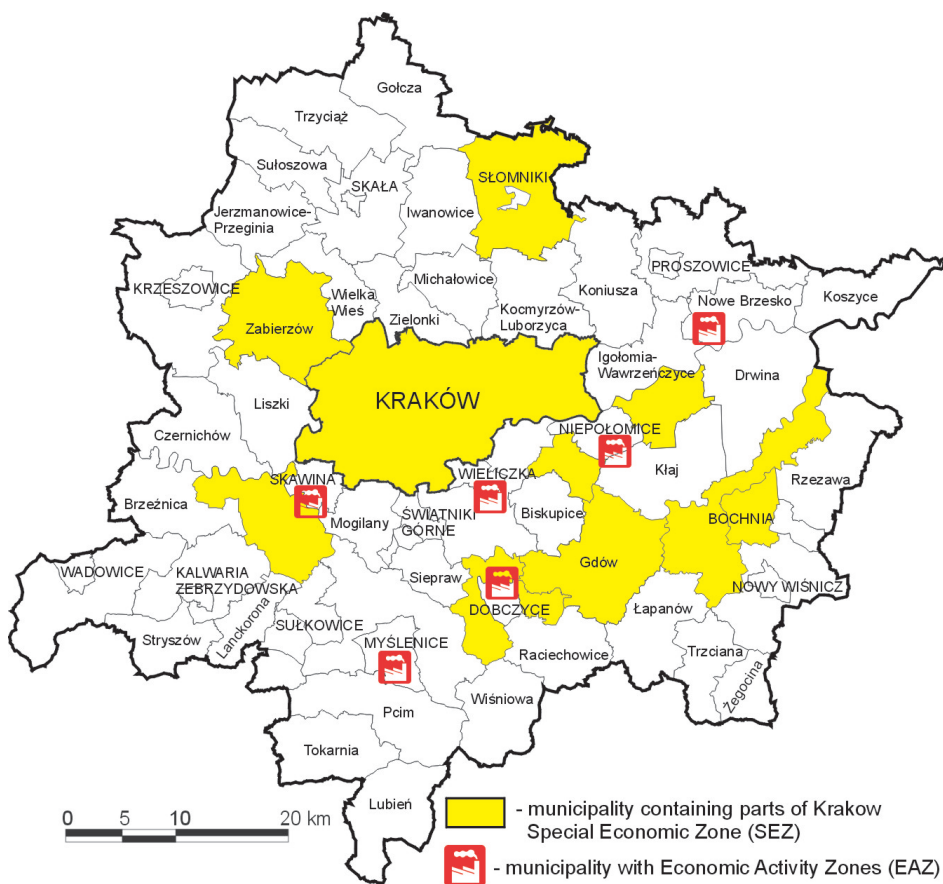


Fig. 9. Special Economic Zone (SEZ) and Economic Activity Zones (EAZ) in KMA in 2012

Source: authors' elaboration on the basis of the data from: *Inwestorzy zagraniczni w Małopolsce w 2011 roku* (2012)



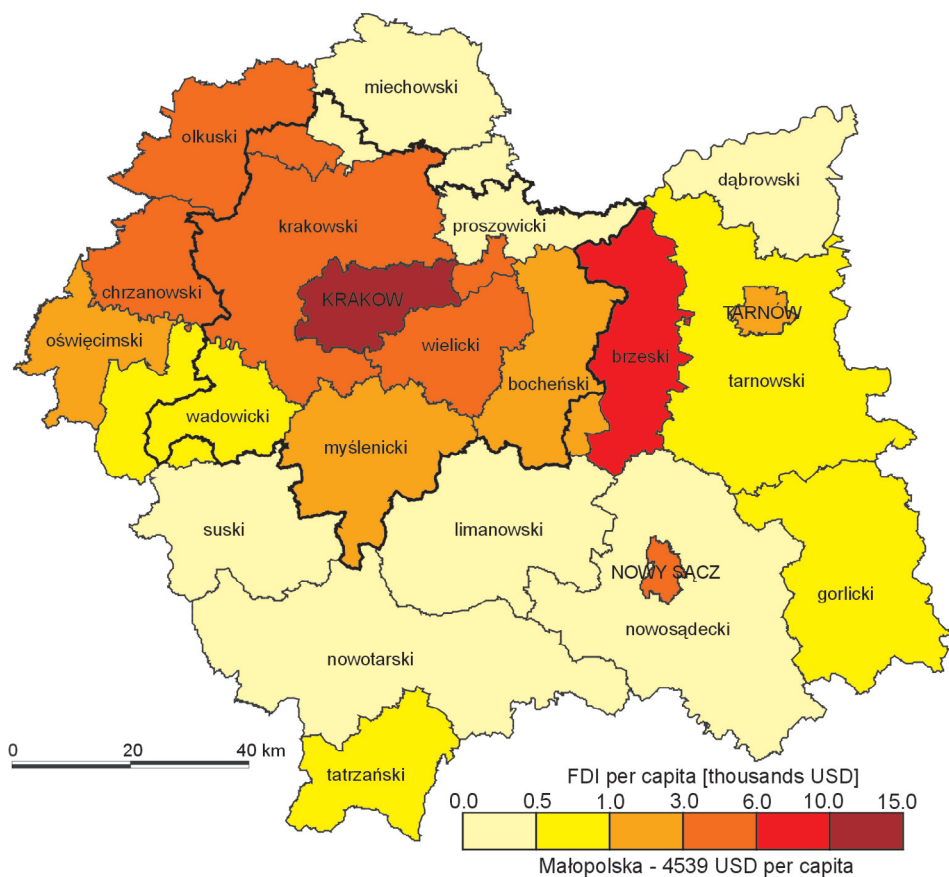


Fig. 10. FDI in the *poviats* of Małopolska Region in 1989–2011

Source: authors' elaboration on the basis of the data from: *Inwestorzy zagraniczni w Małopolsce w 2011 roku* (2012)

The Kraków SEZ, as other SEZes in Poland, offers tax relieves to companies which choose to set up their business there (Bazydło et al., 2002; Kitowski, 2007, 2009; Smętkowski, 2009). The municipalities hosting Economic Activity Zones may also offer some local tax benefits. However, it is not necessary in many cases. It stems from the fact that both KMA and the whole Małopolska Region are investment locations attractive enough for municipalities not to have to offer any relieves of local taxes (mainly of the real estate tax) to attract investors. In return, they offer good investor services and access to land with all the utilities or land for business purposes, and these activities are sufficient. For this reason, the majority of KMA municipalities applies the maximum allowed real property tax rates and does not need to lower them to attract investors. It is also the outcome of good access to highly qualified and relatively inexpensive personnel educated in very good secondary schools and universities of Kraków, which is often one of the most important factors promoting the decision on locating a business, other factors aside.

As a result, Małopolska region, due to its large resources of skilled labor resources and well-educated graduates, and high labor productivity, especially in Kraków and neighboring counties, is one of the four most attractive regions for investment location (Nowicki, 2013). Therefore, KMA is very popular among foreign investors (Figure 8). The highest foreign direct investment (FDI) per capita is observed in Krakow, but it is also high in two neighboring counties – Krakow (rural area) and Wieliczka. They are much higher than in the counties of southern, eastern and northern Lesser Poland.

Total value of FDI inflows to the Małopolska region in the years 1989–2011 amounted to more than \$ 15 billion, more than one third of which were greenfield investments (Table 2). More than three quarters of this value has been invested in the KMA, mainly in Kraków City, but a significant amount also went to other municipalities of KMA.

Tab. 2. FDI in the KMA against the background of Małopolska Region in 1989–2011

Area	FDI 1989–2011		Greenfield FDI 1989–2011		
	mln USD	in %	mln USD	in %	% of total FDI
Małopolska	15 190.3	100.0	5 653.0	100.0	37.2
KMA	12 045.7	79.3	4 273.4	75.6	35.5
Kraków	9 525.1	62.7	2 788.3	49.3	29.3
rest of KMA	3 144.6	20.7	1 379.6	24.4	43.9

Source: authors' elaboration on the basis of the data from: *Inwestorzy zagraniczni w Małopolsce w 2011 roku* (2012), p. 48

Over 7% of the total value of investments in Małopolska in the years 1989–2011 went to Kraków SEZ and economic activity zones in other municipalities (Table 3). The surge of interest in foreign investment in agricultural land has also attracted the Kraków SEZ and Niepołomice EAZ. A detailed analysis of the development of the EAZ in Niepołomice, a good example of pro-investment policies, is shown in the work edited by Jarczewski and Huculak (2011). As Jarczewski (2007) noted, the effective conduct of this type of policy depends on the entrepreneurship of local authorities.

Tab. 3. FDI in the SEZ and EAZ in 1989–2011

SEZ/EAZ	FDI 1989–2011 mln USD	Share of total FDI 1989–2011 in %
Krakow SEZ	553.4	3.6
Niepołomice EAZ	325.0	2.1
Myślenice-Jawornik EAZ	124.0	0.8
Dobczyce EAZ	109.8	0.7
Skawina EAZ	36.8	0.2
Total	1 149.0	7.4

Source: authors' elaboration on the basis of the data from: *Inwestorzy zagraniczni w Małopolsce w 2011 roku* (2012), p. 47

### Industry relocation case studies: *Wawel* and *Vistula*

*Wawel*, one of the largest Polish confectionary producers with its history of more than 100 years (Rachwał 2001) and *Vistula*, one of the largest producers and distributors of high quality menswear and more than 60 years of presence on the market, are excellent examples of transformations in the spatial structure and industry deglomeration processes. These companies held attractive land in the centre of Kraków City, over the Vistula River, in the vicinity of the attractive Jewish District of Kazimierz and within a small distance from the heart of the old Kraków.

In case of *Wawel*, in 2006 the company relocated its production activities to *myślenicki powiat*, Dobczyce municipality. In turn, *Vistula* closed its production plant in Kraków in 2008 and transferred its production to a production plant in Myślenice, which it had been using and expanded. Due to the change in *Vistula*'s business strategy, which transformed from a clothing manufacturer into a brand operator (a trade company ordering goods from suppliers - external producers); the plant was sold to an external investor in 2011.

The old manufacturing facilities have been torn down to be replaced with apartment buildings (*Vistula*) and office and commercial buildings (*Wawel*). These are cases of classical deglomeration of active industrial business – thanks to funds generated from selling attractive area in the city center, a new production facility can be set up on the outskirts of KMA.

In 2006, the production plant of *Wawel* was moved to the town of Dobczyce near Kraków (*myślenicki powiat*) – photo 1. Some buildings have been pulled down in the sold areas (leaving only the historical buildings which had been used for administrative purposes) to be replaced with a new office and residential building with an avant-garde design (resembling a slithering snake), designed by famous Polish architects from Ingarden & Ewy Design Studio (photo 2).

The former Kraków production facilities of *Vistula* will be replaced with luxury apartment buildings (photo 3). The economic crisis does not impact many investors interested in buying property in the excellent location, overlooking the Jewish district of Kazimierz and the Old Town of Kraków. Next to the investment project, Tadeusz Kantor Museum<sup>1</sup>, commemorating his works and achievements, is under construction.

---

<sup>1</sup> Tadeusz Kantor was a well-known Polish theatrical performer (theatre director, costume and stage designer, the founder of Cricot 2 Theatre in Kraków, a painter and graphic).



Photo 1. A new production plant in Dobczyce EAZ of Wawel Confectionary Producer

Source: UMiG Dobczyce, <http://dobczyce.pl/dla-przedsiębiorców/strefa-przemys%C5%82owa-w-dobczycach.html> (19.07.2013)



Photo 2. Post-industrial area of former Wawel plant and visualisation of new apartment buildings

Source: authors' elaboration based on Google Maps (left) and Ingarden & Ewy Design Studio (right) (19.07.2013)



Photo 3. Visualisation of Tadeusz Kantor Museum and luxury apartment buildings in the place of former Vistula plant

Source: Atal S.A. – [http://www.nadwislanska11.pl/#/pl/galeria/widoki\\_osiedla/](http://www.nadwislanska11.pl/#/pl/galeria/widoki_osiedla/) (19.07.2013)

## **Commercial suburbanization in city and municipalities of the Krakow Metropolitan Area**

In the main central European cities residential and commercial suburbanization quickly developed in their outer parts becoming the most important process of urban change during the last two decades. The fast growing shopping centers, hypermarkets, warehousing and industrial properties even preceded the residential deconcentration what is different from the process of suburbanization in the cities of Western Europe (Wilk, Lisowski, 2002; Nuissl, Rink, 2003; Sýkora, Ouředníček, 2007).

In the early 2000s we observed an acceleration of residential suburbanization in KMA which were accompanied also by sprawling shopping centers, warehouses, beauty salons, car workshops and dealerships, and industrial properties. These facilities were built mostly on greenfield areas on the border of the built up areas within the city or at the edge of the city and suburban locations. New commercial investments, warehousing and distribution facilities offered a relatively large number of new jobs and substantially influenced the pattern of commuting to work of people employed in retail and services. In the case of KMA, definitely the fastest development was observed among the network of hypermarkets and shopping malls located within the administrative borders of the city, which resulted from the following factors:

- proximity to large housing estates, whose residents were the main clients of this type,
- relatively better-developed transport network within the city than in the suburban area which facilitated access to such objects,
- relatively slower pace of suburbanization, in contrast to other major cities of Central Europe,
- still a strong relationship between the suburban area and the city center associated with daily commuting and making major purchases in facilities located in the town near the main exit routes.

In the case of hypermarkets as much as 91.3% of their total number is located around Kraków and only 2 were located in Bochnia - the second largest city within the KMA. The situation is much better in the case of the distribution of supermarkets, which are much smaller commercial buildings, hence their much more numerous occurrence in the outer zones of KMA. They are particularly visible in small towns, which are local service centers. However, their growth in the years 2008–2012 shows a significantly slower dynamics as compared to the dynamics of Kraków, which indicates that the main city of KMA continues to be much more attractive for the growing trade networks in comparison with the suburbs (Table 4, Fig. 9).

Trends in the commercial suburbanization, although not very strongly evident in the case of migration of hypermarkets and large shopping centers to suburban municipalities, however, they can be clearly observed in the peripheral areas of the city along the main roads connecting the center to the fastest suburbanizing municipalities. Examples of such processes can be clearly seen along the road



7 called “Zakopianka” running towards Zakopane – a popular resort in the Tatra mountains, in the municipality of Mogilany south of Krakow. Another example is the area of exit road 94 towards municipality Wielka Wieś and the junction of roads 94 and 79 with the northern bypass in Zabierzów (Fig. 12).

Tab. 4. Hyper- and supermarkets in KMA against the background of Małopolska Region in 2008–2012

Area	Hypermarkets		Supermarkets		
	2008	2012	2008	2012	Change 2008=100
Małopolska	23 100.0%	37 100.0%	253 100.0%	376 100.0%	148.6
KMA	16 69.6%	23 62.2%	91 36.0%	142 37.8%	156.0
Krakow	15 65.25%	21 56,8%	54 21.3%	88 23.4%	163.0
rest of KMA	1 4.3%	2 5.4%	37 14.6%	54 14.4%	145.9

Source: authors' elaboration on the basis of data from: Local Data Bank, Central Statistical Office

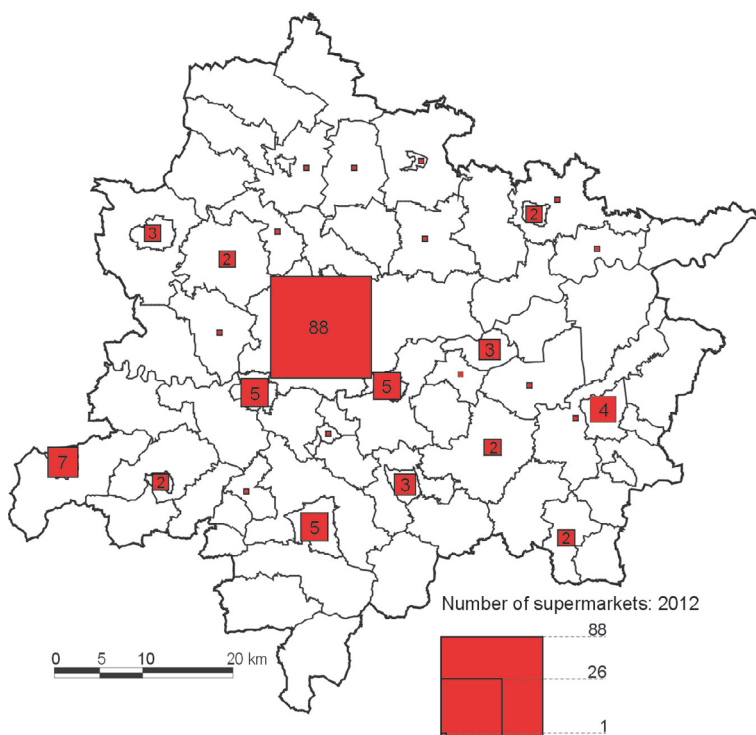


Fig. 11. Supermarkets in KMA in 2012

Source: authors' elaboration on the basis of data from: Local Data Bank, Central Statistical Office

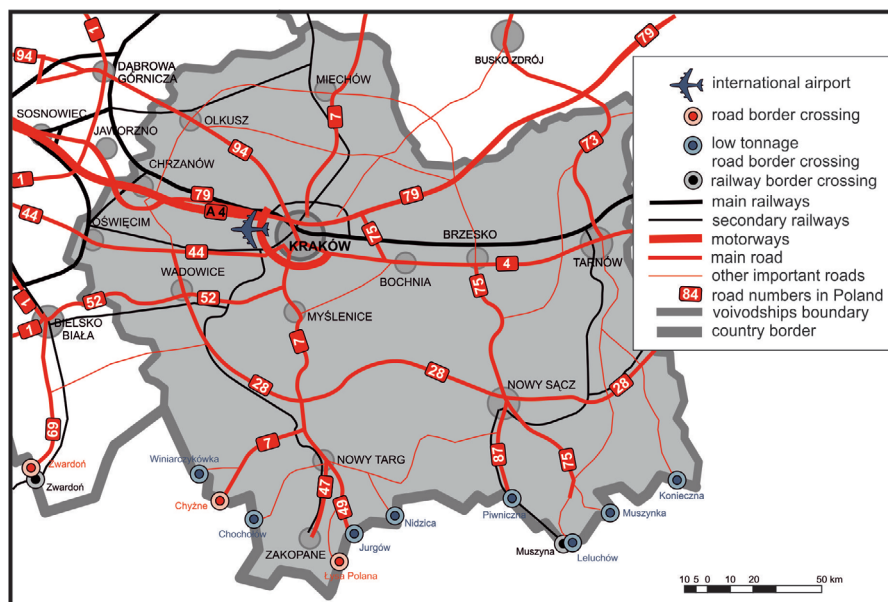


Fig. 12. Major roads network in Małopolska Region

Source: *Plan zagospodarowania przestrzennego województwa małopolskiego* (2003)

## Conclusions

The study showed that a deteriorating role of the industry in activating work resources in KMA is observed, which reflects some general processes occurring in the national economy (Rachwał, 2011a, b). On the other hand, the relocation of industrial activities from Kraków to urban and rural municipalities has been recorded since the 1990s. The post-industrial areas of Kraków witness the development of trade and business related services (BPO service center) and multi-family residential development projects (luxurious apartment buildings, because of high prices of land). It should be noted, however, that the biggest transfers of businesses and human resources (personnel) of the businesses are observed from Kraków to municipalities with production traditions, which actively support of attracting investors, including foreign investors, creating conditions in business activity zones. As a result, there have been major growths of employment in the industrial sector and of the share of employment in the industry in the municipalities. These processes are spontaneous and not coordinated at KMA level due to non-developed structures to manage the area.

Through the empirical study on the Kraków Metropolitan Area, it has become evident that the deteriorating role of industry in the employment structure does not translate into a deteriorating role of industrial enterprises in the economy and development of the metropolitan function. The growing role of industrial enterprises applies, predominantly, to the growth of the sold production and the impact on the R&D and science sector development in the entire KMA.



To the contrary, the suburbanization of retail and warehousing in KMA has been less dynamic and influential than residential deconcentration. Although there has been a shift in the retail (e.g. supermarkets) to municipalities that recorded high population growth and which often are rural areas.

The process of suburbanization in Kraków Metropolitan Area has gained speed in recent years. The growth of manufacturing and service industries in semi-peripheral areas of KMA implies a continuation of the general trend toward decentralization that will tend to favor suburban locations. It seems that continuing residential suburbanization will contribute to further redistribution of industrial activities from the city centre to its hinterland.

## References

- Bazydło, A., Smętkowski, M., Wieloński, A. (2002). Inwestycje w specjalnych strefach ekonomicznych a przekształcenia strukturalne w przemyśle Polski. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 3, 135–148.
- Działek, J., Gwosdz, K. (eds.). (2012). *Inwestorzy zagraniczni w Małopolsce w 2011 roku. Ocena małopolskiego rynku pracy przez inwestorów zagranicznych*. Kraków: Małopolskie Obserwatorium Gospodarki, Urząd Marszałkowski Województwa Małopolskiego.
- Gaschet, F. (2002). The new intra-urban dynamics: Suburbanisation and functional specialisation in French cities. *Papers in Regional Science*, 81, 63–81. doi: 10.1111/j.1435-5597.2002.tb01222.x
- Gierańczyk, W. (2009). Innowacyjność jako główny filar społeczeństwa informacyjnego Europy, *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 13, 82–94.
- Gierańczyk, W. (2010a). Rola własności intelektualnej w budowaniu innowacyjności krajów Unii Europejskiej, *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 16, 76–86.
- Gierańczyk, W. (2010b). Development of high technologies as an indicator of modern industry in the EU, *Bulletin of Geography. Socio-economic Series*, 14, 23–36.
- Gierańczyk, W., Rachwał, T. (2012). Structural changes in the industry of Poland against the background of eastern European Union states. *Quaestiones Geographicae*, 31(2), 83–93.
- Gurbała, M. (2010). Przemysł high-tech a poziom rozwoju społeczno-gospodarczego krajów. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 16, 187–200.
- Gwosdz, K., Sobala-Gwosdz, A. (2008). Geografia hipermarketów w Polsce: strategie lokalizacyjne firm i ich skutki przestrzenne. *Przegląd Geograficzny*, 80 (4), 515–539.
- Harrington, J.W., JR., Campbell H.S., JR., (1997). The Suburbanization of Producer Service Employment. *Growth and Change*, 28, 335–359.
- Hermelin, B. (2007). The Urbanization and Suburbanization of the Service Economy: Producer Services and Specialization in Stockholm. *Geografiska Annaler: Series B, Human Geography*, 89, 59–74. doi: 10.1111/j.1468-0467.2007.00260.x
- Inwestorzy zagraniczni w Małopolsce w 2011 r. Ocena małopolskiego rynku pracy przez inwestorów. (2012). Małopolskie Obserwatorium Gospodarki. Departament Polityki Regionalnej. Urząd Marszałkowski Województwa Małopolskiego. [http://mog.malopolska.pl/Files.mvc/791/inwestorzy\\_zagraniczni\\_internet\\_okl.pdf](http://mog.malopolska.pl/Files.mvc/791/inwestorzy_zagraniczni_internet_okl.pdf) (27.02.2014).
- Jarczewski, W., Huculak, M. (eds.). (2011). *Sukces polityki proinwestycyjnej Niepołomice 1990–2010. Wnioski dla władz lokalnych*. Kraków: Instytut Rozwoju Miast.

- Jarczewski, W. (2007). Duch przedsiębiorczości w proinwestycyjnych działaniach władz lokalnych. *Przedsiębiorczość – Edukacja*, 3, 71–80.
- Kitowski, J. (2007). Przemiany struktury przestrzennej specjalnych stref ekonomicznych w Polsce. In: J. Lach, M. Borowiec, T. Rachwał (eds.), *Procesy transformacji społeczno-ekonomicznych i przyrodniczych struktur przestrzennych*. Kraków: Wydawnictwo Naukowe Akademii Pedagogicznej w Krakowie, 257–276.
- Kitowski, J. (2009). Influence of Global Economic Crisis on Operation of Special Economic Zones in Poland. In: Kitowski J. (eds.), *Global Economic Crisis and Countries of Central Eastern Europe. Geopolitical Studies*, vol. 15. Warsaw: Polish Academy of Sciences – Institute of Geography and Spatial Organization, 241–267.
- Lisowski, A., Wilk, W. (2002). The Changing Spatial Distribution of Services in Warsaw. *European Urban and Regional Studies*, 9(1), 81–89.
- Nowicki, M., (ed.). (2013). *The investment attractiveness of the regions and the sub-regions of Poland 2013*. Gdańsk: Instytut Badań nad Gospodarką Rynkową.
- Nuissl, H. Rink, D. (2003). *Urban sprawl and post-socialist transformation: The case of Leipzig (Germany)*. Leipzig: Helmholtz Centre for Environmental Research – UFZ, Bericht Nr 4/2003.
- Plan Zagospodarowania Przestrzennego Województwa Małopolskiego (2003). <http://www.malopolskie.pl/RozwojRegionalny/Plan> (27.02.2014).
- Rachwał, T. (2001). Kształtowanie się wiodących zakładów przemysłu cukierniczego w Krakowie do 1950 r. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 3, 199–220.
- Rachwał, T. (2005). Zachowania głównych przedsiębiorstw przemysłowych w strukturze obszaru metropolitalnego. In: Z. Makiela, T. Marszał (eds.), *Infrastruktura techniczno-ekonomiczna w obszarach metropolitalnych. Biuletyn Komitetu Przestrzennego Zagospodarowania Kraju PAN*, 222, 158–169.
- Rachwał, T. (2008). Problematyka badawcza funkcjonowania przedsiębiorstw przemysłowych *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 11, 53–85.
- Rachwał, T. (2009). Changes of industry in the countries of Central and Eastern Europe under conditions of economic transformation and European integration. In: J. Kitowski (ed.), *Countries of Central & Eastern Europe versus global economic crisis, Geopolitical Studies*, vol. 15. Warsaw: Polish Academy of Sciences – Institute of Geography and Spatial Organization, 133–164.
- Rachwał, T. (2009a). *Rola przedsiębiorstw przemysłowych w kształtowaniu obszarów metropolitalnych*. In: Z. Makiela (ed.), *Potencjalne metropolie ze szczególnym uwzględnieniem Polski Wschodniej. Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN*, CXXV, 121–135.
- Rachwał, T. (2010). Problematyka badawcza zmian powiązań przestrzennych przedsiębiorstw przemysłowych. In: T. Kudłacz, J. Wrona (eds.), *Geografia w naukach ekonomiczno-przestrzennych*, Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, 157–176.
- Rachwał, T. (2011a). Transformations of the employment structure as an expression of the transformation of the Polish industry against the background of the European Union. *Bulletin of Geography, Socio-economic series*, 15, 5–25.
- Rachwał, T. (2011b). Industrial restructuring in Poland and other European Union states in the era of economic globalization. *Procedia. Social and Behavioral Sciences*, 19 (2011), 1–10.
- Rachwał, T. (2012). Innowacyjność przedsiębiorstw przemysłowych jako czynnik rozwoju miast, In: Z. Makiela, A. Szromnik (eds.), *Miasto innowacyjne. Wiedza – Przedsiębiorczość – Marketing, Studia Komitetu Przestrzennego Zagospodarowania Kraju PAN*, CXXI, 135–152.

- Rachwał, T. Wiedermann, W., Kilar, W. (2009). Rola przemysłu w gospodarce regionów Unii Europejskiej. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 14, 31–42.
- Rettinger, R., Wójtowicz, M., (2009). Rozwój budownictwa mieszkaniowego w obrębie Krakowskiego Obszaru Metropolitalnego (KOM) ze szczególnym uwzględnieniem gminy Zabierzów. In: I. Jażdżewska (ed.), *Strefa podmiejska i małe miasta w okresie transformacji. XXII Konwersatorium Wiedzy o Mieście*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego, 129–144.
- Rubalcaba, L., Gallego, J., Gallo, M.T., Garrido, R. (2013). Business services location and market factors in major European cities. *Cities*, 31, 258–266.
- Smętkowski, M. (2008). Rola specjalnych stref ekonomicznych w kształtowaniu struktury przestrzennej przemysłu w Polsce. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 10, 204–216.
- Sýkora, L., Ouředníček, M. (2007). Sprawling post-communist metropolis: Commercial and residential suburbanization in Prague and Brno, the Czech Republic. In: E. Razin, M. Dijst, C. Vázquez (eds.), *Employment Deconcentration in European Metropolitan Areas. Market Forces versus Planning Regulations. The GeoJournal Library*, 91, 209–233.
- Więclaw, J. (2000). Nowe centra handlowe w strukturze przestrzenno-funkcjonalnej Krakowa. In: I. Jażdżewska (ed.), *Miasto postsocjalistyczne – organizacja przestrzeni miejskiej i jej przemiany. XIII Konwersatorium Wiedzy o Mieście*. Łódź: Katedra Geografii Miast i Turyzmu Uniwersytetu Łódzkiego, Komisja Geografii Osadnictwa i Ludności PTG, Łódzkie Towarzystwo Naukowe, 175–180.
- Wilk, W. (2005). Miejsce miast w sieciach handlowych – przykład Polski. *Prace i Studia Geograficzne Uniwersytetu Warszawskiego*, 35, 129–153.
- Winiarczyk-Raźniak, A., Raźniak P. (2012). *Migracje wewnętrzne ludności w polskich obszarach metropolitalnych u progu XXI wieku*. Kraków: Wydawnictwo Naukowe UP.
- Wójtowicz, M., Kurek, S., Gałka, J. (2014). *Suburbanization in the Krakow Metropolitan Region (KMA) in the years 1995–2010*. In: M. Czerny, G. Hoyos Castillo (eds.), *Suburbanization Versus Peripheral Sustainability of Rural-Urban Areas Fringes*, Hauppauge NY: Nova Science Publishers.
- Zborowski, A. (2004). Podejście funkcjonalno-strukturalne w badaniach delimitacji obszarów metropolitalnych w Polsce – przykład Krakowa. In: Słodczyk J. (ed.), *Przemiany struktury przestrzennej miast w sferze funkcjonalnej i przestrzennej*. Opole: Uniwersytet Opolski, 25–40.
- Zborowski, A. (2005). *Przemiany struktury społeczno-przestrzennej regionu miejskiego w okresie realnego socjalizmu i transformacji ustrojowej (na przykładzie Krakowa)*. Kraków: Instytut Geografii i Gospodarki Przestrzennej UJ.
- Zborowski, A., Chabetko, T., Kretowicz, P. (2011). Procesy suburbanizacji rezydencjonalnej w regionie miejskim Krakowa: przemiany społeczno-przestrzenne. In: J. Jakóbczyk-Gryszkiewicz (ed.), *Regiony miejskie w Polsce. Dwadzieścia lat transformacji*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego, 89–116.
- Zioło, Z. (2012). Miejsce innowacyjności w kształtowaniu procesów rozwoju gospodarczego układów przestrzennych. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 20, 9–32.

**Sławomir Kurek**, Assoc. Prof., Pedagogical University of Cracow, Institute of Geography, Department of Socio-Economic Geography.

Social-economic geographer. Member of the Committee of Demographic Sciences of the Polish Academy of Sciences. His research interests focus mainly on demographic and population issues, including population ageing, decline in fertility and suburbanization processes in Poland.

**Mirosław Wójtowicz**, Ph.D., Pedagogical University of Cracow, Institute of Geography, Department of Socio-Economic Geography.

Ph.D. in geography (specialization in socio-economic geography), lecturer in the Department of Socio-Economic Geography at the Pedagogical University in Kraków, his research interests focus on issues of urbanization and industrialization process in Latin America, with particular emphasis on Argentina, Brazil and Mexico.

**Tomasz Rachwał**, Ph.D., Pedagogical University of Cracow, Institute of Geography, Department of Entrepreneurship and Spatial Management.

Economic geographer, head of the Department of Entrepreneurship and Spatial Management – Institute of Geography, Pedagogical University in Kraków. Member of the National Council for Entrepreneurship. His research interests focus primarily on the issue of change of the spatial structures of industry, the functioning of various branches of industrial activity, corporate restructuring and the role of entrepreneurship in the development of spatial systems and entrepreneurship education.

**Contact details:**

**Sławomir Kurek:**

e-mail: sgkurek@up.krakow.pl

adres/address: Uniwersytet Pedagogiczny w Krakowie,  
Instytut Geografii, Zakład Geografii Społeczno-Ekonomicznej,  
ul. Podchorążych 2, 30-084 Kraków, Polska (Poland)

**Mirosław Wójtowicz:**

e-mail: mwojt@up.krakow.pl

adres/address: Uniwersytet Pedagogiczny w Krakowie,  
Instytut Geografii, Zakład Geografii Społeczno-Ekonomicznej,  
ul. Podchorążych 2, 30-084 Kraków, Polska (Poland)

**Tomasz Rachwał:**

e-mail: T.Rachwal@up.krakow.pl

adres/address: Uniwersytet Pedagogiczny w Krakowie,  
Instytut Geografii, Zakład Przedsiębiorczości i Gospodarki Przestrzennej,  
ul. Podchorążych 2, 30-084 Kraków, Polska (Poland)

# Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica V (2014)

*Małgorzata Bajgier-Kowalska, Renata Rettinger*

## Tourism development in small cities on the example of Pistoia in Tuscany

### Abstract

The dynamic development of tourism in many regions of the world causes competition boost which, in turn, leads to a variety of changes in tourist offers. Tourism is an alternative for other types of economic activity, this relates to spatial units of diverse area, including cities. The tourist function can become the mechanism of local development for cities and the protection of the cultural and natural heritage. The main goal of the article is to present the tourist potential of a historical city and the possibilities of further development of tourist movement in light of current tendencies of the world tourist market. The paper also includes an attempt to analyze the structure of tourist product of the city of Pistoia basing on its location as a neighbor of such large tourist centers as Florence or Pisa.

**Key words:** authenticity; competitiveness; cultural tourism; urban tourism

### Introduction

Urban tourism is one of the fastest growing forms of tourism and includes well-known historical towns, large urban centers, midsize cities, as well as small towns with a broad offering of tourist attractions (Mika, 2007). A close relative of urban tourism is cultural tourism, which is defined as a set of tourist behaviors resulting from an interest in the heritage of material and nonmaterial culture. There is a variety of definitions of cultural tourism (Hughes, 1996; Bonet, 2003) including very narrow ones that associate cultural tourism with visits to museums and archaeological sites, as well as broad ones that blur out the lines between cultural tourism and other forms of tourism (ICOMOS, 2002).

In Italy, cultural tourism ranks second, only behind leisure tourism (24.3% vs. 31.6% of the market share) (Touring Club Italia, 2007). Tuscany is one of the most attractive regions of Italy characterized by significant biodiversity, rich cultural heritage (material and nonmaterial), and good tourist infrastructure. The region features large urban centers, midsize cities, and small towns with a limited tourist offering. This yields the question: How can midsize cities and small towns function

in a competitive market dominated by large tourist centers? The answer may lie in the motivations and preferences of tourists seeking hospitality and authenticity.

The main purpose of the paper is to describe the tourism potential of Pistoia and its opportunities to increase tourist traffic in light of global trends in the tourism market. The paper also attempts to analyze the city's tourist offering in the context of its renowned and large neighbors such as Florence and Pisa. However, the main object of research is the city of Pistoia, which also happens to be located in one of the most important tourist regions in Italy (Tuscany). Data for this paper were obtained in the course of a three-week field study.

### Pistoia's place in Tuscany

The province of Pistoia is located in northern Tuscany – one of the most important and most visited regions in all of Italy. Northern Tuscany features six UNESCO World Heritage Sites: (1) historical center of Florence (1982), (2) cathedral plaza in Pisa (1987), (3) historical center of San Gimignano (1990), (4) historical center of Siena (1995), (5) city center in Pienza (1996), and the Val d'Orcia Valley (2004). Tuscany is a leading European center of art and culture with 550 museums and galleries – this accounts for more than 10% of all museums in Italy. The region's capital of Florence is considered an urban bestseller, and one of the top twenty art cities in the world (van der Borg, Costa & Gotti, 1995). Florence is located on the Arno River at the foot of the Apennines. It is a regional tourist magnet, drawing 3,257,000 tourists in 2011. Its *Galleria degli Uffizi* is considered one of the most important museums in the world. Other key art cities in Tuscany include Siena, Pisa, and Lucca.



Fig. 1. Tuscany – administrative divisions

Source: <http://www.solitalia.it/regioni/toscana/provincia-pistoia/>

The province of Pistoia covers an area of 965 km<sup>2</sup> and borders to the north with the provinces of Modena and Bologna, to the east with the province of Prato, to the south with the provinces of Florence and Pisa, and to the west with the province of Lucca (Fig. 1). Pistoia is divided into 22 communes (townships). The largest and most important commune is the capital commune of Pistoia, which includes the medieval city of Pistoia.

### **Tourist attractiveness of Pistoia**

The city and commune of Pistoia are located at the foot of the Apennine Mountains between the Tyrrhenian Coast in the west, but with no direct access, and the world famous city of Florence to the southeast. Its total area is 236.7 km<sup>2</sup>, which is 25% of the total area of the province of Pistoia. The city and commune of Pistoia are inhabited by 90,147 residents ([www.provincia.pistoia.it](http://www.provincia.pistoia.it)). The commune features diverse relief that includes mountains in the north (elevation of more than 1,600 m), the Montalbano Ridge to the south, as well as the foothills of the Apennines, and finally lowlands in the central part featuring a broad plain found as low as 40 meters above sea level. The commune's diverse relief offers visitors a chance to experience a variety of landscapes and pursue an array of sports.

Pistoia is a medieval city rooted in antiquity. It is older than neighboring Florence. Numerous Ligurian and pseudo-Ligurian archaeological finds show that the valley where the city is now located has been inhabited since the 2<sup>nd</sup> century BC. The city of Pistoia was most likely founded by Roman soldiers of the Flaminius army in 187 BC. The soldiers' camp was to have been located there. The Roman army was said to have been looking for food in the area during Rome's war with Liguria. The name Pistoia is said to be derived from the Roman word "pistoria", which means "bread oven" in Latin. Another potential origin of the name is said to be two Etruscan words – Pist and Oros. The former meant gate and the latter mountain (Tigri, 1990). Over the next few centuries, Pistoia had changed hands frequently. Its rulers included the Goths, Lombards, and Franks.

The commune of Pistoia began to emerge as a political institution towards the end of the 11<sup>th</sup> century and significantly expanded its borders following its wars with neighboring Florence, Lucca, and Bologna. The arrival of the relic of St. James in 1144 opened the way for larger pilgrimages. As Pistoia became a mandatory waypoint along the *Via Francigena* pilgrimage route, it reaped the financial benefits of numerous pilgrimages including those headed farther to Santiago de Compostela in Spain. The city's fortunes declined in the 14<sup>th</sup> century due to internal conflict between its affluent families as well as due to wars with neighboring Lucca and Florence. This state of affairs lasted until the 17<sup>th</sup> century when Pistoia regained its status as a strategic commercial waypoint between Central and Northern Italy. In 1861 Pistoia joined the Kingdom of Italy (D'Afflitto, Falletti, 1999).



Pistoia's medieval district boasts itself with a large array of sites with historical and artistic significance including 65 sites valued for their architecture and building technology. Eighteen of the sites are churches. The most valuable artifact in Pistoia is the silver altar of St. James located in the beautiful Cathedral of St. Zeno. The altar is a masterpiece of medieval religious art. The city also features several beautiful plazas surrounded by historical palaces. Pistoia has 17 sites with cultural and artistic significance including 10 museums located within 100 meters of each other. The city also has 15 hotels located in historical townhouses. In addition, the city's heritage is enriched by 50 cultural associations including 15 musical associations. Pistoia hosts more than 600 events of all types per year (Briganti, 2004) including the very popular Pistoia Blues Festival and the *Giostra dell'Orso* (Bear Tournament) in July.

One niche tourist product of Pistoia is greenhouse plants. The city is the European leader in the production of ornamental plants, both in terms of acreage and plant diversity. Pistoia has served as a synonym for greenhouse plants for a very long time. The residents of Pistoia have been able to cultivate and popularize every type of plant. The mild climate and fertile soil of the Ombrone Valley helped spark the greenhouse plant production in Pistoia 150 years ago. Today the region features 1,500 plant producers working on an area of more than 5,200 hectares including 1,000 hectares of covered cultivation. Pistoia's greenhouses can be visited by tourists. Hence, Pistoia is considered the European capital of cultivated bushes and small trees (C. Vezzosi, 2009). This form of economic activity not only helps attract tourists, but also attracts European business owners involved in the production and sales of ornamental plants.

### **Tourist management and tourist traffic**

The city of Pistoia features a wide variety of lodging options including luxury mansions, hotels, bed & breakfasts, private houses, single rooms, apartments, and agricultural lodging options. According to the Pistoia Office of Statistics, the commune possessed 82 lodging facilities in 2011 featuring 1,593 hotel beds (1,376 beds in 2008). The city has 16 hotels and most are three-star facilities with a total of 498 hotel beds (31.3% of total). In addition, four-star hotels in Pistoia offer 170 hotel beds (10.7%). Pistoia also has 24 bed & breakfast facilities and 23 agricultural lodging options. The type of lodging facility that stands out is historical lodging facilities with a total of 227 hotel beds available year-round. Finally, single guestrooms in Pistoia offer the smallest number of hotel beds – only 5.1%. In general, year-round accommodations constitute 90.4% of all accommodations available in Pistoia. The hotel bed density index for Pistoia Commune is 6.72 and the hotel bed growth index is 31.34.

In 2010 Pistoia Commune possessed a total of 190 eating establishments including 40 restaurants, 113 bars, 18 pizzerias, and 19 other places. Most eating establishments in Pistoia are located in the city center, especially close to the

*Piazza del Duomo*, one of the most beautiful plazas in Italy. The quality of the city's restaurants spans the full price spectrum.

Supplementary infrastructure helps increase the tourist attractiveness of a given area. Rapid growth in recreational services has been observed in the Pistoia area in recent years. Local sports and recreational facilities help meet the needs of tourists by offering the chance to pursue a variety of forms of recreation and entertainment. Tourists visiting Pistoia can take part in a variety of sports events and other mass events. The commune features two tennis courts, three softball and basketball courts, one public pool, thirteen municipal gyms, rock walls, one bow practice range, one auto racing track, one sports stadium, four ice rinks, and twenty sports clubs. In addition, Pistoia hosts three theaters, three cinemas, one philharmonic, and ten museums featuring a wealth of original works of art.

The city of Pistoia can be easily reached by motorway A11 linked with the Florence – Sea national motorway system, as well as by national highway 64 (*Porrettana*) linking it with Ferrara and cities in the Emilia-Romagna region. Other roads that lead to Pistoia include regional highway 66 (*Pistoiese*) to Florence and regional highway 12 (*dell'Abetone* and *dell Brennero*), as well as regional highway 435 (*Lucchese*) to Western Tuscany (Ruozi, 2009). Pistoia and all other towns in the province are also within easy reach via the Lazzi, Copit, and CAP bus lines ([www.lazzi.it](http://www.lazzi.it)).

The Pistoia Commune is linked to the national railway network via regional rail to Florence, Prato, and Pisa. The main rail line in the region runs via Florence, Prato, Pistoia, Lucca, and Pisa. Another regional rail line runs across the northern part of Pistoia Province from Pistoia West Station to Porrettana Terme and Bologna.

There are no civilian airports in Pistoia Province. The two closest airports are Galileo Galilei Airport in Pisa and Amerigo Vespucci Airport in Florence. The airport in Pisa is located about 60 kilometers away from Pistoia. The Pisa Airport Railway Station links Pisa with Florence (Santa Maria Novella Station) via Lucca and Pistoia. Tourists can reach Pistoia from Vespucci Airport in Florence via train and then bus. There is also a direct bus line from Vespucci Airport to Pistoia. Tourists can reach Pistoia from any international airport in Tuscany within 30 to 40 minutes by car, train, or bus.

The city of Pistoia offers tourists and residents a convenient Park & Bus transportation system with a number of municipal parking lots located around the city linked to the city center via city buses. Pistoia supports ecological transportation and its urban bike rental system helps achieve this goal. The system is called "Pistoia on Bikes" and is financed by the Ministry of the Environment. Bike riders use an electronic card to borrow almost 40 bikes stationed throughout the city's historical center.

Pistoia attracts a small number of tourists despite having a lot to offer. This includes easy road access, close proximity to world class centers of tourism, great architecture, rich local culture and old city, local flavor and hospitality, and an array of good lodging options. Over the last decade, the largest number of tourists (64,674) was recorded in the year 2000 – of which 23,369 were foreign tourists.

The number of tourists decreased steadily between 2001 and 2004 to 34,927 – of which only 11,467 were foreign tourists. In 2010 the number of tourists increased to 49,940 – of which 20,611 were foreign tourists. The number of tourists increased again in 2011 to 52,270 – of which 21,320 were foreign tourists. For comparison, neighboring Pisa hosted 646,914 tourists in 2011, while Lucca hosted 241,540 tourists, Prato 190,927 tourists, and Florence 3,257,061 tourists ([www.regione.toscana.it](http://www.regione.toscana.it)).

Statistical data indicate that most tourists in Pistoia are domestic tourists – mostly from Lombardy, Latium, and Tuscany. This is confirmed by C. Massidda and I. Etzo (2012) who studied Italian tourist traffic. On the other hand, Pistoia's foreign tourists usually come from Germany, France, Holland, Great Britain, and the United States. Other sources of tourist traffic include Belgium, Spain, Switzerland, Liechtenstein, Denmark, Austria, and Poland. Most tourists visiting Pistoia between 2000 and 2010 stayed at three-star and four-star hotels. Agricultural lodging facilities as well as historic mansions were also popular with tourists ([www.provincia.pistoia.it](http://www.provincia.pistoia.it)). Tourists stay an average of 2.8 days in Pistoia, which is similar to that for most other European cities with significant cultural heritage (Costa & van der Borg, 1992, van der Borg, Costa & Gotti, 1995).

A key characteristic of tourism in Pistoia Commune is its seasonality. In the field of tourism, seasonality may be defined as fluctuations in tourist-related characteristics over time. This includes tourist volume, tourist expenditures, automobile traffic on motorways, railway traffic, employment in the tourist services sector, and the number of tickets sold related to tourist attractions (Butler, 1994). Seasonality produces an array of negative effects. It is the goal of tourism researchers to reduce the magnitude of these effects via the diversification of tourist offering. One way to reduce fluctuations in the case of Pistoia would be to promote the city and its region even more as a destination for lovers of ornamental greenhouse plants. This could, in itself, become a key characteristic of Pistoia.

Most tourist stays occur between June and October. This is true for both domestic and foreign tourists. Some of the reasons for this include summer vacations, very good weather, as well as major summer cultural events taking place in Pistoia ([www.provincia.pistoia.it](http://www.provincia.pistoia.it)). The Pistoia Blues Festival has been held for 34 years and draws thousands of young blues fans from around the world. This festival and other local events help promote the city worldwide and increase demand for its goods and services (Attanasia et al., 2013).

### **Hospitality and authenticity as characteristics of tourist offering**

The growth of the global tourist sector – as manifested via increasing tourist traffic and growing tourist infrastructure – creates the need for competitive analysis and action. The competitiveness of a region or tourist center may be defined as the ability to compete with other regions or tourist centers for tourist traffic. Research literature provides a growing number of studies on this very issue: (Alavi & Yasin,

2000; Crouch & Ritchie, 1999; Enright & Newton, 2004; Kozak, 2002; Kozak & Rimmington, 1999; Ritchie & Crouch, 2000; Ruhanen, 2007; Cracolici & Nijkamp, 2008). An especially difficult situation arises when two regions or tourist centers of very different size, but offering similar tourist attractions, compete with one another. This is the case with Pistoia, which is a historical city that must compete with the much larger and more well-known Florence – a city characterized by more commercial (mass) tourism.

In light of the continuing commercialization of tourism around the world, there is a growing need for environmental, cultural, and artistic authenticity (Taylor, 2001). The tourist sector in Pistoia is growing rapidly, and the city's government wants to strengthen the city's image as a city of art and culture and to improve its tourist services ([www.comune.pistoia.it](http://www.comune.pistoia.it)). The issue with cultural tourism is smart management of cultural heritage in order to maintain a sustainable approach to development. The challenge for smaller cities that wish to attract culture-oriented tourists is the balance between the identification of unique cultural attributes and a smart way to market them to the general public and link them with the business strategies of major international tour operators (Russoa & van der Borg, 2002; Rizzo & Throsby, 2006; Peacock & Rizzo, 2008). However, it is often difficult to prove that World Heritage Sites can attract large numbers of tourists (Cellini, 2010). This suggests that a more integrated approach using lesser known cultural sites may be more productive, instead of focusing promotional efforts on superstar sites (Cuccia & Rizzo, 2010).

The tourist sector is increasingly becoming a manufactured product featuring novel tourist attractions and standardized services (Durydiwka, Duda-Gromada, 2011). Current research does not unequivocally indicate whether the “manufacturing” of a tourist product draws or repels tourists. The global tourist marketplace is filled with artificial tourist attractions, and authenticity is becoming a rare commodity. This is especially true in well-established tourist markets such as Italy.

In the case of cities where cultural tourism sites are not enough to build a viable tourist sector, other cultural assets may be used in conjunction with tourist attractions. This may include special events, restaurants and bars, and high quality tourist infrastructure. However, the original source of local cultural value and image must not be lost (Russoa & van der Borg, 2002). According to research on economic cycles and how they affect domestic and foreign tourist traffic in Italy as well as the competitiveness of the Italian tourist market (Guizzardi & Mazzocchi, 2010), price levels and price elasticity as well as special events are key factors driving tourist demand in Italy.

Aside from authenticity, the other key element of a competitive tourist offering is hospitality. Kaczmarek, Stasiak, and Włodarczyk (2008) define hospitality as a way of managing a given area that creates a safe and comfortable environment for tourists and links physical infrastructure with friendly local attitudes. Hence, it may be

assumed that the higher the percentage of local residents who are friendly and wish to be good hosts, the more hospitable a given community may be said to be.

A reputation for hospitality is a key element of the nonmaterial value of an entity in the tourist sector and may help it gain competitive advantage. Pistoia is a quiet city where tourists may observe real life in Tuscany, which includes hospitality, openness, and the Italian rhythm of life. Hospitality can make all the difference in a competitive tourist marketplace. It may take on a more intuitive form or a more institutional form. However, the basis of any form of hospitality is service quality and organizational culture. Research literature describes hospitality as a cohesive set of trained behaviors aimed at customers (Piasta, 2007).

Customer satisfaction and general well-being may be used to indirectly evaluate the competitiveness of a given tourist area. Attractiveness in a tourist sense may be defined as easy access to a given geographic area, proper management of local tourist services, meeting customer needs, and general tourist welfare. According to empirical research by Cracolici & Nijkamp (2008), high volume of tourist traffic does not always equal high rates of customer satisfaction. Poor service quality may reduce the competitive advantage of a given tourist area over time. Conversely, high service quality may improve the competitiveness of an area.

The above may lead to the conclusion that tourist volume may indirectly affect the quality of tourist services. Small and midsize tourist towns, which welcome tourists in an authentic manner, possess immense potential in a world filled with mainstream trends. Customized customer care and direct host – customer interactions are possible at lower tourist volumes, while major tourist centers suffer the problem of anonymity, both on the part of the host and that of the customer. Lower tourist volumes in Pistoia are paradoxically an asset. An increase in tourist numbers may fundamentally alter the nature of the city. Commercialization of tourist services may outweigh Pistoia's authenticity and hospitality at some future point in time. In turn, this may indirectly reduce the city's tourist attractiveness.

Pistoia is a city whose art and culture await discovery. Its rich offering of attractions has not yet been fully taken advantage of by the general public (Ruozi, 2009). The city's tourist offering may need to be supplemented by promoting its identity, which consists of three basic ingredients:

- history, art, culture, local traditions
- craftsmanship, high quality local products
- diverse local natural environment

The above ingredients are the key strengths of the city and commune of Pistoia. The city needs to find a place for itself along the trail of a new type of tourist – one who visits mostly small and midsize cities not yet affected by mass tourism (Mariotti, Romei, 2009). In this rapidly changing tourist marketplace, yet another form of tourism is available – niche tourism. This form of tourism is based on high quality service and simple and authentic attractions valued by individuals searching for unique local arts and traditions.

However, history and architecture are not the only determinants of the attractiveness of a city. A number of other components are needed, as every city has many faces: history, culture, architecture, commerce, entertainment. Pistoia is a city that yields an optimal mix of each of the mentioned facets of urban geography. The city is also taking steps to diversify its hotel offering and improve existing tourist infrastructure (Ruozi, 2009).

## Conclusions

Tourism has become a favorite growth strategy for governments of many cities, regardless of size. Cities are attempting to create a niche for themselves in the local or global tourism marketplace. The tourist economy is developed in conjunction with other strategic sectors of the municipal economy (Mariotti, Romei, 2009). Investment in the promotion of tourist attractions, improved tourist infrastructure, and diversification of the tourist offering are all ways to increase tourist traffic and the revenues it generates.

It is world class competitors such as Florence and Pisa, and to some extent Lucca and Prato, that reduce tourist traffic to Pistoia, a city with a rich history and architecture as well as good tourist infrastructure and easy accessibility. Cultural heritage is a fundamental tourist attraction in Pistoia and puts the city on the tourist map of Italy. The city needs to emphasize all aspects of its character including its architecture, arts, traditions, folklore, and material culture. All of these aspects make Pistoia authentic and unique. The city offers rich artistic heritage associated with music, exhibits, events, a historic district, parks, gardens, commerce, services, and high quality tourist guides.

Pistoia also offers social and cultural options normally associated with sophisticated metropolitan areas including pedestrian-friendly zones and so-called slow living. Tourists can take advantage of organ recitals at Romanesque churches, visit a decorative plant garden, view new varieties of roses and decorative bushes, or follow the Olive Oil and Wine Trail or the Scent and Color Trail (*Appennino Pistoiese*).

In summary, it is difficult to know whether the success of Pistoia as a smaller tourist town will depend on increased tourist traffic – in effect, commercialization at the expense of authenticity and hospitality – or whether the city should maintain its genuine character, which will draw fewer tourists, but they will be tourists with a greater awareness of the purpose of their visit.

## References

- Alavi, J., & Yasin, M.M. (2000). A systematic approach to tourism policy. *Journal of Business Research*, 48(2), 147–156.
- Attanasia, I.G., et al. (2013). Cultural investment, local development and instantaneous social capital: A case study of a gathering festival in the South of Italy. *The Journal of Socio-Economics*. DOI: 10.1016/j.socec.2013.05.014

- Borg van der, J., Costa, P., Gotti, G. (1996). Tourism in european heritage cities. *Annals of Tourism Research*, vol. 23, 306–321.
- Bonet, L. (2003). Cultural tourism. In: R. Towse (ed.), *A handbook of cultural economics*. Cheltenham: Edward Elgar.
- Butler, R. W. (1994). Seasonality in tourism: issues and implication. In: A.V. Seaton (ed.), *Tourism: A state of the art*. Chichester, UK: Wiley. 332–339.
- Cellini, R. (2010). Is UNESCO recognition effective in fostering tourism? A comment on Yang, Lin and Han. *Tourism Management*, 32, 452–454.
- Costa, P. & van der Borg, J. (1992). The Management of Tourism in Cities of Art. *Vrije Tijd en Samenleving*, 10(2/3), 45–57.
- Cracolici, M.F., Nijkamp, P. (2008). The attractiveness and competitiveness of tourist destinations: A study of Southern Italian regions. *Tourism Management*, 30, 336–344.
- Crouch, G.I., Ritchie, J.R.B. (1999). Tourism, competitiveness, and societal prosperity. *Journal of Business Research*, 44(3), 137–152.
- Cuccia, T., Rizzo, I. (2010). Tourism seasonality in cultural destinations: Empirical evidence from Sicily. *Tourism Management*, 32, 589–595.
- Durydiwka, M., Duda-Gromada, K. (2011). Między autentycznością a kreacją – tendencje i przyczyny zmian w przestrzeni turystycznej. In: *Przestrzeń turystyczna. Czynniki, różnorodność, zmiany*. Warszawa: Uniwersytet Warszawski, Wydział Geografii i Studiów Regionalnych,
- Enright, M.J., & Newton, J. (2004). Tourism destination competitiveness: a quantitative approach. *Tourism Management*, 25(6), 777–788.
- Figini, P., Vici, L. (2012). Off-season tourists and the cultural offer of a mass-tourism destination: The case of Rimini. *Tourism Management*, 33, 825–839.
- Guizzardi, A., Mazzocchi, A. (2010). Tourism demand for Italy and the business cycle. *Tourism Management*, 31, 367–377.
- Hughes, H. (1996). Redefining cultural tourism. *Annals of Tourism Research*, 24, 707–709.
- ICOMOS. (2002). *International cultural tourism charter. Principles and guidelines for managing tourism at places of cultural and heritage significance*. ICOMOS International Cultural Tourism Committee.
- Kaczmarek, J., Stasiak, A., Włodarczyk, B. (2008). Przestrzeń gościnna - kilka uwag o konkurencyjności regionów. In: G. Gołębowski (ed.), *Turystyka jako czynnik wzrostu konkurencyjności regionów w dobie globalizacji*. Poznań: Akademia Ekonomiczna.
- Kozak, M. (2002). Destination benchmarking. *Annals of Tourism Research*, 29(2), 497–519.
- Kozak, M., Rimmington, M. (1999). Measuring tourist destination competitiveness: conceptual considerations and empirical findings. *Hospitality Management*, 18(3), 273–283.
- Lutak, M. (2011). *Potencjał turystyczno-rekreacyjny miasta i gminy Pistoia w Toskanii*. Praca magisterska, maszynopis. Kraków: Krakowska Akademia im. Andrzeja Frycza Modrzewskiego.
- Massidda, C., Etzo, I. (2012). The determinants of Italian domestic tourism: A panel data analysis. *Tourism Management*, 33, 603–610.
- Melani, V. (2005). *Pistoia*. Pistoia: Tellini.
- Mika, M. (2007). Turystyka miejska. In: W. Kurek (ed.), *Turystyka*. Warszawa: Wydawnictwo Naukowe PWN.
- Peacock, A., Rizzo, I. (2008). *The heritage game. Economics, policy and practice*. Oxford, UK: Oxford University Press.
- Piasta, J. (2007). *Marketing w hotelarstwie*. Warszawa: Hotelarska Firma Ekspercka Jacek Piasta.
- Ritchie, J. R. B., Crouch, G. I. (2000). The competitive destination: a sustainability perspective. *Tourism Management*, 21(1), 1–7.



- Rizzo, I., Throsby, D. (2006). Cultural heritage: economic analysis and public policy. In: V. Ginsburgh, D. Throsby (eds.), *Handbook of the economics of the arts and culture*. Amsterdam: Elsevier.
- Ruhanen, L. (2007). Destination competitiveness. In A. Matias, P. Nijkamp, P. Neto (eds.), *Advances in modern tourism research*. Heidelberg: Physika-Verlag, 133–152.
- Russoa, A.P., Borg, J. van der (2002). Planning considerations for cultural tourism: a case study of four European cities. *Tourism Management*, 23, 631–637.
- Taylor, J.P. (2001). Authenticity and Sincerity in tourism. *Annals of Tourism Research*, 28, 1, 7–26.
- Touring Club Italia, (2007). *L'annuario del turismo e della cultura 2007*. Milano.
- Vezzosi, C. (2009). *Vivai di Pistoia-Arte e Tradizione*. Pistoia: Settegiorni.

www.comune.pistoia.it  
 www.provincia.pistoia.it  
 www.provincia.pistoia.it  
 www.lazzi.it

**Małgorzata Bajgier-Kowalska**, Ph.D., assistant professor, Andrzej Frycz Modrzewski Krakow University, Faculty of Law, Administration and International Relations, Department of International Tourism and Sociological Geography.

Scientific and research issues as well as publication themes are concentrated on the geomorphology problems and issues concerning regional geography. Author's research also concentrate on the problem of tourism and recreation growth, especially on the question of development conditions and functioning of tourist regions in the world including analyses of spatial differentiation of tourist infrastructure and size of tourism itself.

**Renata Rettinger**, Ph.D., assistant professor, Pedagogical University of Cracow, Institute of Geography, Department of Tourism, and Regional Research.

In her research, the author concentrates on the problems of tourism development in the Caribbean region. Her research issues focus on the size and spatial differentiation of tourist infrastructure and tourism volume itself together with the directions of the tourism development. The research topics also include the issue of tourist enclaves as a dominating form of tourist infrastructure in the Caribbean in the light of sustainable development and pro-poor tourism. The member of the Polish Geographical Society.

#### Contact details:

**Małgorzata Bajgier-Kowalska:**

e-mail: malbajkow@interia.pl  
 adres/address: Krakowska Akademia im. Andrzeja Frycza Modrzewskiego,  
 Wydział Prawa, Administracji i Stosunków Międzynarodowych,  
 ul. Gustawa Herlinga-Grudzińskiego 1, 30-705 Kraków (Poland)

**Renata Rettinger:**

e-mail: rettinger@onet.eu  
 adres/address: Uniwersytet Pedagogiczny w Krakowie,  
 Instytut Geografii,  
 ul. Podchorążych 2, 30-084 Kraków (Poland)

# Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica V (2014)

*Sławomir Dorocki, Paweł Brzegowy*

## **Ski and spa tourism as local development strategy – the case of Krynica Zdrój (Poland)**

### **Abstract**

The socio-economic, cultural and technological transformations, characteristic features of the globalization era, result in altering the ways in which tourist and recreational services are rendered, leading to the formation of the so-called mega-tourism trends. At present, tourism has become one of the fastest developing economic branches in many countries around the world. This dynamic development includes, among others, SPA and wellness and outdoor physical activity sectors. Slowly giving up their therapeutic functions, spa resorts aspire to expand their tourist and recreational infrastructure through the organization of ski lifts and slopes and development of other sport facilities. The intention behind this study is to analyze the theoretical assumptions pertaining to health tourism and active recreation in Poland, where the potential of such economic activities is still not fully used. The impact of natural factors on the development of health and mountain tourism and accompanying activities was presented on the basis of Krynica Zdrój located in the Małopolska province. Having reviewed the local development strategy, the impact of tourism on the activization of the city and region economics was determined.

**Key words:** Krynica Zdrój; local development; ski; spa tourism

### **Introduction**

In view of economic, social, technological, and cultural transformations, many ideas of leisure activities are being revalued. Today, demand and supply of tourism and recreation services are changing and undergoing the process of global unification. Now we can observe the so-called mega trends in tourism, understood as global trends noticeable in recent years in the tourism market around the world. Special place in modern transformations of tourism is taken by active leisure and services aimed at the regeneration and preventive health care (spa and wellness type services). A feature of the modern leisure and tourism, and also the direction of their development is health and its various aspects. Particular attention is paid to trends in physical activity in the open air. An important aspect of this global fashion is to use the advantages of the geographical environment in the tourist offer and to move away from passive recreation. These trends affect the whole

society, both older and younger. Older people usually need services related to the improvement of health and regeneration of physical strength. Young people look for mental rest and relaxation in addition to services improving their appearance and health, as well as an opportunity to test their abilities and demonstrate their strengths (Olchowik, 2006). Also, due to greater prosperity and mobility of the inhabitants of developed countries, general access to specialized equipment and a wide range of leisure services in the market, tourist services are now egalitarian, creating the phenomenon of mass tourism. Today, segmentation of qualified tourism is no longer as clear as a dozen or so years ago (Preisler, 2011). An example could be an expedition to the highest peaks of the world or a trip around the world, available to almost every moderately wealthy European. Contemporary tourism is therefore a multifaceted phenomenon combining social, economic and cultural aspects. Tourism is now one of the most dynamically developing sectors of the economy of many countries in the world and it has an increasing impact on local development by creating economic growth and increasing employment (Krupa, Wołowiec, 2010). In addition, the development of active tourism is possible both in areas surrounding large cities and in rural and peripheral regions. It even seems that non-urbanized areas, after investments in the necessary infrastructure are made, are predisposed to the development of this type of activity due to the specific characteristics of the natural environment (Lehto, Oksa, 2004). In this regard, areas most predisposed to the development of active medical tourism seem to be spa towns in the mountains. Therefore, spa tourism, cooperating closely with the tourism sector, takes a special place among tourist services. Spa tourism services were seen for a long time as social and medical services, and their importance for the development of cities and regions was ignored (Krupa, Wołowiec, 2010). Today, the concern for health and for maintaining physical fitness is an important purpose of tourists visiting spas. Globally, it is estimated that the value of medical tourism will grow from 40 trillion US dollars in 2004 to 100 trillion US dollars in 2012 (Herrick, 2007). This trend should be seen as development prospects for Polish spas. Therefore, spas should expand and improve their offer and they should develop an even more abundant set of attractive products in medicine, culture, and active recreation. Spas should form the so-called tourism clusters, combining both medical treatment and active leisure tourism (Nordin 2003, Mańczak, 2010). However, this implies the presence of developed tourist and recreational infrastructure, such as ski lifts and ski slopes, fitness trails, sports facilities, swimming pools, etc. (Wojnarowski, Wołowiec, 2008), especially that nowadays there is a tendency to move away from typical health resort treatments to wellness and SPA services. In case of Poland, this is mainly caused by people's inability to spend 2–3 weeks in a sanatorium and their growing interest in health resorts services for healthy people, wanting only to improve their health and well-being. Therefore, weekend trips and stays for a few days are most common. The purpose of this article is to present the theoretical assumptions about the development and operation of services related to health tourism and active

recreation, and their role in local development. The analysis presents the prevailing trends in spa industry and in active winter tourism and their role in creating local economic growth. These considerations refer to actions taken by the local government of Krynica Zdrój, a well-known health resort and an important place on the Polish ski map.

## **Tourism and local development**

The theoretical assumptions of local development based on local tourism resources can be found in classical theories of regional development. According to Butowski (2010), theoretical basis for tourism development programming may include: theories of endogenous development – identifying the potential of tourism; theories of network development – the construction of tourist products; theories of export base – the commercialization of tourist products. Endogenous resources forming the basis for development based on tourism services include the presence and popularity of local tourist attractions, tourism management (tourism infrastructure), and transport accessibility. An important element of this theory is the involvement of local authorities mainly with regard to territorial marketing (information, promotion, advertising) as well as to technical and institutional infrastructure, determining and supporting the development of tourism. Social relationships (entrepreneurship, openness) may also be of some significance. It should be pointed out that if we analyse local development factors, an increasing importance is attributed to human resources. Therefore, it seems that the aspect of attitudes of local authorities can be complemented by the leadership factor and the theory of “capital attracting models” highlighting the active role of local government. Also social relations, such as pro-tourist and entrepreneurial attitudes of the population can be related to the theory of “production cycle” in which economic development is associated with the development of innovation in tourism product. Therefore, development is most common in tourist areas, where the demand created by tourists stimulates innovation (competitiveness) development, implemented with the use of intangible assets such as attitudes of the inhabitants of the region.

With regard to the theory of network development it should be referred to the concept of tourism product (Więckowski, 2010). Local tourist product is created with the participation of a network of different actors interacting in a given territorial space (Soliński, Krupa, 2006; Zdon-Korzeniowska, 2009). The characteristics of a network tourism product (brand) include: the fragmented structure of entities and tourist facilities, but with a common concept of their operation and their common determinant, interaction between partners for further economies of scale and for developing high quality solutions, as well as the reduction of administrative barriers by collaboration of public and private entities. Also high level of tourism services can have an impact on the positive assessment of the tourists (Winiarczyk-Raźniak, Raźniak, 2010).

Tab. 1. The impact of tourism on the local economy

Traditional elements of tourist attractiveness	Tourism values	Artefacts and cultural and historical values
		Natural values
	Tourism infrastructure	Accommodation
		Catering facilities
Elements of territorial marketing	Promotion and tourist information	Carried out by public authorities with the participation of the private sector
	Creation and commercialization of tourism product	Implemented by public and private sectors
Selected elements of technical infrastructure	Transport infrastructure (accessibility)	External
		Internal
Socio-economic, cultural and political conditions	Environmental infrastructure	
	Attitudes of the local community	Social relations, command of foreign languages, etc.
		Entrepreneurship
	Actions of public authorities	Public policy objectives, investment incentives for the tourism sector
		Ensuring security
		Protecting the environment and historical heritage

Source: Butowski, 2010: 6

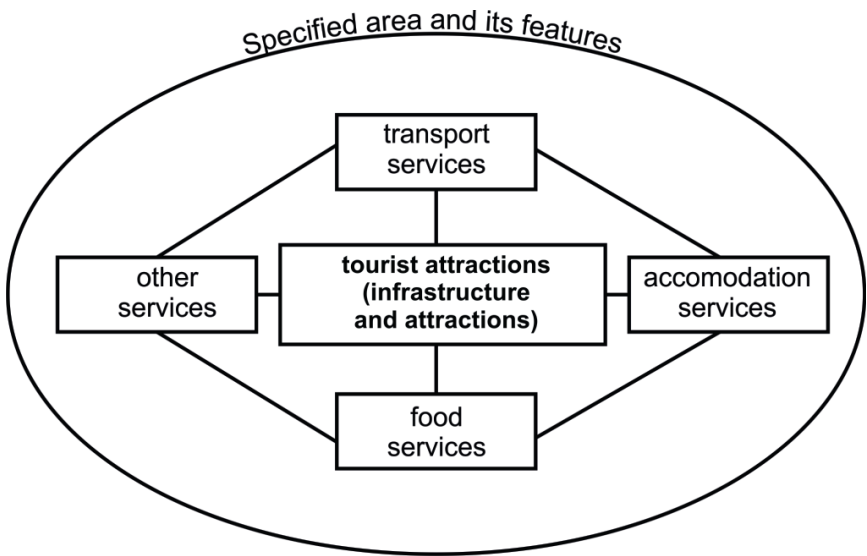


Fig. 1. The structure of tourism product in the “mesh” concept

Source: Butowski, 2010: 8

Horizontal and vertical structure of tourism product is particularly important in a network approach. In horizontal construction, emphasis is put on the similarity or relationship between services and goods offered to tourists in order to create a homogeneous (recognizable) product. Vertical construction of tourism product includes tourist attractions and material infrastructure both in objective terms (tourist services) and subjective terms (service providers, administrators), with close cooperation of all stakeholders.

However, in an attempt to refer the concept of economic base to local development based on tourism services, we must distinguish the key (competitive) tourist industry of the area. This “specialization of tourism form” will form the basis for “exporting” the tourism product and it will create local demand for goods and services linked to and associated with the key industry (the multiplier effect). Similarly, the theory of the basic product relating to regional specialization and export activities can be successfully transposed to local development in the context of tourism development.

An important theory of regional development in the context of local development based on tourism can also be the theory of location (Kožuch, 2011). In this approach, local cultural and historical values take on particular importance (e.g. Rome, Paris, monuments, music festivals, battlefields, traditional products, etc.) because they are unique and do not have competition. Similarly, the values of the natural environment (the highest mountain peaks, north and south poles, relict and endemic species, etc.) create the uniqueness of the place and can provide local strategic resources.

In contrast, the concept of polarization and the theory of cumulative causation by Myrdal and the theory of “core and periphery” are based on the state of disequilibrium that drives the development process, leading to an even greater diversity (Churski, 2004). The premise of these theories is the claim that economic development, both sectoral and local, can take a course in an unsustainable way (centre and periphery). In this approach, tourists choose destinations of their trips by the occurrence of natural assets (mountains, sea, forests, lakes) and anthropogenic attractions (monuments, tourist infrastructure) (Wosiek, 2009). So there are two types of areas. Underdeveloped areas often have natural values that are of interest to tourists from more developed areas. Therefore, tourism can be one of the factors stimulating the development of peripheral regions. On the other hand, there are areas where tourism is continuously one of the most important functions. In these popular tourist areas, tourist offer is continuously expanding and improving. Such activities will be characterized by “innovation”, acting as the local “growth centre”. These theories explain the reasons why certain areas maintain the leading position in the tourism market. On the other hand again, tourism can serve as a motor for economic development not only in tourist centres, but also in peripheral areas (Christaller, 1964).

Finally, we can refer to Marshall’s industrial districts (Amin, 2003). Local specialization leads to economic growth by resources of skilled workers,

development of support and ancillary industries and the possibility of work-sharing between companies and the use of specialized infrastructure. Also, with regard to tourism as local specialization, there is an accumulation of expertise and know-how within the territorial production systems and the creation of an innovative environment, the so called *innovative milieux*. Development of local knowledge networks of businesses and their employees and other institutions consists of collective learning process. Strong emphasis is put on soft factors such as entrepreneurship, trust, extra-industrial interdependence, shared vision of leadership. The most important factor, then, is the ability of local authorities to cooperate with businesses and professionals. It creates favorable conditions for the exchange of information and ideas. In this respect, the geographical proximity of the cooperating companies becomes important (Pietrzyk, 1995). The development of territorial production systems depends to a large extent on historical, social, demographic and political circumstances. However, the key role is played by social (relational) capital. Relational capital refers to the relationships that exist between enterprises operating in the area and public institutions and business environment. These relations are both material – regarding the market, and informal – regarding the phenomenon of reciprocity, that is, the exchange of information and services beyond the purely commercial transactions. In the presented approach, we find a located production system characterized by an interplay of social, economic and cultural factors in a given area. To create such system the population inhabiting the area must have a strong sense of identity, which enables them to notice, in addition to economic benefits, also the advantages arising from social relationships. These features can be found in local communities focused on tourism services. People living in regions with a long tradition of tourist services, such as the region of Podhale or in towns that are known health resorts such as Krynica Zdrój or Szczawnica depend on tourism not only economically. There are also noticeable differences in their mentality, urban culture of residents and actions taken by the local authorities, compared to similar towns and regions. Tourism specialization is mostly reflected in the infrastructure, both in terms of functionality and architecture as well as in entrepreneurial activities of the inhabitants. The tradition of “accommodating holiday-makers” in these towns dates back as early as the first half of the nineteenth century, which had an impact on the formation of tourist infrastructure and social capital of these towns.

Referring to theoretical models of the evolutionary development of tourist areas and health resorts, the authors used the two most popular concepts according to Szromka (2010) explaining the mechanism of the changes taking place in tourist areas, that is concepts by Plog and Butler. According to the concept of Plog created in the late 1960s<sup>1</sup>, there are two personality types of tourists: allocentrics and

---

<sup>1</sup> Theory of Plog met with criticism by Szromek (2010).



psychocentrics<sup>2</sup>. Allocentrics are people who are active and courageous, looking for new sensations and experiences, innovation and uniqueness. They are customers who choose new and innovative products and services regardless of the cost. They are full of energy, assertive and confident, trusting in their own judgement, open and friendly. In contrast, psychocentrics are conservative, they do not tend to take risks, they have no desire to search for new sensations and experiences. They prefer to spend time in a passive way. They are thrifty, they opt for proven products; they make decisions guided by mentor opinions or they mimic actions of public figures. Allocentrics travel more often than others and their stay lasts longer, they spend more money, choose the unknown and uncharted territories, accept the discomfort associated with travel. In contrast, tourist of psychocentric type travel less and for shorter time than others, they spend less money, choose proven destinations with well-developed tourist infrastructure and entertainment offer. Tourists of those two types affect the local environment (social and spatial) in different ways. Evolutionary changes of tourist areas correspond with types of tourist visiting them. Undeveloped tourist areas are first visited by allocentrics. After returning home, they share their experiences with their friends, among whom are para-allocentrics. Because of the information received, para-allocentrics decide to visit the described location. There are more para-allocentrics than allocentrics, so this tourist area will be visited now by many more tourists than before. Thus, a new, demanding group of tourists will initiate the development of both infrastructure and tourist services in the area. The increased popularity of the place attracts the attention of the mass media, which publicize the information about interesting places, increasing their popularity. However, with the development of infrastructure, the area is becoming less attractive for allocentric tourists. In contrast, the area with increased standards of services and increases diversity of attractions attracts tourists with psychocentric characteristics. This results in shortening of the average length of stays, smaller profits recorded by companies, higher customer expectations, etc. The new group of tourists' style of spending holiday affects the positive trends in employment, turnover and income of the entrepreneurs, and in the tax income and the satisfaction of the local population. Therefore, the optimal thing to do for local authorities is to maintain the phase, in which the dominant group of tourists are para-allocentrics, for as long as possible. The main pillars of local development are the distinguishing features of the tourist area and the way they are perceived by travellers. The best results can be achieved by protecting those features that attract tourists, and at the same time, by making them prominent through marketing. As for tourism businesses, they should focus on the appropriate configuration of the tourism product.

Another example of a concept explaining the evolution of a tourist area is the model by Butler (referred to in the literature as TALC, which is the abbreviation of

---

<sup>2</sup> Plog also lists three intermediate groups: near-dependables/near-psychocentrics and near-venturers/near-allocentrics and centrics/mid-centrics.

Tourism Area Life Cycle) based on the theory of product life cycle, which involves phase development of a phenomenon or object (Butler, 2011). In this model, six phases of the evolution of a tourist area were distinguished: exploration, introduction, development, consolidation, stagnation and decline or revival. Evolution phases of the area were distinguished on the basis of the number of visitors who come to the area in a fixed period (usually in a year). The first phase is appearance of a few individual tourists, who are attracted mainly by natural or cultural values of the area. The second phase is the increase in the number of tourists and the creation of tourism services in the area. When tourism is becoming one of the main sources of income in the area, and the number of tourists is equal to or exceeds the number of permanent residents, it is the phase of development. The consolidation phase is the full development of tourism function and slower rate of increase in the number of tourists, with tourism remaining the dominant local economy sector. In the urban space, the medical and tourism functions are separated from residential functions. The phase of stagnation is when the growth in the number of visitors is inhibited, and then the number drops. Economic, social and ecological problems arise. The last phase of the cycle is the post-stagnation phase, in which there is a decrease in the number of tourists, unprofitable tourist facilities are closed, and the offer of services is reduced. This phase may result in total or partial loss of tourist function in the area. The area may, however, enter the phase of revival, by increasing the attractiveness of the area. There are two proposed solutions: introducing new attractiveness, independent of local resources or exploitation of previously unused natural resources.

Kapczyński and Szromka (2008) distinguish two cycles with regard to Polish health resorts. The first one, covering the period 1949–1984, is the development of health resorts based on traditional spa treatment products (balneology and physical medicine). The second, lasting from the mid-1980s and 1990 was the development of the so-called modern spa product, which is a combination of traditional health resort treatment and modern forms of wellness (spa and wellness). In the evolution of Polish spas, we can also distinguish cycles, one of which ended in the early 1990s. Also, relating to the concept of Plog, it may be presumed that the increase in the number of para-allocentrics may be due to the ageing of the population. On the one hand, this fact combined with the increase in wealth of the society that already reached a certain degree of prosperity, can bring more profits, but on the other hand it results in the change of recreation style.

Universal conditions for tourism development should be also mentioned here. There are 4 basic features. The first one is the global nature of tourism reflected in tourism investment location and globalisation of the labour market, as well as the extension of tourist services into the sphere of information technologies. The second feature is the shortening of product life cycle and the acceleration of technological change, which results in high demands regarding the staff. Modern economy is a knowledge-based economy, which means that the importance of highly qualified

staff and of innovation in the development and activities aimed at competitiveness is increasing. Also, the advancing specialization of services means increasing dependence on partners and contributes to the growing quality of goods and services (Kozak, 2008). Today, areas with the best chance for development based on tourism are areas that are able to gain a competitive advantage by introducing technological, organizational or product innovation.

## SPA and ski tourism

Health tourism is one of the types of tourism, adopting health as the objective of tourists. Health tourism is the sum of all the relationships and phenomena resulting from the travel and stay of people whose main motive is to preserve or improve their health (Fig. 1). A special type of health tourism is wellness and spa tourism. These services are primarily intended for people who want to only improve their health condition, mood and appearance. Such a wide range of services can be implemented mainly in the towns with health tourism functions or in tourist-and-spa resorts that offer such services as medical and cosmetic services, relaxation, active recreation and entertainment and catering services.

Also, health tourism has two functions: curative function and tourism. We can distinguish different types of health tourism: therapeutic tourism, which refers to the traditional form and regards sick people, and (taking into account the tourism function) spa tourism, which refers to the modern trends and regards preventive health services based on spa and wellness that do not need to be carried out only in health resorts (Hadzik, Hadzik, 2008).

It can therefore be assumed that traditional methods of medical treatment based on natural resources in health resorts have expanded recently to include new services related to *remise en forme* (regaining form) and providing good mental and physical condition and appearance. The spa and wellness tourism in health resorts is seen as the future of recreation. It is a combination of active rest with health care, use of cosmetics and treatments based on natural raw materials found in medical spas: mineral waters, moor muds etc. Even now most of the products offered in spas in Western European countries are based on spa and wellness programs, which also form a lifestyle that allows the contemporary man to achieve psychophysical balance (Dryglas, 2009).

Development of spa and wellness tourism falling under health resort tourism can have many beneficial effects on the town and the region in which it takes place, in economic, social and environmental terms (Spivack, 1998). Health tourism and active recreation can be the most important factors in increasing the competitiveness of a region and even of an entire country (Müller, Kaufmann, 2000; Pehoiu, 2010; Lubowiecki-Vikuk, 2011). On the other hand, development of spa tourism poses great challenges for the region, in particular for the local government (Henderson, 2003). Towns providing health tourism services are competitive only if they are

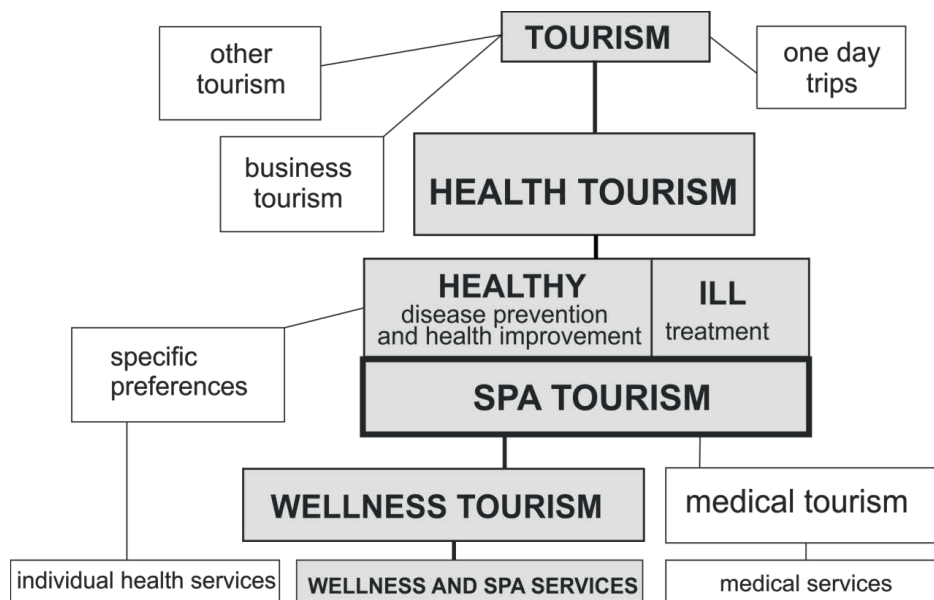


Fig. 2. The position of wellness and spa tourism in health tourism

Source: own study based on Hadzik, 2009

able to expand their offer and diversify the base of the services provided mainly in the area of health and sports (Woolf, 2008). Additionally, there is a need to provide accompanying services, related with accommodation and customer service (bars, parks, ATMs, etc.), and with customers activity (trainers, nutritionists, consultants, services and sports equipment rentals, etc.). Another important challenge for modern spas is to provide clean natural environment and to maintain balance between economic interests and environmental requirements (Jurinčič, Bojnec, 2009). Another barrier to the development of spas is the specific legal situation of health resort municipalities. In Poland, there are legislative restrictions related to the requirements of the Ministry of Health and mining laws (exploitation of natural resources such as mineral waters) (Wołowiec, Duszyński, 2003). There are also legal barriers associated with the location of health resorts in protected areas and in areas of high natural value. These limitations regard the development of infrastructure for recreation and sporting activities and they pose another important problem to the authorities of spas and to interested investors (Zawilińska, 2007).

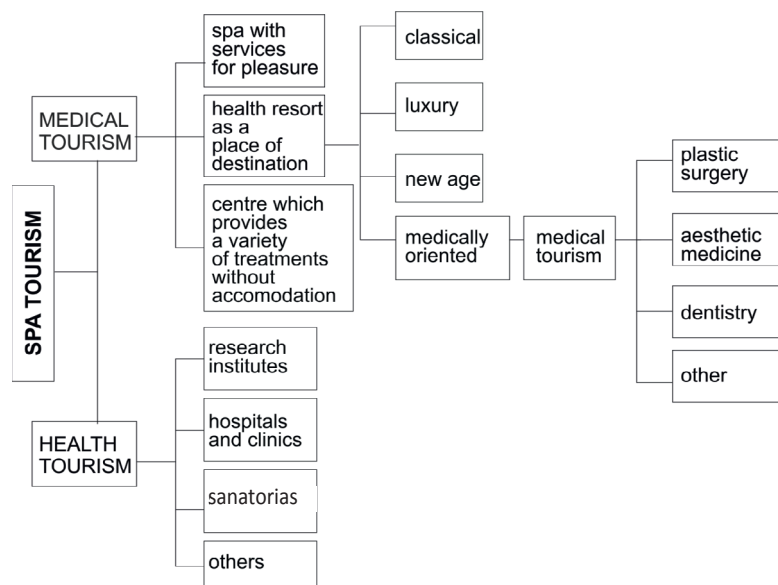


Fig. 3. Model of spa types and their breakdown by services provided

Source: Dryglas, 2009, based on Spivack, 1998

In view of the described trends in tourism services, modern enterprises operate in two intersecting sectors: the tourism sector and the public health sector. In order to maintain the viability of the spa tourism product in the rapidly changing environment, it must be characterized by innovation, competitiveness, complementarity and synergy. In view of the new challenges in creating the spa tourism product and in an attempt to “heal the health resorts”, we must consider the necessity of their transformation into multi-functional centres for health, tourism, recreation, sports and culture, offering a diverse program of services for patients and visitors. This results in new functions of spas. Spas should operate as: places with therapeutic functions based on local medical assets, health centres, “holiday” resorts, places with leisure services, places concentrating leisure and sports activities, centres of education and culture, places associated with running a business – conference and training centres (Krupa, Solina, Bajorek, 2011).

In Poland, tourism and recreation belong to the economic sector, the potential of which is still not fully used, both in terms of tourism assets and resources of the country and services based on these values. The development of tourism industry depends to a large extent on the creation, development and modernization of facilities for tourism such as road infrastructure and tourism products, the creation or development of new tourist attractions, or the development of tourist information system (Żywicka, 2011).

In Poland, you will find that tourism takes a special place in development strategies of an increasing number of municipalities, which is an opportunity for

their economic recovery. An important factor in the development of tourism and associated services, particularly in the areas of health resorts is the appropriate attitude of local governments towards this form of entrepreneurship. It should be noted that nearly 50% of visitors in Polish spas are spa guests paying the full cost and tourists, and their share is always increasing in relation to the number of people coming to the resorts for medical treatment. It is assumed that tourists in Polish health resorts, on average, account for 18% of visitors (Niemiec, Trzcińska, 2011). The promenade and the pump room is no longer sufficient for contemporary patients and tourists. What is needed is a specialized infrastructure: a tennis court, an aqua park, restaurants, etc. Therefore, close cooperation between local governments and health resort owners is necessary.

Nowadays tourism economy (tourism industry), from a local perspective, can be regarded as a specialization of the region. From an economic point of view, a tourist region is an area with tourism demand and supply. The individual characteristics of tourist supply and demand interact to form a synthetic image of tourist economy sector. In tourist areas there is in fact a clash of mobility of tourism demand with spatial concentration of supply (Cudowska-Sojko, 2011). Tourist traffic is directed mainly to places where there are well-known tourist attractions, which are the main force attracting tourists and determining the location of tourist facilities. The demand from tourists coming to the region is cumulative – it occurs in the form of

Tab. 2. The impact of tourism on the local economy

Positive impact	Negative impact
<ul style="list-style-type: none"> <li>– inflow of cash</li> <li>– increase in employment and development of entrepreneurship</li> <li>– stimulation of investment and capital inflow</li> <li>– development of technical, transportation and social infrastructure</li> <li>– attractive image of the region</li> </ul>	<ul style="list-style-type: none"> <li>– price increase</li> <li>– inhibiting the growth of other types of economic activity – the alternative cost of development</li> <li>– overinvestment, overloaded infrastructure, commercialization</li> <li>– the risk of dependent development</li> </ul>

Source: Cudowska-Sojko, 2011

a cluster of needs for an entire package of goods and services. In order to fully satisfy the demand from tourists, there must be a coexistence and interaction of many individual goods and services produced by different manufacturers. The tourist economy as a whole is therefore heterogeneous and complementary. However, temporary fluctuations in demand (seasonality) and the inflexibility of supply make tourism economy unstable and associated with high risk.

Considering the impact of tourism on local development we should take into account a number of aspects. First, tourists visiting the region activate the local economy by declaring demand for certain goods and services and by bringing and spending money. Profits are recorded by both direct providers of tourist services

and companies cooperating with them (the so-called multiplier effect). It is assumed that 100 jobs created in the health tourism generate more than 200 new jobs in other areas of economy (Niemiec, Trzcińska, 2011). This also boosts revenues of local governments in the form of tax revenue. The increasing tourist traffic stimulates local employment market in the region by creating new jobs, professional diversification and the inflow of capital – also foreign capital (Kruczek, Zmyślony, 2010). However, it is important to be aware of the negative phenomena associated with the development of tourism. It is mainly the degradation of natural and cultural resources of the regions and the intensification of negative phenomena such as: transportation problems, increase in the cost of living, noise, increasing pressure of construction projects, environmental pollution, etc. However, compared with other sectors of the economy, tourism is considered to be a factor of great importance for sustainable economic development by generating jobs and income, stimulating investment and other (Simion, et al., 2010).

Due to the increasing financial capacity of inhabitants of developed countries and due to scientific and technological progress, there has been a change in lifestyle, in which the organisation of leisure time is now becoming one of the most important attributes of quality of life. In this aspect, there is a noticeable growing demand for sports and recreation, including skiing<sup>3</sup>. The increased interest in winter physical activity as well as a growing number of businesses that meet these needs mean that this sector plays an increasingly important role in the economy of many regions.

Today's ski tourism, because of its mass character, is one of the main factors supporting the socio-economic development of many towns in mountain areas (Kurek, 2004). Experiences from skiing resorts in Europe and in the world indicate that investments in down-hill skiing infrastructure pay off relatively quick. At the present time in Poland, investors as well as local authorities show strong interest in the creation of new or modernizing existing infrastructure for this form of tourism (Chudy-Hyski, 2005).

The development of skiing was the result of Poles adopting the western system of holidays, which consists of two holiday trips per year. The first one takes place in the summer for recreational purposes or sightseeing, the second trip is in the winter for active leisure. The survey by TNS OBOP (Report on winter tourism [www.wiadomosciturystyczne.pl](http://www.wiadomosciturystyczne.pl), 05.11.2012) shows that on average, every fifth Pole can ski or snowboard. A Polish skier goes for a skiing holiday usually twice a year (38%), and his stay in the mountains lasts no longer than a week (54%). Although in Poland, tourists' interest in winter holidays is still relatively small (approximately 18% of Poles), ski trips are a regular part of the offer of most tour operators. Ski holiday offers are addressed primarily to the wealthy client, who uses it as second holiday trip, in addition to the summer holiday. In Poland, recreational skiing services are still prestigious goods. Therefore, their consumption very often satisfies the needs

---

<sup>3</sup> In this text, the authors understand skiing services as services provided to skiers and other persons practising winter sports such as snowboarders.



for a demonstration of the material status of the buyer. This effect increases with the price of the purchased goods. The increase in prices of ski services can therefore sometimes also contribute to an increase in demand for these services (Puciato, 2010).

In Poland in the last few years, there is a boom in the number of ski resorts and ski lifts. Currently in 2013, according to data from Tatra Voluntary Mountain Rescue (TOPR) and Voluntary Mountain Rescue (GOPR), there are about 181 ski lifts located mostly in the southern part of Poland in the mountainous regions of the Sudetes and the Carpathian Mountains. However, today lifts are also located in the lowlands (Pomerania, Warmia) and near large urban areas (e.g. Warsaw, Katowice, Poznan). The most general requirements for the development of ski and snowboard areas are listed according to the concept of the French (Kunysz, 2010). Winter sports centres should be spatially coherent (no barriers) and harmoniously developed. This regards mainly the aspect of ownership of the land used by skiers. Even small changes in ownership, and hence the possibility of the emergence of barriers on skiing routes may lead to the collapse of the entire resort (these difficulties are common outside the regions with the so-called white snow right). Another requirement for ski stations is the appropriate equipment of each individual ski area. Every slope and ski lift should have an appropriate infrastructure for services (e.g. catering). Also, harmonious combining of all areas into one recreational system will contribute to preventing unnecessary communication barriers (e.g. the introduction of ski passes) (Nowicki, 2010). Another recommendation is an appropriate equipment of the best (most attractive) slopes. Increased number of skiers requires wider ski runs, better preparation of routes, proper lighting and providing places for stopping and rest for skiers. An important element is reshaping the terrain, in order to facilitate skiing and to diversify the trails. Another important aspect of the operation of ski resorts is proper service for accompanying persons and tourists, which results in the diversification of services offered, such as sports equipment rental and maintenance, catering services, parking lots, etc. Another increasingly common requirement for ski lift owners is to provide playgrounds and recreation facilities for children (slopes for sledging, snow parks, the so-called nursery slopes) (Havrlant, 2011). Additionally, the offer of ski resorts is complemented by cross-country skiing trails and trails for skiing tourism, practiced also in Poland (Pasaławska, 2010).

However, the primary factor enabling the development of winter sports is the right natural environment i.e. the presence of snow cover and its suitable thickness and durability, the length of periods with negative air temperatures and the terrain diversity (relief, slope, length, and exposure of slopes, land cover – vegetation, buildings). Currently ski stations may exist both in areas where natural environment creates favourable conditions and in areas where due to lack of these qualities, skiing conditions must be created by humans, as exemplified by ski runs in Muszyna in the Beskid Sadecki.

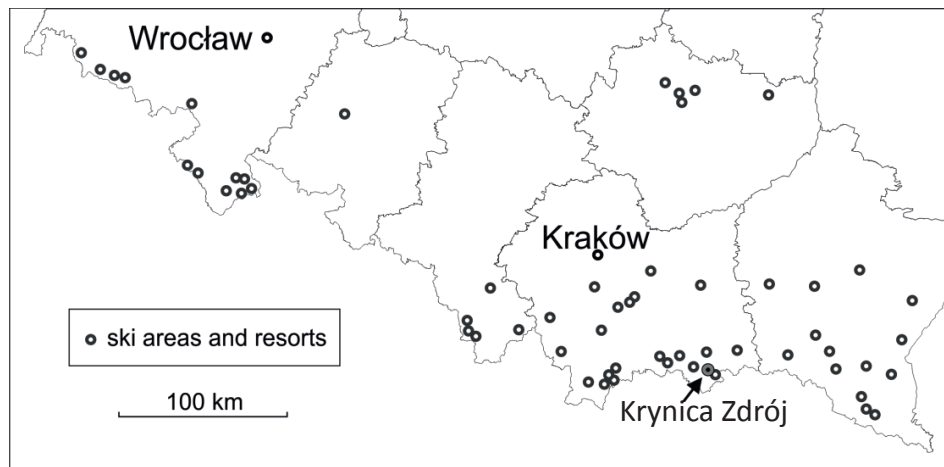


Fig. 4. Location of ski resorts in the mountainous regions of Poland

Source: own study based on data from the Internet

In addition, sports infrastructure enables the organisation of sporting events, which is an additional factor attracting tourists and generating economic growth (Candrea, Ispas, 2010). Organization of sporting events also has an effect on the image of the area and contributes to the popularity of the resort. Marketing activities lead to the formation of a tourism brand which is an important element for local development and for the identity of the area (Stăncioiu Teodorescu, Vlădoi, Baltescu, 2011). Both in Poland and in the world, ski resorts are still struggling with numerous problems, which include the said conflict regarding the status of legal ownership of leased ski areas, ecological limitations on investment in ski infrastructure, safety on ski slopes, shared use of the slopes by skiers and snowboarders, degradation of natural environment of the slopes (Mika, Krzesiwo, Krzesiwo, 2007; Madziková et al., 2011). Despite its seasonality and in analogy to the importance of health tourism for local economic development, ski tourism is one of the most important factors activating the development of mountain areas.

### Krynica SPA and ski resort

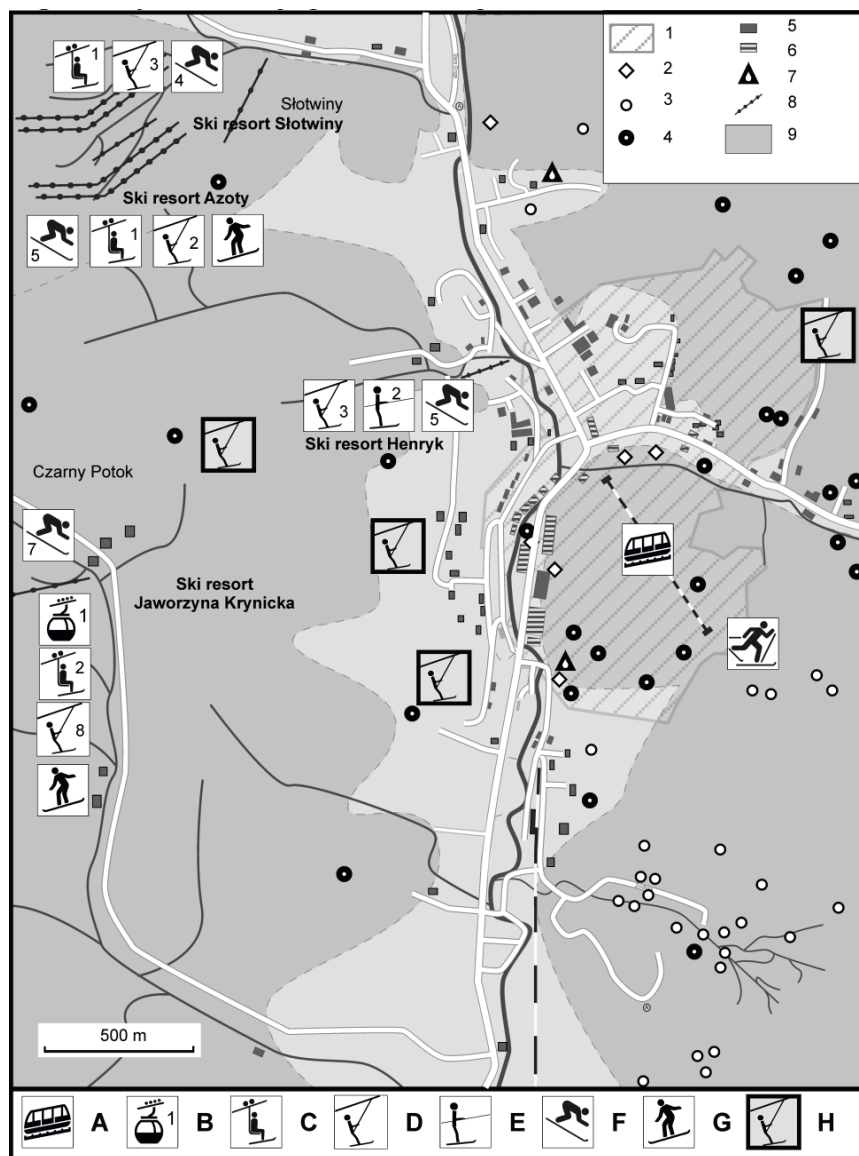
Krynica is located in the southern part of Poland in Małopolska Province. The health resort municipality lies on the northern side of the central part of the Carpathian Mountains, on the border between the Beskid Sądecki and the Beskid Niski. Most of forested mountains surrounding the resort rise to a height of 700 to 950 m above sea level, rarely exceeding 1000 m above sea level. However, the town itself is situated at the foot of the second-highest peak of the Beskid Sądecki, the Jaworzyna Krynicka with 1114 metres above sea level. This mountain range, almost 30 km long,

running from the northwest to southeast, due to its steeper slopes, has become a base for winter sports. This was mainly caused by the location of ski stations on the slopes of Jaworzyna Mt. in Krynica and of the ski station Wierchomla-Szczawnik on the slopes of Pusta Wielka (1061 m). The region of Krynica, including Tylicz – part of the municipality – and neighbouring towns Muszyna and Powroźnik, along with the whole area of Poprad valley, is one of the biggest balneological areas and centres of mineral water bottling in Poland (Figure 1). These resources, in addition to terrain that is suitable for tourism and skiing, favourable climate (mountain microclimate comparable with the climate of alpine valleys), and other natural assets (the Poprad Landscape Park, and the countrywide unique forest park at the Park Hill – Góra Parkowa – in Krynica), are crucial for the development of the resort.

The region of Krynica is an area extremely rich in natural mineral springs. The area of occurrence involves quite a compact space between Krynica Zdrój and Tylicz and Powroźnik and to Piwniczna in the north and to Bardejov in the south. In this area, mineral water is highly carbonated, it contains free carbon dioxide (over 1000 mg/1 litre). The chemical composition of water varies and depends mainly on the depth of the deposition. All “shallow” acidulous waters were created by saturation of atmospheric water with carbon dioxide that comes up from the bottom in the areas of cracks. This is evidenced by the large variation of CO<sub>2</sub> saturation and the chemical composition of water at a constant presence of calcium, magnesium, iron derived from the chemical composition of flysch formations (Świdziński, 1972; Lewkiewicz-Małysa, Macuda, 2007; Rajchel, 2009). Krynica Zdrój has a total of 23 water intakes: five natural springs and 18 wells. According to the list made in 2011 by the Ministry of the Environment, geological resources of water are estimated to be 57.40 m<sup>3</sup>/h and the working (exploitation) resources to be 33.66 m<sup>3</sup>/h. This makes Krynica the location of second biggest healing water resources in the Carpathian region, just after Muszyna (94.30 m<sup>3</sup>/h) and before Tylicz (48.43 m<sup>3</sup>/h). However, in terms of exploitation, Krynica Zdrój takes the third place with 51,980.90 m<sup>3</sup>/year, after Muszyna (188,489.90 m<sup>3</sup>/year) and Piwniczna-Zdrój (88,859.30 m<sup>3</sup>/year). However, regardless of changes in the volume of extraction and mineral water production in Poland, it is Krynica Zdrój that is called the “Pearl among the Polish health resorts”. Krynica mineral waters generated interest already in the first half of the 18<sup>th</sup> century. The historically oldest Main Spring (Zdrój Główny – ZG) is the place where the spa history of Krynica began. The second half of 1850s saw a dynamic development of the resort and growing use of mineral waters in Krynica. In 1856, as part of the activities of the Austrian commission, the construction of new facilities begun, such as B&Bs (called villas), pump rooms, treatment facilities (baths, the Spa House) and park pavilions. In addition to mineral water treatments (balneology), in 1858, treatments were started using the locally extracted mud. This mud was recognized at the beginning of the twentieth century as one of the best in Europe in terms of quality (Skórczewski, 1904). Another important resource for the development of the health resort was exhalation of carbon dioxide. The use of endogenous carbon dioxide was initiated in the 1860s, when gas condensation was started (Ciężkowski,

2002). In 1873, gas baths were introduced in Krynica, which are still offered today. Gas was also used in the food industry. In 1858, the method of filling mineral water bottles with atmospheric carbon dioxide was patented in Krynica, which gave rise to the industry of mineral water bottling. In addition, during the post-war period (1944–1956), Krynica has become an important producer of liquefied natural gas and dry ice. Currently, the spa town produces annually about 200 tons of liquid gas, mainly for bottling industry and medicinal treatments (Ciężkowski, 2002). So in the second half of the nineteenth century, apart from being a health resort, the town was exporting a variety of products: mineral water, ferruginous therapeutic mud, spruce needle extracts, essential oils and other. After World War I, the Polish authorities took over the resort. At that time, some of the sanatorium facilities were renovated and many new ones built. Next to sanatorium infrastructure, new investments were made related to tourism and winter sports. A mountain hut was built on the Jaworzyna Mt. and a cable car on the Parkowa Mt., as well as a winter stadium, a ski jump and a toboggan run. Krynica, hosting many international sport events, has become a world centre for winter sports. In 1919, the health resort was visited by ca. 10 thousand people, while in 1938 this number increased to 40 thousand. After the war, there was an expansion of accommodation facilities, new spa resorts and a natural therapy centre were built as well as the main pump-room with a concert hall and other facilities. The nationalization of the spa industry meant that after 1945 there has been an increase in the number of tourists and patients (about 120 thousand persons using accommodation), while health tourism gave way to health resort function combined with recreation and leisure (Buczek, Quirini-Popławski, 2009).

Thus, considering the example of Krynica, it can be stated that the pre-war period of Polish spas development can serve as a model for the development of spa services, tourism, sport and recreation, and the important function of spas as cultural centers. The law of 1922 provided health resorts with a special legal and financial status, which allowed Polish spas to effectively compete with European resorts. The law distinguished between two types of spas: public and other. Spas of public service had the right to create the Treatment Fund (Fundusz Kuracyjny) supplied with curative tax (30% of the cost of patient's stay and fees charged to entrepreneurs). The functioning of Polish health resorts has been further "strengthened" in 1933 with the introduction of the term "health resort municipality of public service" in the Polish law. Unfortunately, in the post-war period these beautiful centres of cultural life were transformed into large spa hospitals with collective discipline and certain ways of behaving. Principles of health resorts' operation were established that were identical for every health resort in every aspect and in every area. When rules of market economy were introduced after 1989, it became clear that Polish spas are maladjusted to the new economic conditions. The disparities in the standard of medical infrastructure, accommodation and recreation infrastructure became evident (Wołowicz, 2003). Health resorts consist of not only sanatoriums, but also tourist infrastructure constituting about 18% of accommodation facilities in the country.



A) cable railways B) cable cars (gondola) C) chairlift D) platter and t-bar lifts E) handle tows F) ski runs (number) G) snowboard parks H) inoperative or closed ski lifts; 1. zone of strict protection of water in the health resort, 2. mineral water pump-rooms, 3. mineral springs, 4. intake of mineral water, 5. sanatoriums and hotels, 6. sanatoriums created in the nineteenth century, 7. mineral water bottling plants, 8. ski lifts, 9. forests

Fig. 5. Krynica Zdrój spatial development

Source: author's own study

Today Krynica Zdrój continues its economic development, mainly based on its natural potential, allowing the development of health tourism and mountain tourism (Lee et al., 2008). This development is based on three sectors: leisure industry – with extensive use of accommodation and tourist facilities (with a smaller role of spa medical treatment services and the growing importance of beauty and wellness services as well as training and conference tourism), active leisure (ski facilities) and bottling industry (mineral water bottling plants) (Ateneta-Płotkowiak, Swędzioł, 2006). Considering the number of nights spent by tourists in collective accommodation establishments in 2011, stays in spa resorts accommodation facilities accounted for 52% (out of 934,010 overnight stays). However, the bathers were only 26% (out of 158,294) of the total number of guests using the accommodation. It is also noticeable that the number of people using medical treatments is dropping. Mineral water is therefore now becoming raw material for industry and a tourist attraction rather than source of health. They are used both in the beauty spa and wellness services (Lecznictwo uzdrowiskowe w Polsce w latach 2000–2010), as well as in mineral water bottling plants. Despite the long tradition of mineral water bottling, it wasn't until the end of the twentieth century that the bottling industry started to flourish. In 2011, the bottled water market grew by 11% and it is expected to still increase by 15%. Water bottling in Krynica began in 1808, with production at that time reaching 20 thousand bottles (there was a factory opened in Krynica that was manufacturing stoneware bottles for shipping water). Water bottling industry has also developed in the interwar period. There were nine water bottling plants at that time in Poland. In 1935, Krynica health resort bottled about 400 thousand litres of water per year. Before the 1990s, when economic changes occurred in Poland, there were 17 state-owned water bottling plants, one of which was located in Krynica. In the first decade of the 21<sup>st</sup> century, there were about 150 mineral water and table water bottling plants in Poland, four of which are located in the town of Krynica, and further two in the municipality of Krynica Zdrój (Tylicz and Mochnaczka Wyżna). According to the Geological Institute, mineral water approved by the ministry is bottled by only 28 bottling plants in Poland, of which four are located in the municipality Krynica Zdrój (Spa Krynica-Żegiestów S.A., Mineral Complex Sp.z o.o., INEX s.c. (formerly Galatex), Coca-Cola HBC Sp. z o.o. (formerly Multivita) and a further nine in neighbouring towns (Powroźnik, Muszyna, Andrzejówka/Milik, Leluchów). Despite a decline in production of bottling plants Krynica, visible in the decreasing amount of extracted water from 50,806 m<sup>3</sup> in 2008 to 39,567 m<sup>3</sup> in 2012, it can be concluded that this industry is significantly contributing to the economy of the health resort and continues to grow, as evidenced by concessions granted for exploration and research of curative minerals. Water from Krynica is sent not only to the domestic market and Europe, but also to global markets such as China.

Another important factor in the development of the health resort is the sector of sports and leisure services. This term includes services that are created outside the accommodation and catering facilities and are open to everyone and require separate investments related to the construction of special facilities and maintaining

them in a functional state (Buczek, Quirini-Popławski, 2009). There are four ski stations in Krynica Zdrój, with the longest Polish gondola lift on the Jaworzyna Mt. Thanks to the favorable terrain, the municipality has 24 ski lifts with a total length of 15,180 meters and a total capacity of 23,249 skiers per hour. Ski slopes of a total length of 15.8 kilometers can be used by almost 17 thousand skiers per hour. As the result of the growing popularity of Krynica Zdrój as a winter sports centre, ski infrastructure has been developing also in the previously unused neighboring regions. These include the ski station “Dwie Doliny (Two Valleys)” in Wierchomla and Szczawnik (7817 m long ski routes) and the ski station in Tylicz (7430 m long routes). However, compared to neighboring centers, Krynica’s terrain is more advantageous, as evidenced by an average slope of routes averaging 19% (while it is 16% for Tylicz and Wierchomla-Szczawnik) and longer periods of snow retention. Ski lifts in Krynica are located on both the peripheral areas of the town (Czarny Potok and Słotwiny) and its centre (ski station Henryk). The need to diversify services offered by the resorts, especially in order for them to be operating also in the summer season, contributes to the development of other tourist services such as mountain biking, hiking, etc.

Tab. 3. Ski stations in Krynica Zdrój

Ski infrastructure	ski stations				Krynica (total)
	Jaworzyna	Słotwiny	Azoty	Henryk	
Number of ski lifts	11	4	4	5	24
The length of ski lift (m)	9650	2320	2190	1020	15180
The difference in levels (m)	2285	492	431	170	3378
lift capacity [persons/hour]	13200	4200	3449	2400	23249
Number of ski runs	7	9	4	5	25
The length of ski runs (m)	7328	5270	2190	1020	15808
ski runs capacity [persons/hour]	4990	6100	3450	2400	16940
the slope of the route (average %)	23	19	18	15	19

Source: author’s own study

Tab. 4. Ranking of selected ski resorts in the years 2010–2013

Ski station	Routes and ski lifts				Infrastructure				Comfort of skiing and skiers’ impressions				Sum of points				Position in the ranking			
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013
Jaworzyna Krynica	50	62	62	62	17	18	18	13	22	20	18	18	89	100	98	93	1	1	2	3
Białka Tatrzańska	55.5	55.5	70	80	16	18	18	18	16	17	17	17	87.5	90.5	105	115	3	2	1	1
Dwie Doliny	40	47	47	51	18	18	18	18	20	22	22	22	78	87	87	91	5.5	4	5	5
Krynica Azoty	21	n.d.	21	n.d.	12	n.d.	12	n.d.	18	n.d.	17	n.d.	51	n.d.	50	n.d.	29	29	35	n.d.
Tylicz-TopSki	n.d.	n.d.	30	32	n.d.	n.d.	10	14	n.d.	n.d.	15	16	n.d.	n.d.	55	62	n.d.	32	23	15

Source: own study based on data from [podroze.onet.pl](http://podroze.onet.pl) i [newsweek.pl](http://newsweek.pl)



The high position of Krynica Zdrój in the rankings of Polish ski resorts confirms the importance of ski tourism in this area. The table shows that both the ski station at Jaworzyna Krynicka and the neighboring station Dwie Doliny in Wierchomla and Szczawnik are important winter sports resorts comparable to the ski resorts of the Podhale region. A significant process observed in recent years is the growing importance of tourism regions in the direct surroundings of the health resort. An example might be the village of Tylicz, which reached the 15th position in the rankings of ski lifts in Poland.

### Local development strategy

Local development is a long-term process of purposeful change aimed at the improvement of the status quo. The concept of development should be associated with the expected, positive transformations of quantitative, qualitative and structural properties of a given spatial system. Thus, if the system is a socio-territorial unit equipped with a set of economic, spatial and cultural characteristics, then we can speak of development on a local scale (Wołowicz, Reško, 2012). Development in general terms is a positive transformation of quantitative and qualitative nature. It is a process based on endogenous and exogenous factors, which requires a comprehensive approach. Considering internal conditions, local development policy should therefore take into account such factors as geographical location, economic structure and its specific characteristics, the demographic situation and the local labour market, usable resources, natural environment, the characteristics of the local community, cultural background, etc. External conditions include the general trends in economy, politics, technology and society (PEST analysis – Political, Economic, Social and Technological analysis).

An important factor in stimulating economic development of regions is tourism. The particular importance of tourism results from its profitability and its ability to activate economic sectors associated with tourism services. However, local development based on tourism poses many challenges for local authorities referred to in the context of theories and models of tourism development. Krynica Zdrój, as one of few towns in the Polish Carpathians, prepared together with Muszyna, Piwniczna Zdrój and Stary Sącz common strategy for the development of an integrated tourist product (Więclaw-Michniewska, 2011).

This *Strategy for the Development and Promotion of Malopolska spa product for the years 2013–2018* based on the guidelines from the document *Trends of Tourism Development for the Malopolska Region for 2008–2013*, sets out 10 key directions for tourism development<sup>4</sup>. One of the most important directions indicated in the

---

<sup>4</sup> Strategy for the Development and Promotion of Malopolska spa product for the years 2013–2018, Trends of Tourism Development for the Malopolska Region 2008–2013, Kraków 2008, <http://www.sgurp.pl/images/Strategia%20Rozwoju%20i%20Promocji%20MPU.pdf>; <http://www.malopolskie.pl/Pliki/2008/Kierunki.pdf> (18.05.2014).

document was to create a branded product – spa and health tourism of Malopolska province, which should be created by actions:

1. Improving the quality of services in health resorts in Malopolska,
2. Development of tourism infrastructure and accompanying infrastructure for visitors,
3. Expanding tourist offer in areas with health and spa tourism.

These objectives shall be achieved by the use and development of training and conference centres and leisure facilities including spa.

Branded tourist products in Krynica Zdrój indicated in the document are: health resort and spa, skiing, developed sector of MICE (Meetings, Incentive, Conferences, Events) and recreation and cultural tourism.

The spa market is a very dynamically developing element of the hotel market. Tasks for Krynica indicated in the document include attracting new investments such as spa centres.

The target group of the developing health tourism are seniors. The increasing importance of this group is indicated by the newly created special term: “age-friendly” and by international programs supporting tourism of seniors aged 55+. These include “Europe Senior Tourisme – Calypso” and “TOURAGE – Support for Seniors Tourism in Peripheral Regions”, which are designed to contribute to the development of tourism of the elderly in the European Union<sup>5</sup>. Demographic trends entail changes in people’s needs and expectations.

Another target group of developing health tourism are young people who spend a lot of time working and who expect rapid recuperation. This group forces a change in the approach to health resorts, going away from the traditional medical services towards wellness and spa services in health resorts. Curative stays are shortened, and the treatment is accompanied by active and cultural tourism. Weekend trips and stays for a few days are most common, allowing for regenerating psychophysical condition in a short time. The main customer of domestic spa hotels is a domestic tourist, a woman aged 35–45 years. Tourists from business group are interested in medical and beauty treatments as well as in the offer of spas, regenerative treatments, swimming pools and gyms.

One of the ways of creating development based on tourism services is the creation of a regional tourist product (Zdon-Korzeniowska 2009). There are four branded tourist products designated for Krynica Zdrój by the health resort authorities<sup>6</sup>:

1. **“Skiing/Winter”** is a product created on the basis of the high position of Krynica Zdrój in the ranking of ski resorts. In this case, the crucial factor was the presence of the cable car and ski runs on the slopes of Jaworzyna Krynicka, which are considered some of the best in Poland, and this offer is complemented by a number

<sup>5</sup> According to estimates by the World Health Organization, by 2025 there will be 1.2 billion people aged over 60 years, and by 2050 – nearly two billion.

<sup>6</sup> [http://www.wrotamalopolski.pl/NR/rdonlyres/2F0FE15D-DBCA-4E7C-B494-79C419189F62/911760/Uch\\_115.pdf](http://www.wrotamalopolski.pl/NR/rdonlyres/2F0FE15D-DBCA-4E7C-B494-79C419189F62/911760/Uch_115.pdf) (13.05.2014).

of smaller lifts in different parts of the town and municipality. The tasks within this product include: Kolorowe Jarmarki Krynickie (Colourful Fairs in Krynica), ice rink on the promenade, ice sculptures competition, Poland's Championship in Skiing for Advertisement Industry, offer for children - winter in Krynica.

2. **"MICE"** is a product in which the most important event is the annual Economic Forum, establishing the reputation of the town as conference centre and setting the direction of development. In order to keep the Forum in Krynica Zdrój it is necessary to build a conference room for more than a thousand people in the next few years, which will create opportunities to attract other large and prestigious events to the city. In Krynica Zdrój Convention Bureau was established, which periodically collects the entire offer of conferences in the health resort and promotes business tourism<sup>7</sup>.

3. **"Health resort/spa"** is a year-round product, relatively resistant to the seasonality of weather conditions. Krynica has a strong reputation as health resort, although it is currently declining. On this basis build, Krynica Zdrój should create a strong brand as a leading spa resort by such actions as introduction on the market of cosmetics suggesting a link with Krynica.

4. **"Summer in the mountains"** is a diversified product, aimed primarily at families with children, and to a lesser extent, at groups of children and adolescents. It includes a number of tasks, such as the Krynica-Tylicz hiking loop, Letni Salon Małopolski (the Summer Salon of Malopolska), Krynica – Lemko heritage centre, offer for kids – summer in Krynica, Krynica Jogging, April weather in Krynica, Krynica weekend for half price, Kolorowe Jarmarki Krynickie (the Colourful Fair in Krynica).

The strategic principle of tourism products of Krynica Zdrój has been determined: *Krynica, here is the life!* [because] *"here you can touch and taste life in its various manifestations of health, fun, art, food, entertainment, sports and the risk of adventure."* The strategy places a strong emphasis on ordering of public spaces, removal of "plastic" elements, lighting of historic buildings especially those located on the promenade, the development of large and small architecture in accordance with the character of the area. It should be emphasized that Krynica Zdrój is one of the few towns in Poland that have approved their local spatial development plan regulating the direction of transformation and investment opportunities for the health resort. Due to its health resort qualities and the occurrence of medicinal waters in Krynica Zdrój, it was especially difficult to adopt this plan, as it had to be consulted with the District Mining Office in Krakow and with the Ministry of Health, which significantly extended the time, and limited investment opportunities. Preparing the so called health resort statement required much work aimed at documenting the medicinal properties of mineral waters, the state of the sanatorium infrastructure, and the designation of a protection zone for the health resort. This work involved long-term studies of air pollution, noise levels, the purity of water

---

<sup>7</sup> <http://www.krynicaconvention.pl/> (13.05.2014).

and mineral water sources and a detailed inventory of sanatorium and medical infrastructure. The document, very important for land use planning – the Statute of Krynica Health Resort, was adopted on the basis of the decision of the City Council by Resolution No. LII/364/2010 on 21.06.2010.

In spite of the fact that as a result of the financial crisis, Polish tourism industry recorded a decline in international arrivals, the forecast for the coming years of second decade of the twenty first century shows a dynamic development of the sector. Further intensification of sports and recreation activities in Krynica Zdrój requires further development of sports infrastructure. As for winter sports infrastructure, in 2012, there were ski lifts, a toboggan run, trail for classic skiing (Krynica-Tylicz), one indoor and one outdoor ice rink. According to the development strategy of Krynica Zdrój, the tourism sector will be strengthened, as the fundamental substrate of the municipal economy. Traditionally, the most important position in the report on tourism in the city is taken by health tourism. However, it was indicated that there is a need to stimulate business tourism and tourism associated with winter sports. Sports and culture are considered priority areas, the first ones to obtain funding<sup>8</sup>. In the spirit of today's popular ecological paradigm, health resort tourism and other kinds of tourism practiced in the municipality of Krynica Zdrój require closer connection with the idea of sustainable development. Therefore, tourism activities should be seen in a holistic and interdisciplinary way. The extensive tourist infrastructure of 12 thousand beds, the presence of ski facilities and spa infrastructure, conference and concert halls and numerous sports facilities, are considered to be the primary determinants stimulating the development of spa, leisure and commercial services. In the near future, Krynica Zdrój plans to enhance the recreational function in Góra Parkowa (Park Hill), and to create an ethnographic park on its slopes.

## Conclusions

For more than 200 years, Krynica has been developing mainly due to natural conditions and resources. In the early days, the major determinant of the development was the health resort function, stimulated by the presence of medicinal mineral waters. Later, medicinal function of the spa resort was joined by leisure and recreational functions developed due to favorable natural conditions (mountains, forests and climate). Today, the health resort develops using the principle of tourism cluster (or cluster of health and tourism) (Dąbrowska-Zielińska, Wołak-Musiał, 2012). The cluster involves the development of both medical services and tourism as well as sports, leisure, conference, educational and industrial functions. This approach also enables the use of natural resources of Krynica Zdrój. Mineral waters are used both in medicine and regenerative services (spa treatments) and in industry

---

<sup>8</sup> Resolution of the Krynica Zdrój City Council number XLIV.252.2013 from 27 June 2013 on the adoption of the "Strategy for the Development of Krynica Zdroj municipality", Krynica Zdrój 2013, p. 67

and recreation (e.g. as a tourist attraction, in geo-parks, nature trails). However, we cannot forget that these resources were the main factors in the development of tourist infrastructure in the town and helped to publicize the health resort. Also today, they continue to be the main factors that attract tourists to Krynica Zdrój and the neighboring villages. Today Krynica Zdrój is in the big league among Polish health resorts and tourist resorts (in many rankings, it is listed in the first place even before such well-known cities as Krakow and Zakopane, for example, considering the number of sold accommodation nights per number of inhabitants). This situation is the result of both the abundant tourism infrastructure developed in this health resort since the 19<sup>th</sup> century and the rich tradition of leisure and holiday. However, the primary factor has always been the array of natural conditions discussed above. Today, due to technical capabilities and well developed accessibility, many of the services previously reserved only for health resorts and mountain areas are offered also in other places (due to the construction of artificial ski slopes, modern medical treatments and rehabilitation, etc.), which may result in limiting the number of guests in health resorts. However, better accessibility positively impacts the development of services in Krynica health resort, as exemplified by the rapid development of tourist infrastructure and accommodation on the outskirts of the town, for example in Tylicz located ca. 5 km away from Krynica (Dorocki, 2011). It therefore seems appropriate for Krynica Zdrój to continue its comprehensive development taking into account the diversified use of its natural resources.

## References

- Amin, A. (2003). Industrial Districts. In: T.J. Barnes (ed.), *A Companion to Economic Geography*. Oxford: Wiley-Blackwell, 149–168.
- Ateneta-Płotkowiak, J., Swędzioł, W. (2006). Zagospodarowanie turystyczne w gminie Krynica Zdrój. *Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie*, 9, 267–278.
- Biliński, J., Przydział, M. (2004). *Nowe tendencje w turystyce i rekreacji*. Rzeszów: WSIZ Publishing House.
- Buczek, M., Quirini-Popławski, Ł. (2009). Frekwencja kuracjuszy w Krynicy w Karpatach Zachodnich i Truskawcu w Karpatach Wschodnich (Ukraina). *Prace Geograficzne*, 121, 39–58.
- Butler, R.W. (2011). Tourism Area Life Cycle. In: Ch. Cooper (ed.), *Contemporary Tourism Reviews*. Oxford: Goodfellow Publishers Limited, 3–33.
- Butowski, L. (2010). Turystyka jako czynnik rozwoju w świetle wybranych teorii rozwoju regionalnego. *Turyzm*, 20 (1), 5–11.
- Candrea, A.N., Ispas, D.A. (2010). Promoting tourist destinations through sport events. The case of Braşov. *Journal of tourism*, 10, 61–67.
- Christaller, W. (1964). Some considerations of tourism location in Europe: the peripheral regions – underdeveloped countries – recreation areas. *Papers, Regional Science Association*, 12(2), 95–105.
- Chudy-Hyski, D. (2005). Analiza wybranych elementów infrastruktury gmin górskich jako obszarów recepcji narciarstwa w Polsce. *Infrastruktura i ekologia terenów wiejskich*, 3, 5–17.

- Churski, P. (2004). Rozwój regionalny w warunkach transformacji gospodarczej i integracji europejskiej. In: S. Ciok, D. Ilnicki (ed.), *Przekształcenia regionalnych struktur funkcjonalno-przestrzennych. Regionalny wymiar integracji europejskiej*. Wrocław: Instytut Geografii i Rozwoju Regionalnego. Uniwersytet Wrocławski, 31–45.
- Ciężkowski, W. (2002). Wykorzystanie dwutlenku węgla. Występowanie, dokumentowanie i eksploatacja endogenicznego dwutlenku węgla w Polsce. In: W. Ciężkowski (ed.), *Występowanie, dokumentowanie i eksploatacja endogenicznego dwutlenku węgla w Polsce*. Wrocław: Ministerstwo Środowiska Departament Geologii i Koncesji Geologicznych, 55–60.
- Cudowska-Sojko, A. (2011). Rola turystyki w rozwoju regionu aspekt teoretyczny. *Zeszyty Naukowe Uniwersytetu Szczecińskiego, Ekonomiczne Problemy Usług*, 79 (690), 23–33.
- Dąbrowska-Zielińska, K., Wołk-Musiał, E. (2012). Turystyka uzdrowskowa w Polsce i na świecie – perspektywy rozwoju SPA i Wellness w Polsce. *Inżynieria Ekologiczna*, 30, 36–47.
- Dorocki, S. (2007). Stacja Narciarska „Wierchomla” – lokalny ośrodek aktywizacji gospodarczej. *Przedsiębiorczość – Edukacja*, 3, 81–87.
- Dryglas, D. (2009). Innowacje produktowe turystyki uzdrowskowej. In: J. Golba, K. Rymarczyk-Wajda (ed.), *Marketing uzdrowskowy w państwach europejskich, innowacyjne kierunki rozwoju turystyki uzdrowskowej i lecznictwa uzdrowskowego*. Krynica: Stowarzyszenie Gmin Uzdrawiskowych RP, 167–173.
- Hadzik, A. (2009). Turystyka wellness jako przykład innowacyjnego kierunku w uzdrowskach teoria i praktyka. In: J. Golba, K. Rymarczyk-Wajda (ed.), *Marketing uzdrowskowy w państwach europejskich, innowacyjne kierunki rozwoju turystyki uzdrowskowej i lecznictwa uzdrowskowego*. Krynica: Stowarzyszenie Gmin Uzdrawiskowych RP, 199–212.
- Hadzik, A., Hadzik A. (2008). The sustainable tourism of rural health resort areas. The outline of the issue. *Infrastruktura i ekologia terenów wiejskich*, 6, 71–81.
- Havrlant, J. (2011). Kierunki i bariery modernizacji ośrodków sportów zimowych w czeskim regionie turystycznym „Beskidy”. *Prace Geograficzne*, 125, 77–93.
- Henderson, J.C. (2003). Healthcare tourism in Southeast Asia. *Tourism Review International*, 7, 111–121.
- Herrick, D.M. (2007). *Medical Tourism: Global Competition in Health Care*. NCPA Policy Report No. 304, access: [www.ncpa.org/pub/st/st304](http://www.ncpa.org/pub/st/st304).
- Jurinčič, I., Bojnec, Š. (2009). Environmental management in Slovenian tourist enterprises. *International Journal of Sustainable Development and Planning*, 4(3), 226–237.
- Kozak, M. W. (2008). Koncepcje rozwoju turystyki. *Studia Regionalne i Lokalne*, 1(31), 38–59.
- Kożuch, A. (2011). Rola samorządu terytorialnego we wspieraniu rozwoju lokalnego. In: A. Kożuch, A. Noworól (ed.), *Instrumenty zarządzania rozwojem w przedsiębiorczych gminach*. Kraków: Instytut Spraw Publicznych, Uniwersytet Jagielloński, 9–26.
- Kruczek, Z. Zmyślony, P. (2010). *Regiony turystyczne*. Kraków: Proksenia.
- Krupa, J., Soliński, T., Bajorek, M. (2011). Determinanty rozwoju turystyki zrównoważonej i zdrowotnej na terenie uzdrowsk – kreowanie jakości produktu turystycznego i uzdrowskowego. In: T. Soliński, J. Krupa (ed.), *Uwarunkowania innowacyjnego rozwoju uzdrowsk*. Rzeszów: Instytut Gospodarki Wyższej Szkoły Informatyki i Zarządzania, 21–56.
- Krupa, J., Wołowicz, T. (2010). Uzdrawiska Polski Wschodniej wobec wyzwań rozwojowych turystyka zrównoważona. In: J. Hermaniuk, J. Krupa (ed.), *Współczesne trendy funkcjonowania uzdrowsk klastering*. Rzeszów: Instytut Gospodarki Wyższej Szkoły Informatyki i Zarządzania, 7–35.
- Kunysz, P. (2010). Stan zagospodarowania zieleńca pod kątem uprawiania snowboardu w opinii ankietowanych snowboardzistów. *Rozprawy Naukowe AWF we Wrocławiu*, 31, 374–380.
- Kurek, W. (2004). *Turystyka na obszarach górskich Europy*. Kraków: IGiP UJ.



- Leczenie uzdrowiskowe w Polsce w latach 2000–2010. Informacje i opracowania statystyczne (2011). Kraków: Statistical Office in Krakow.
- Lee, Ch., Bergin-Seers, S., Galloway, G., O'Mahony, B., McMurray, A. (2008). *Seasonality in the tourism industry. Impacts and strategies*. Gold Coast: CRC for Sustainable Tourism Pty Ltd.
- Lehto, E., Oksa, J. (2004). Networks for Local Development: Aiming for Visibility, Products and Success. In: A. Árnason, M. Shucksmith, J. Vergunst (ed.) *Comparing Rural Development*. Ashgate, 17–46.
- Lewkiewicz-Małysa, A., Macuda, J. (2007). Możliwości zagospodarowania niewykorzystanych ujęć wód podziemnych w rejonie Krynicy. *Wiertnictwo Nafta Gaz*, 24(1), 291–297.
- Lubowiecki-Vikuk, A.P. (2011). Turystyka medyczna jako produkt eksportowy polskiej gospodarki. *Zeszyty Naukowe Uniwersytetu Szczecińskiego*, 690, 125–137.
- MacCallum, N. Baert, T., Rosato, P., Barbier, S. (2011). Sustainable Tourism and Local Development in Apulia Region. *OECD Local Economic and Employment Development (LEED) Working Papers*, access: <http://dx.doi.org/10.1787/5kgghrkghpd5-en>
- Madziková, A., Klamár, R., Rosič, M., Kaňuk, J. (2011). Główne kierunki i problemy rozwoju turystyki narciarskiej w Republice Słowackiej. *Prace Geograficzne*, 125, 111–128.
- Manczak, I. (2010). Zastosowanie teorii klastra w turystyce. *Sympozja i Konferencje KKMU*, 5, 561–570.
- Mika, M., Krzesiwo, K., Krzesiwo, P. (2007). Współczesne problemy rozwoju ośrodków narciarskich w Polsce – przykład Szczyrku. *Prace Geograficzne*, 117, 63–77.
- Müller, H., Kaufmann, E. L. (2000). Wellness-Tourismus: Eine Analyse des schweizer Marktes und Konsequenzen für die Hotellerie. *Tourism Review*, 55, 26–38.
- Niemiec, W., Trzcińska, H. (2011). Rozwój i znaczenie turystyki uzdrowiskowej w Polsce. *Zeszyty Naukowe Politechniki Rzeszowskiej, Budownictwo i Inżynieria Środowiska*, 58 (2/11), 209–222.
- Nordin, S. (2003). Tourism Clustering & Innovation–Paths to Economic Growth & Development. *Analys och Statistik*, 14. Östersund: ETOUR Utredningsserien.
- Nowacki, M. (2010). Model uwarunkowań cen skipassów w polskich ośrodkach narciarskich. *Zeszyty Naukowe Uniwersytetu Szczecińskiego*, 591, 435–446.
- Olchowik, L. (2006). Wypoczynek z dawką adrenaliny wciąż zyskuje nowych fanów. *Wiadomości Turystyczne*, 15, 11–12.
- Pasławska, M. (2010). Turystyka narciarska jako forma aktywnego wypoczynku w okresie zimy. *Turystyka i Zdrowie*, 4, 155–163.
- Pehoiu, G. (2010). Strategies regarding development of Romanian mountain tourism and sport actuality and perspectives. In: O. Martin, X. Zheng (ed.), *EMESEG'10 Proceedings of the 3rd WSEAS international conference on Engineering mechanics, structures, engineering geology*. Wisconsin: World Scientific and Engineering Academy and Society (WSEAS) Stevens Point, 539–544.
- Petry, R. (2009). Czy w Europie występuje zmierzch uzdrowisk i klasycznego leczenia? In: J. Golba, K. Rymarczyk-Wajda (ed.), *Marketing uzdrowiskowy w państwach europejskich, innowacyjne kierunki rozwoju turystyki uzdrowiskowej i lecznictwa uzdrowiskowego*. Krynica: Stowarzyszenie Gmin Uzdrowiskowych RP, 101–107.
- Pietrzyk, I. (1995). Paradygmat rozwoju regionalnego. In: W. Kosiedowski (ed.), *Gospodarka przestrzenna i regionalna w trakcie przemian*. Toruń: Uniwersytet Mikołaj Kopernika, 13–23.
- Preisler, M., (2011). Turystyka kwalifikowana jako zjawisko społeczne. *Studia Periegetica, Zeszyty Naukowe Wielkopolskiej Wyższej Szkoły Turystyki i Zarządzania w Poznaniu*, 6, 37–43.
- Puciato, D. (2010). Determinanty popytu na narciarskie usługi rekreacyjne. *Rozprawy Naukowe AWF we Wrocławiu*, 31, 357–361.



- Rajchel, L. (2009). Zagłębie rozlewnicze wód mineralnych w dolinie Popradu. *Geologia*, 35(1/2), 278–288.
- Sekliuckiene, J., Langviniene, N. (2009). Service perspectives in healthiness and sport tourism in Lithuania: case of SPA. *Economics & Management*, 14, 505–512.
- Simion, D., Mazilu, M., Patrutescu, M., Ispas, R. (2010). The Economic and Social Contribution of Tourism from the Sustainable Development Point of View. In: *Proceedings of the 5th WSEAS International Conference on Economy and Management Transformation*, I, 53–60.
- Skórczewski, B. (1904). *Krynica jej rozwój i jej obecne potrzeby*. Kraków: Drukarnia Uniwersytetu Jagiellońskiego.
- Soliński, T., Krupa, J. (2006). Rola samorządu lokalnego w tworzeniu produktu turystycznego regionu. In: *Materiały III Międzynarodowej Konferencji Naukowo-Technicznej „Błękitny San”. „Ochrona środowiska, walory przyrodnicze i rozwój turystyki w dolinie Sanu”*. Du-biecko: Związek Gmin Turystycznych Pogórza Dynowskiego, 309–333.
- Spivack, Sh.E. (1998). Health SPA development in the US: A burgeoning component of sport tourism. *Journal of Vacation Marketing*, 4, 65–77.
- Stăncioiu, A.F., Teodorescu, N., Vlădoi, A.D., Băltescu, C. (2011). The Image of the Tourism Destination – a Supporting Element in the Development of the Regional Tourism Brand. Study Case: Muntenia. *Theoretical and Applied Economics*, XVIII, 2(555), 139–152.
- Szromek A.R., Kapczyński A. (2008). Hypotheses concerning the development of Polish spas in the years 1949–2006. *Tourism Management*, 29, 1035–1037.
- Szromek, A.R. (2010). Rozwój obszarów turystycznych i uzdrowiskowych w koncepcjach S.C. Ploga i R.W. Butlera. *Zeszyty Naukowe Politechniki Śląskiej, Organizacja i Zarządzanie*, 54, 305–322.
- Świdziński, H. (1972). Geologia i wody mineralne Krynicy. *Prace Geologiczne*, 70, 14–28.
- Więckowski, M. (2010). Turystyka na obszarach przygranicznych Polski. *Prace Geograficzne*, 224, 223–246.
- Więclaw-Michniewska, J. (2011). Wybrane warunki rozwoju funkcji turystycznej miast Kar-pat Polskich. *Prace Geograficzne*, 125, 179–196.
- Winiarczyk-Raźniak, A., Raźniak, P. (2010). Poziom satysfakcji turystów zagranicznych a wzrost ruchu turystycznego w Meksyku. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 16, 251–258.
- Wojnarowski J., Wołowicz, T. (2008). *Zarządzanie turystyką – hotelarstwem i turystyką uzdro-wiskową. Wybrane aspekty*. Nowy Sącz: Wyższa Szkoła Przedsiębiorczości, 45–47.
- Wołowicz, T. (2003). Bariery finansowe i legislacyjne rozwoju polskich gmin uzdrowisko-owych w perspektywie integracji z Unią Europejską. *Studia Regionalne i Lokalne*, 3(13), 97–107.
- Wołowicz, T., Duszyński, M. (2003). Development limitations of polish spas (legal and finan-cial barriers). *Prace Geograficzne*, 11, 317–326.
- Wołowicz, T., Reško, D. (2012). Strategia rozwoju gminy jako narzędzie zarządzania zmianą gospodarczą. *Zeszyty Naukowe WSEI, seria: Ekonomia*, 5(2), 61–89.
- Woolf, J. (2008). Competitive advantage in the health and fitness industry: developing servi-ces bundles. *Sport Management Review*, 11, 51–75.
- Wosiek, M. (2009). Instytucjonalne uwarunkowania konkurencyjności jednostek terytorial-nych. *Nierówności Społeczne a Wzrost Gospodarczy*, 14, 172–186.
- Zawilińska, B. (2007). Działania władz lokalnych w rozwoju turystyki w karpackich parkach krajobrazowych. *Prace Geograficzne*, 117, 181–193.
- Zdon-Korzeniowska, M. (2009). *Jak kształtować regionalne produkty turystyczne? Teoria i praktyka*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Żywicka, A. (2011). Rola samorządu gospodarczego w rozwoju branży turystycznej w Polsce. *Zeszyty Naukowe WSEI, seria: Administracja*, 1, 153–164.

**Sławomir Dorocki**, Ph.D., Pedagogical University of Cracow, Institute of Geography, Department of Entrepreneurship and Spatial Management. Graduated from Pedagogical University in Cracow MA degree in geography, Ph.D. in history (Institute of European Studies of the Jagiellonian University). Adiunkt (assoc. professor) at Pedagogical University of Cracow, Institute of Geography. His research interests are tied with regional problems and processes of socio-economic regionalization, with particular emphasis on the diversity of Europe, processes of European integration and historical conditions.

**Paweł Brzegowy**, M.A., graduate of the Institute of Political Studies and International Relations at the Jagiellonian University, doctoral student at the Faculty of Geography at the Pedagogical University of Cracow named after the National Education Commission. His main research interests focus on social and economic history of extra-European France departments and communities as well as French and Polish school of political geography.

**Contact details:**

**Sławomir Dorocki:**

e-mail: [sdorocki@up.krakow.pl](mailto:sdorocki@up.krakow.pl)  
adres/address: Uniwersytet Pedagogiczny w Krakowie,  
Instytut Geografii,  
ul. Podchorążych 2, 30-084 Kraków (Poland)

**Paweł Brzegowy:**

e-mail: [pbrzegowy@up.krakow.pl](mailto:pbrzegowy@up.krakow.pl)  
adres/address: Uniwersytet Pedagogiczny w Krakowie,  
Instytut Geografii,  
ul. Podchorążych 2, 30-084 Kraków (Poland)

# Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica V (2014)

*Agnieszka Świątek*

## Roma ethnic minority risk of social exclusion in Poland

### Abstract

Roma people are one of the most colourful minorities in Poland and arouse interest and controversy among contemporary Polish society, nearly monolithic in terms of ethnic origin and nationality. At present, the socio-economic situation of Roma people in Poland and in other European countries is difficult and marked with social exclusion. In the article the author identifies and describes the following symptoms of social exclusion experienced by Roma people in Poland: lack of tolerance in Polish majority, problems relating to the functioning on the labour market and access to education, low standard of living as well as the need for some actions for Roma people in Poland to be taken by governmental authorities. The author refers in the article to numerous results of current surveys on the attitude adopted by Poles towards Roma people, which prove intolerant attitude of Poles to this minority. The second fact that, in the author's opinion, confirms social exclusion of Roma people in Poland is extremely high unemployment rate (90%) among Polish Roma, a consequence of disappearance of typical Roma professions, cultural limitations, stereotypes and very low level of education. This last reason further proves social exclusion of Roma people, although the situation in this respect is dynamically changing. As a result of actions taken by governmental authorities and because of financial support and creation of a post of a Roma assistant and a support teacher since 2004 Roma children have been widely attending schools. Roma ethnic minority is also excluded because of its very low standard of living characterised by the author on the basis of her own research carried out in the Małopolska Region. At the end of the article the author indicates governmental actions aimed at fighting the symptoms of social exclusion taken within the "Program for the Roma Community in Poland".

**Key words:** ethnic education; labour market; Roma people; social exclusion; standard of living; state programs

The National Census of Population and Housing (2011) shows that as many as 93.9% inhabitants of Poland are of a homogeneous Polish national identity. Among a relatively insignificant number of minority representatives in Poland, 16 thousand citizens of the Republic of Poland declared a Roma ethnic minority membership in the census, however, in accordance with more precise estimates of the Ministry of Internal Affairs and Administration, in Poland there are 20,750 Roma people, while the largest community of 3,500 people resides in the Małopolska Region (Program for the Roma community in Poland, 2003).

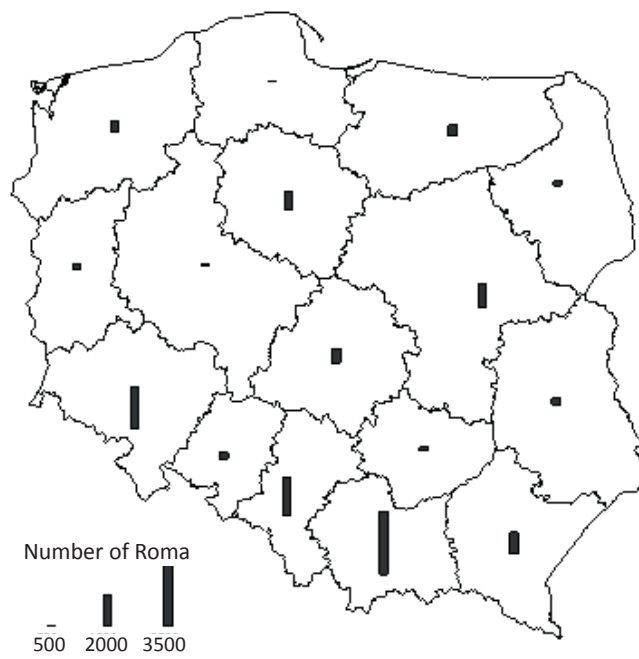


Fig. 1. Distribution and size of Roma ethnic minority in Poland in 2012 as estimated by the Ministry of Internal Affairs and Administration

Source: own work on the basis of data from the Ministry of Internal Affairs and Administration

Roma people, although at present it is a relatively small community (due to a significant decrease as a result of mass murders by Nazis during the Second World War), have been continuously inhabiting Poland for over six hundred years. The first mention of Roma people's presence in Poland was noted in Kraków (in 1401), Lvov (in 1405) and Sanok (in 1419) (Bartos, 2004). Nevertheless, the majority still does not know and certainly does not understand the culture or customs of Roma ethnic minority. Roma community is not an object of Polish geographical research (only of historical, ethnographic and culture-related research), although this issue is widely tackled in foreign literature. It is also worth considering in Poland because most of the Polish Roma are now struggling with social and economic problems, which causes two alarming phenomena showing features of social exclusion: low standard of living of the Roma population and tense relationships with the majority.

The article focuses on Roma ethnic minority in Poland and aims to determine whether it is at risk of social exclusion. In order to achieve this purpose, at the beginning of the article the author mentions symptoms of social exclusion and, based on them, seeks to answer the following questions:

- What is the level of acceptance towards Roma people in the Polish society?
- What is the situation of Polish Roma on the labour market?

- What is the educational situation of Roma people in Poland?
- What is the standard of living of Roma people in Poland?
- Is the Roma community in Poland covered by public aid?

To achieve the set objectives – i.e. find answers to the questions asked, the author of the article studies reference and source materials but also uses results of her own research carried out in 2013. The research was conducted in a form of interviews on a sample of several dozen Roma people and concerned the standard of living of the Roma population in three selected localities in the Małopolska Region inhabited by the largest Roma population in Poland (approx. 17%).

### **Roma people in Poland – at risk of social exclusion**

In reference books in the social sciences “social exclusion” is usually defined either in terms of participation, as: a limited or non-existent participation of individuals and social groups in various spheres of social and public life, or in terms of distribution, as: “limited or non-existent access to important social resources and services, in particular access to labour market [...], education (qualifications), social security system and health care” (Jasińska-Kania, Łodziński, 2009) Roma minority in Poland can be regarded as being at risk of social exclusion, if not already socially excluded, especially in the light of the second definition. Another important symptom of social exclusion, in addition to those enumerated in the above definition, is the lack of acceptance by the majority, frequently connected with signs of discrimination and stereotypes. Social categories that researchers in social sciences often categorise as those at risk of social exclusion include: the unemployed, the poor, the homeless, the disabled, mentally ill, the elderly, persons of sexual orientation other than heterosexual, but also representatives of other races, cultures, followers of other religions, immigrants, refugees as well as of course representatives of national and ethnic minorities. The author claims that the following proves social exclusion of Roma ethnic minority in Poland: intolerant attitude of Poles towards Roma people, problems relating to the functioning on the labour market and access to education, very low standard of living and the need that some actions be taken for these Roma people by governmental authorities.

### **Lack of tolerance in the Polish majority**

The first and, according to the author, the most important symptom of social exclusion of Roma people in Poland is lack of tolerance in Poles towards Roma people and problems relating to social integration of Roma people and Poles which result from ignorance of Roma culture and customs and their different value system. Because of differences between people and especially between groups of people comprising nations or ethnic groups, in our minds people are divided into “our people”, i.e. members of the same nation and “others”, who in many respects differ

from “our people”, and absolute “strangers” whose features contradict the features of “our people” (Mróz, 1986). In line with this division, by large segments of Polish society Roma people are rather regarded as “others”. In order to decide to which category a given person belongs, “our people”, “others” or “strangers”, most people use the following criteria: language, clothes, belief system, way of life, value system and also food and food-related customs as well as anthropological differences (Mróz, 1986). Analysis of Roma customs and culture show that when these features are taken into account, huge differences can be found between Polish and Roma people. Because of these differences Polish people find it so hard to accept Roma people and lack of acceptance leads to stereotypes and finally to – acts of discrimination. Many scientific publications prove their existence. The author will enumerate some of them, in her opinion are the most meaningful.

Research carried out by Aleksandra Jasińska-Kania over attitudes of Poles towards representatives of minorities published in an article dated 2009 shows that over 70% of adult Poles who participated in the research accepts the fact that Roma people are allowed to enter Poland, given Polish citizenship, while less than a half would like to see them as members of local authorities or future spouses of their family members (Jasińska-Kania, 2009). A similar attitude was demonstrated (this time by students) in an earlier research conducted in 1991 by the Department of Sociological Research at the Institute for Scientific Research Policy and Higher Education. Approximately 60% of students declare a dislike for Roma people, would not like to have a Roma holiday companion, family member and especially a Roma superior (Bartosz, 2004). A different research carried out on a much smaller research group of youth in a lower secondary school in Łososina (Małopolska Region) by Wężowicz-Bochenek and Ślosarczyk shows that 84% of Polish pupils taking part in the research say they are for an inflow of permanent immigrants to Poland, but 19% of them say they do not want an inflow of Roma people (Ślosarczyk, Wężowicz-Bochenek, 2007). Research carried out among young people by Piróg (2003) on a sample of 1,032 pupils from the Małopolska Region in 2001 shows that pupils regard Gypsies (22.7%), Ukrainians (23.4%) and Russians (21.5%) as least likeable nations. In a survey published by “Gazeta Wyborcza” in 1992 nearly 30% of young Poles declared that they would not like to share a desk at school with a Roma person (equally strongly as with an HIV-positive person), with a smaller percentage among them received only in case of a mentally ill person and a homosexual. In this classification Roma people shamefully overtake drug users, children of alcoholics, the Germans, Jews and the disabled... (Bartosz, 2004). It is mainly due to a negative stereotype of a Roma person that exists among Poles. In a nationwide survey carried out by the Public Opinion Research Centre (CBOS) in 2008, 42% of Poles that took part in it supported a view that Roma people have a natural predisposition to commit crimes (Szymańczak, 2011). Such views are a consequence of the fact that Poles do not know much about Roma history, tradition and culture. Culture and history-related differences which Poles do not understand can be shown on the example

of: a social structure based on ancestral community, where “being a member of a certain family becomes for an individual a source of prestige and social position and frequently also an opportunity to achieve a higher economic status” (Nowicka, 2007), getting married at a very young age and compliance with Romanipen (a set of rules of conduct passed down orally) (Paszko, Sułkowski, Zawicki, 2007).

### **Problems relating to the functioning on the labour market and access to education**

Another proof of Roma social exclusion are also problems relating to the functioning on the labour market and access to education. The two factors are mutually dependent and mutually driven. Roma people represent a social group which is mostly incapable of keeping up with economic development of contemporary Poland. Of course, it is not true that the whole Roma population experiences economic problems. Roma community in Poland, similarly to other European countries, is characterised by internal diversity and differences between individual groups concern among others attitude to rules and such values as work (Paszko, 2007). In most cases however, Roma people are helpless on the labour market, mainly because of the stereotypical way in which they are perceived by Poles – as thieves and slovens, but above all because of a very low level of education, a factor that has become a determinant of success on the contemporary labour market. In accordance with a report “Roma people – unemployment. Elements describing social situation of Roma people in Poland in 1999”, every third Roma person from a research sample, is not a primary school graduate and as little as 0.8% of the research sample has earned a higher education diploma (Paszko, Sułkowski, Zawicki, 2007). In consequence Roma people face difficulties in finding employment. According to data presented by the Ministry of Internal Affairs and Administration, unemployment rate among Roma people in Poland has remained at a level of over 90% for years, with the highest value noted in the first year when governmental authorities conducted research – 2004, when no one among them was officially employed (Fig. 2) (Reports on the implementation..., 2004–2011). In subsequent years unemployment rate among Roma people in Poland decreased, although it is still very high. Because of that as much as 80% of Roma population depend on state-provided welfare and the result are poor living conditions and a growing crime rate (Matulayová, 2001).

Another equally important reason for the fact that Roma people do not participate in the labour market, apart from lack of tolerance for representatives of Roma ethnic minority among Polish employers, is their history, tradition and culture. Roma people live in accordance with the Romanipen code, which is a set of rules of conduct compliant with a Roma cultural pattern. If the rules of the Romanipen are breached sanctions are imposed, the most serious being permanent exclusion from the group (Nowicka, 2007). Roma people commonly live by the rule, not directly resulting from the Romanipen, which says that “Roma people work when it is



absolutely necessary" (Paszko, 2007). Roma people find work boring and not very profitable, they prefer short-term, often one-off activities that bring profits (Paszko, 2007) (Osuch, Dwojak, 2009). "Roma people hold an opinion that non-Gypsies also work improperly, in a Gadže-like manner, stupidly, monotonously, sluggishly and unprofitably" (Mróz, 1986).

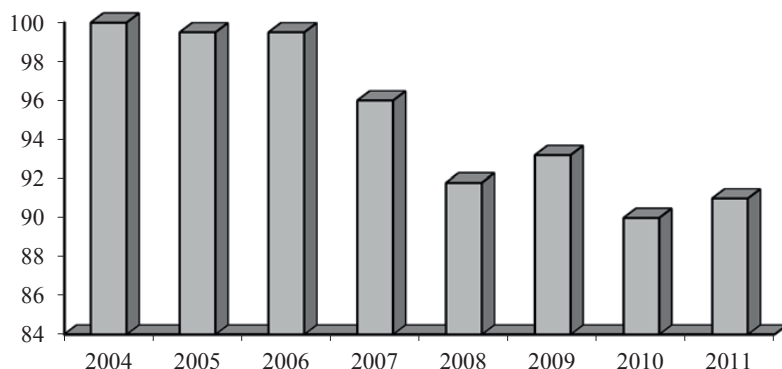


Fig. 2. Unemployment rate of Roma people in Poland in the years 2004-2011 (%)

Source: own study on the basis of Reports on the implementation of the "Program for the Roma Community in Poland" for 2004-2011

Specific attitude towards work among Roma people is reflected in unconventional jobs that they did in the past. They include: playing musical instruments, blacksmith's craft, manufacturing wooden spoons, spindles, bowls, sieve-making, comb-making, horse-trading (sometimes in a dishonest way – they knew special tricks of how to make a horse look younger and healthier at the time of sale), boiler-making, bear shows (showing around tamed bears) and fortune-telling (Paszko 2007).

These days Roma people cannot pursue their traditional professions as there is no demand for their goods or services. The only typical Roma profession, apart from fortune-telling, which has preserved on the modern market is trade, that is why most working Gypsies trade in imported second-hand cars or clothes. They find it easy thanks to relations with representatives of their own group in other European countries (Paszko, Sułkowski, Zawicki, 2007). However, a group of those officially employed is definitely not large. Most of them still work illegally or not at all (Osuch, Dwojak, 2009). Because of this non-entrepreneurial attitude combined with a very low level of education and inability to use entrepreneurship support tools the Gypsy community in Poland is at risk of long-term unemployment (Osuch, Dwojak, 2009).

Due to a permanent shortage of money Gypsies struggle on a daily basis for existence, resources for basic needs of their multiple children families. It is obvious that in the light of such problems purchase of textbooks or school supplies must pale into insignificance. This fact is confirmed in a publication by Kwadrans (2007), who among material things that Roma children lack enumerates season-appropriate

clothing, funds for school transport as well as housing conditions, by which he means having a regular place to study. Wężowicz and Śłosarczyk (2007) also refer to this hopeless financial situation in their article, in which they mention a common phenomenon practised in southern Poland, where they conducted their research, of Roma parents applying for a certificate to confirm that their children are disabled and unable to pursue education so that they could obtain a family supplement, which for them is one of main sources of income (Osuch, Dwojak, 2009).

Unemployed parents who cannot afford to send their children to school or offer them any assistance in receiving education cause their children to follow in their footsteps making the already huge group of the unemployed even larger. Thus, lack of education and the resultant unemployment somehow become hereditary (Osuch, Dwojak, 2009b). However, hopefully this situation will be changing in the nearest future. Since 2004 within the "Program for the Roma Community in Poland" (described in more detail in the paragraph "Actions taken by governmental authorities") education of Roma children in Polish schools has really become common practice. Within the program, Roma children receive support which enables them to attend school and includes co-financed: stay in kindergartens, school kits (textbooks, notebooks and the necessary accessories), school transport, meals at schools, remedial classes and funds for doing homework at school under the supervision of a teacher. Hobby circles are provided, community centres are opened, classes focussed on Roma culture and tradition and also educational and remedial classes are organised for children and youth.

In addition, parents and children are provided with psychological and pedagogical counselling (meetings with parents focussed on compulsory school attendance and compulsory school education) and a scholarship system has been introduced for Roma students and artistically-gifted Roma children and youth.

However, the most important action taken in Poland with a view of providing education for Roma children was the creation of a post of a support teacher and a Roma assistant. Support teachers, specially prepared to work with Roma children, supervise children's work and progress, work with them during classes and after school activities (help in doing homework, conduct remedial classes) and overcome problems resulting from bilingualism. Educational support that they provide is necessary to ensure that Roma children in Polish schools have equal opportunities and are treated as foreign and bicultural students, otherwise, given additional difficulties with integration and huge backlog at school, they have no chance to fulfil compulsory school attendance requirements.

An equally important role, if not more important, is played by Roma assistants – respectable representatives of Roma community selected by Roma people themselves, who become a kind of "liaison officers" between the Roma world and the world of Gadže. Their main duty is to be at school on a daily basis (which often includes taking children to and from school as well) and offering support in day-to-day school problems. Assistants are responsible for attendance and safety of children (otherwise many parents worried about their children's safety would never let them

go to school) and usually initiate and organise activities for children. They perform care and educational functions and offer invaluable support to Gypsy children who struggle on a daily basis with learning and language difficulties, cultural differences and lack of acceptance in Polish-Roma classes.

As a result of what has been done, nowadays Roma children in Poland are educated in Polish-Roma integration classes, which brings about positive outcomes: school dropout rates have decreased significantly, in most regions in the country compulsory school attendance requirements are met at a level of over 80%, Roma children attendance rate exceeds 70% and they achieve a grade point average of about 3 (Reports on the implementation..., 2004–2011).

While the present situation of Roma people on the labour market can be regarded as a proof of social exclusion, the educational situation seems to be different. Adult Roma people carry a burden of exclusion because of their lack of education, while Roma children of school age are not burdened with exclusion thanks to actions taken by governmental authorities.

### **Low standard of living**

Unemployment and lack of education are to blame for a low standard of living of Roma people, which in the author's opinion provides further evidence of their social exclusion. So far this issue has not been widely researched although it has been noticed by governmental authorities and local communities that Roma people belong to. This is also confirmed by preliminary results of research carried out by the author since 2012 among Roma community representatives in the Małopolska Region. The author will present results of a diagnostic survey conducted in a form of interviews among several dozen Roma people living in three localities in the Małopolska Region that differ in size and character: Krośnica (a village with a population of 6,702 (including 56 Roma people)), Limanowa (a small town of about 15,132 people (including 145 Roma people)) and Nowy Sącz (an important city in the region with a population of 84,129 (including 750 Roma people)). In order to assess the standard of living of her respondents, the author focusses on indicators relating to: respondents' situation on the labour market, the sources of household income, opinion on the level of satisfaction of their financial needs, place of residence and household infrastructure.

Adult Roma people who took part in the Author's research are in a very difficult situation on the labour market. Unemployment rate is the highest in Krośnica (nearly 100%), high in Nowy Sącz (65%) and the lowest in Limanowa (over 45%). Therefore, in all three localities Roma respondents' households have income from non-work sources. A vast majority of Roma people in Nowy Sącz (82%) live off social assistance benefits and in Krośnica more than a half (54.2%). While Roma people in Limanowa most often indicate an unemployment benefit as their source of income (63.5%).

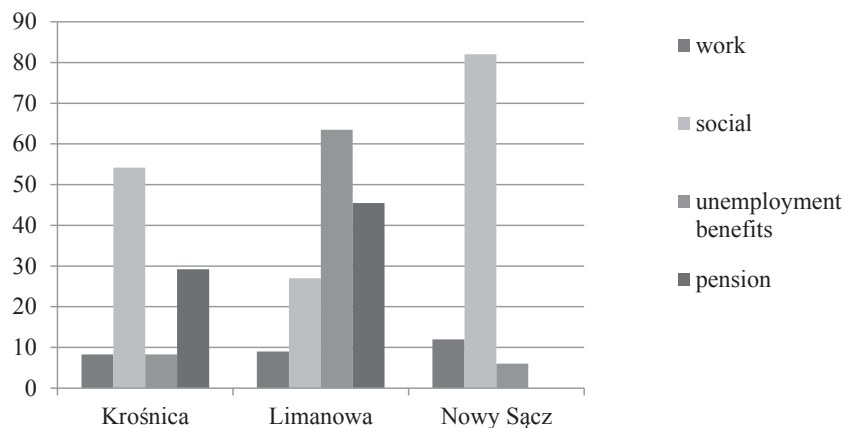


Fig. 3. Sources of income declared by Roma households (%)

Source: own work on the basis of own research

In consequence, financial needs of those Roma people are satisfied only to a very insignificant degree. The worst situation is in Krośnica, where a half of respondents claimed that sometimes they cannot even afford food whereas in Limanowa and Nowy Sącz most respondents (73% and 82% respectively) declare that they can afford food but find it difficult to pay utility bills and make other purchases. Monthly gross income per household among Roma people who took part in the survey amounts to: Krośnica: 694 zlotys, Limanowa: 1,173 zlotys, Nowy Sącz: 1,011 zlotys.

Housing situation of Roma people who participated in the survey is difficult as well. They live in multi-generational and multiple children families. An average number of people per respondent's household is high: the highest in Nowy Sącz (on average 9.8 persons), in Limanowa 6.6 persons and in Krośnica 4.75. An average number of children is also high: in Nowy Sącz – 4.9, in Limanowa – 4.7 and in Krośnica – 4.25. The situation is very different among the majority, where fertility rate is very low, lower than replacement fertility rate, and the bigger the locality the lower the rate – quite the contrary than in the case of the Roma people who participated in the survey. Most Roma in Nowy Sącz and Limanowa live in council flats (77% and 73% respectively) located in blocks of flats or temporary buildings adapted for residential purposes. It is different in Krośnica, where most premises are Roma property (91.7%), but they are in a very bad condition (these are mostly barracks with no foundations or heating).

The level of infrastructure that Roma premises in localities covered by the survey are provided with significantly differs from household to household. The worst situation is noted in Krośnica, where buildings used for residential purposes are not provided with running water, central heating, underground drainage, not to mention other facilities. Roma people from Limanowa have better living conditions as nearly half of their flats have been provided with basic infrastructure, while nearly all Roma people residing in Nowy Sącz live in blocks of flats and their flats are provided with all typically available utilities and devices.

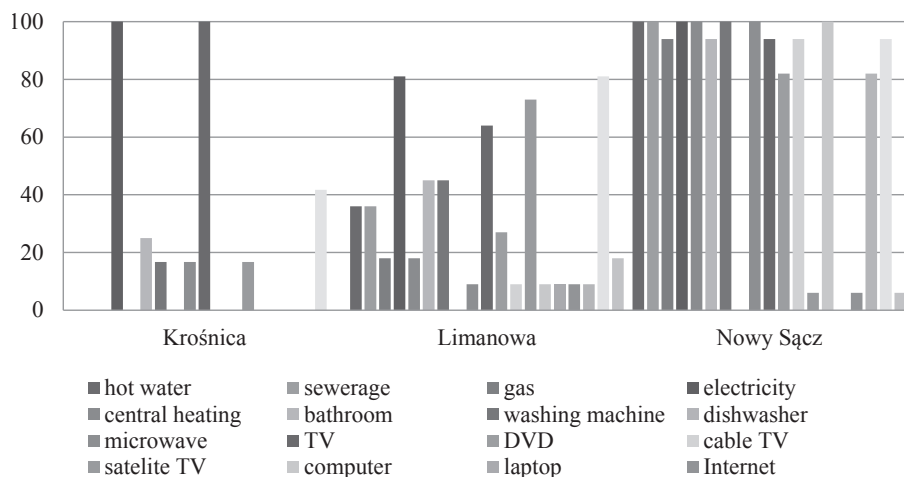


Fig. 4. Infrastructure of Roma households in Krośnica, Limanowa and Nowy Sącz (%)

Source: own work on the basis of own research

It must be concluded on the basis of preliminary results of research on the standard of living of Roma people in localities representative of the Małopolska Region that it is low, though differs from locality to locality in terms of some aspects. Undoubtedly it is an important symptom of social exclusion of Roma people in the region of Poland where their population is largest.

### Actions taken by governmental authorities

The conditions signalled must be treated as symptoms of social exclusion suffered by Roma people in Poland.

At present marginalization and exclusion have a wider connotation and relate not only to social problems but also to areas that determine general socio-cultural situation of children, youth and adults. That is why now it is necessary to monitor (diagnose) the state and reasons as well as consequences of marginalization and exclusion, [...] so that assistance measures could be taken (Trempała, 2005).

The mere fact that governmental authorities take actions for a given community can act as a determinant that social exclusion takes place in case of this community.

The first one and so far the most important state program that addresses the problems of Roma minority in Poland is the "Program for the Roma Community in Poland". The Program was implemented in 2004 within the entire territory of Poland after its pilot version had been introduced in the Małopolska Region under the name the "Pilot Government Program for the Roma Community in the Małopolska Region for 2001–2003". The nationwide program for 2004–2013, which can be continued in subsequent years, was created on the basis of the pilot version.

Every year 10 million zlotys are designated for the program from a special reserve set up in the state budget. This amount is supplemented with additional resources from budgets of the Ministry of Internal Affairs and Administration (approx. 300 thousand zlotys) and the Ministry of National Education (approx. 700 thousand zlotys) (Szymańczak, 2011).

International and national foundations and organizations also contribute some amounts from their resources. The program aims at equalizing levels and opportunities between Poles and Roma people in such fields as: education, employment, health, hygiene, housing conditions and ability to function in the civic society. Beginning from 2014 further actions aimed at Roma people will be taken under the “Program of the Social Roma Integration in Poland for 2014–2020”. According to the author, state aid is definitely necessary, but sometimes not well allocated. Despite the above described obviously positive actions and support provided in the area of education, other funds spent within the program on other fields could have been more effectively allocated. One of the most important problems experienced by Roma minority is large-scale unemployment. Unfortunately in this key area operation of the program leaves a lot to be desired. For example, in the Małopolska Region, where Roma population is the largest in Poland (approx. 3,500), number of trainings aimed at increasing their qualifications with a view of giving them better chances on the labor market in the years 2004–2011 never reached 10. Also the number of subsidized jobs created in the years when the survey was carried out was usually below 10. Investments were commonly made in renovations of existing premises rather than in building new flats – the greatest number of them was renovated in 2010 – as many as 130. Taking into account the size of Roma population in the Małopolska Region and existence of several member households, it is possible to conclude that the premises are renovated every few years. Given the deplorable condition of the premises coupled with lack of care among the inhabitants (since these are council houses) this is a waste of money.

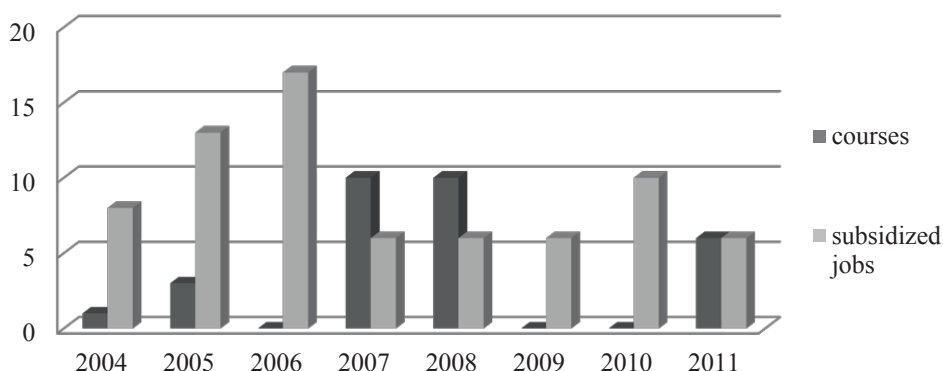


Fig. 5. Number of Roma participating in courses for lifting or changing skills and benefiting from subsidized jobs in the Małopolska province in the years 2004–2011

Source: own work on the basis of own research

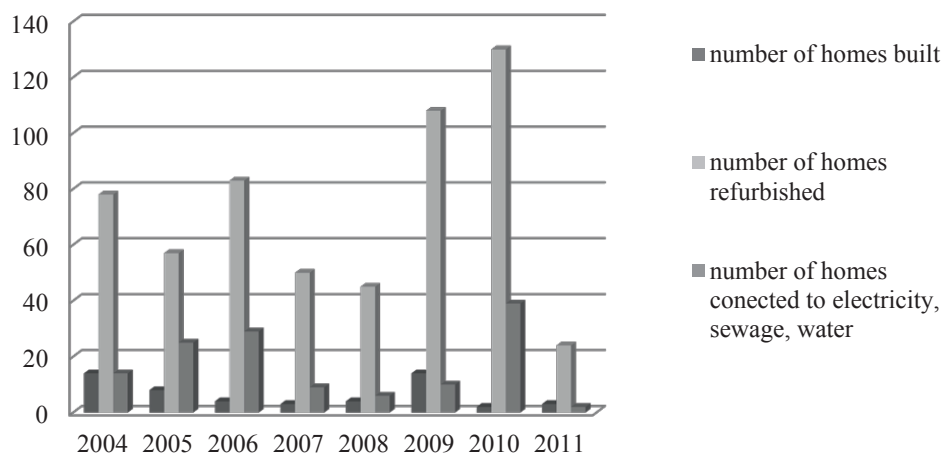


Fig. 6. Public actions taken to improve the living conditions of the Roma in the Małopolska province in the years 2004–2011

Source: own work on the basis of own research

## Conclusions

Analyses of reference books, ministerial reports and results of research carried out by the author and others lead to a conclusion that Roma people in Poland are a group at a serious risk of social exclusion. This is confirmed by answers to questions set as the paper's objective which at the same time constitute a summary of the discussion conducted in the article:

- Level of acceptance of Roma people in Polish society is very low. When social relations become more intimate Roma people are rejected by Polish people of different ages. This is accompanied by strong misunderstanding and lack of knowledge of Roma culture which is to blame to a significant extent for a negative stereotype of Gypsies formed among Polish people.
- The situation of Polish Roma on the labour market is dramatic. Approximately 90% of them are unemployed and most are helpless on the labour market due to lack of education.
- At present the educational situation of Roma people in Poland is bad which is confirmed by a low level of education among adult Roma. However, the situation has been getting decidedly better in recent years as a result of actions taken by governmental authorities leading to the creation of conditions conducive to effective education of Roma children and giving Roma children a chance to avoid the fate of their unemployed parents.
- The standard of living of Roma people in Poland determined on the example of research carried out in the Małopolska Region is low. Many Roma people live in council flats not equipped with basic infrastructure.



- Roma community in Poland is covered by and requires state aid within the “Program for the Roma Community in Poland”. Actions taken by governmental authorities confirm the risk of social exclusion. Most of these actions are intentional but the method of funds distribution within particular areas of the program should be verified.

## References

- Bartos, A. (2004). *Nie bój się Cygana. Na daro Romestar*. Sejny: Fundacja Pogranicze.
- Jasińska-Kania, A. (2009). Wykluczanie z narodu: dystanse społeczne wobec mniejszości narodowych i migrantów. In: A. Jasińska-Kania, S. Łodziński (ed.), *Obszary i formy wykluczenia etnicznego w Polsce, mniejszości narodowe, imigranci, uchodźcy*. Warszawa: Wydawnictwo Naukowe Scholar, 39–57.
- Jasińska-Kania, A., Łodziński, S. (2009). Wprowadzenie. Obszary i formy wykluczenia etnicznego w Polsce. Koncepcje teoretyczne i badania empiryczne. In: A. Jasińska-Kania, S. Łodziński (ed.), *Obszary i formy wykluczenia etnicznego w Polsce, mniejszości narodowe, imigranci, uchodźcy*. Warszawa: Wydawnictwo Naukowe Scholar.
- Kwadrans, Ł. (2007). Charakterystyka sytuacji edukacyjnej Romów w Czechach, Polsce i Słowacji po 1989 roku. In: P. Borek (ed.), *Romowie w Polsce i Europie*. Kraków: Wydawnictwo Naukowe Akademii Pedagogicznej, 233–248.
- Matulayová, T. (2001). Praca socjalna w środowisku Romów. In: Z. Jasiński, T. Lewowicki (ed.), *Oświata etniczna w Europie Środkowej*. Opole: Wydawnictwo Uniwersytetu Opolskiego, 335–338.
- Mróz, L. (1986). Wyróżnianie grupy własnej przez Cyganów w Polsce: swojskość, inność, obcość. In: W. Dynowski (ed.) *Etnografia Polska*, XXX: 1. Wrocław, Warszawa, Kraków, Gdańsk, Łódź: Zakład Narodowy im. Ossolińskich, Wydawnictwo PAN, 139–162.
- Nowicka, E. (2007). Romowie i świat współczesny. In: P. Borek (ed.), *Romowie w Polsce i Europie*. Kraków: Wydawnictwo Naukowe Akademii Pedagogicznej, 124–147.
- Osuch, W., Dwojak, A. (2009). Wspieranie przedsiębiorczości przez przeciwdziałanie marginalizacji społeczno-economicznej grup nieprzystosowanych do konkurencji w gospodarce rynkowej, jako dążenie do zrównoważonego rozwoju społeczeństwa informacyjnego (na przykładzie Romów polskich). In: Z. Ziolo i T. Rachwał (ed.), *Rola przedsiębiorczości w kształtowaniu społeczeństwa informacyjnego*. Warszawa–Kraków: Wydawnictwo Nowa Era, Zakład Przedsiębiorczości i Gospodarki Przestrzennej IG UP, 244–253.
- Paszko, A. (2007). Romowie i polskie doświadczenie wolnego rynku. In: P. Borek (ed.), *Romowie w Polsce i Europie*. Kraków: Wydawnictwo Naukowe Akademii Pedagogicznej, 204–216.
- Paszko, A., Sułkowski, R., Zawicki, M. (ed.). (2007). *Romowie na rynku pracy*. Kraków: Małopolska Szkoła Administracji Publicznej Akademii Ekonomicznej w Krakowie.
- Piróg, D. (2003). Stan wiedzy i postawy uczniów polskich, brytyjskich i niemieckich wobec procesów integracyjnych w Europie. In: *Edukacja geograficzno-przyrodnicza w dobie globalizacji i integracji europejskiej*. Opole: PTG Oddział w Opolu, 59–67.
- Szymańczak, J. (2011). Społeczność Romów w Polsce. Analizy Biura Analiz Sejmowych, 1 (45).
- Słosarczyk, I., Wężowicz-Bochenek, B. (2007). Edukacja młodzieży romskiej w polskiej szkole na przykładzie gimnazjum w Łososinie. In: W. Osuch (ed.), *Wybrane problemy edukacyjne i kulturowe niektórych mniejszości narodowych i etnicznych w Polsce i Europie*. Kraków: Geoinfo, 101–112.

Trempała, E. (2005). Zagrożenia rozwoju człowieka marginalizacją i wykluczeniem w środowiskach lokalnych a pedagogika społeczna. In: K. Marzec-Holka (ed.), *Marginalizacja w problematyce pedagogiki społecznej i praktyce pracy socjalnej*. Bydgoszcz: Wydawnictwo Kazimierza Wielkiego.

National Census of Population and Housing in Poland, GUS, 2011, Warsaw.

Program for the Roma community in Poland, 2003, MIA, Warsaw.

Reports on the implementation of the "Programme for the Roma community in Poland" in the years 2004–2011.

**Agnieszka Świątek**, M.A., Pedagogical University of Cracow, Institute of Geography, Department of Geographical Education, was born in Kraków and in 2010 graduated from the Faculty of Geography with a major in the Department of Entrepreneurship and Spatial Management at the Pedagogical University of Cracow, named after the National Education Commission in Kraków. By profession the author is a teacher of Geography and Basics of Entrepreneurship. At present she is a university lecturer employed as an assistant at the Department of Didactic Geography, Institute of Geography at the Pedagogical University in Kraków. Her interests comprise three research areas: education, issues of entrepreneurship and the situation of Roma ethnic minority in Poland. Author's scientific interests resulted in undertaking research and now she is preparing a doctoral dissertation entitled: "Education as an element of standard of living of the Roma ethnic minority in the Małopolska Region". The member of the Polish Geographical Society.

**Contact details:**

e-mail: swietekaga@wp.pl

adres/address: Uniwersytet Pedagogiczny w Krakowie,

Instytut Geografii, Zakład Dydaktyki Geografii,

ul. Podchorążych 2, 30-084 Kraków (Poland)

# Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica V (2014)

*Mariola Tracz*

## Motives for the choice of geography in Matura<sup>1</sup> examinations in the context of Poland's examination policy

### Abstract

The educational reform in 1999 introduced external examinations into the Polish system of education. The examinations are carried out on the basis of educational standards for individual subjects and subject groups. External examinations, especially new Matura examination, changed diametrically previous solutions which is a challenge to teachers, students and parents.

Being frequently chosen by students out of the group of optional subjects, geography has a large contribution to Matura overall results. Therefore, a question arises what makes young people decide to take Matura examination in geography. The study shows the results of a survey carried out among those Matura grade students who chose geography for Matura in 2012. The gathered results also allowed to estimate how the alterations introduced by Ministry of Education into the procedures of examination subjects' choice influence students' choice in relation to geography.

**Keywords:** choice of geography on an examination; educational reform; examination policy; geography; motives

### Introduction

Introduced in 1999, the reform of the system of education in Poland launched external examinations coordinated by Central Examination Commission (CEC). Since 2002, pupils take obligatory examination at the end of primary school (at the age of 13) and gymnasium (at the age of 16). The third examination, Matura (at the age of 19), introduced in a new form in 2005, has great significance as it opens paths for further education in state or private universities and colleges or in post-Matura schools.

From 1994, works were carried out on the concept for new Matura examination as a part of ministerial project "Nowa Matura" and SMART. The new Matura examination form comprises three compulsory exams: Polish, a foreign modern

---

<sup>1</sup> Examinations usually taken in Poland at the age of 19, necessary for entrance to university; the equivalent of A level exams in British schools.

language and one subject chosen from a group of obligatory ones. Students have the right to choose the level of an exam subject – basic or extended. Apart from that, they can take some extra subjects examinations. Geography is the subject included in the list of obligatory subjects to choose from.

In 2010, a modification to Matura examination took place. Mathematics was introduced as the third compulsory subject for Matura examination. The remaining subjects may be chosen by students as additional ones, but their number must not exceed 6. According to Central Examination Commission data, students usually choose one (45,2% of students), two (27,5%) or three (27,5%) additional subjects for Matura examinations. Currently, geography is included in the group of additional subjects which may be taken on basic or extended level.

### **Geography in Matura examinations in 2005–2013**

Matura examination in geography on basic level lasts for 120 minutes. An exam sheet I-basic level comprises, on average, 30 questions (multiple choice and open-ended), a topographical map of a given area (e.g. national or landscape park) at a scale of 1 : 50 000 and other source materials (table, photographs, figures, etc.). Extended level examination, on the other hand, has been subject to change in the analyzed period. In 2005–2006, the exam lasted for 240 minutes and was divided into two parts; the first part lasted for 120 minutes and comprised questions from exam paper I, while the second part consisted of open-ended questions put in paper II (socio-economic and regional geography). Since 2007, extended-level exam lasts for 150 minutes and contains just one paper with a topographic map of a given area added to it. An extended-level paper comprises, on average, 34–36 questions.

The examination sheets contained a various number of tasks. They included open-ended and closed-ended questions. Out of all sheets, closed-ended questions predominated in more sheets, open-ended ones prevailed in less sheets. Typically, more tasks were prepared to verify the knowledge than to check the skill. The number of closed-ended tasks and the tasks verifying the knowledge has increased, while the number of open-ended tasks and the tasks checking the skill has decreased. These unfavorable trends were observed at high school final examinations in the years 2005–2011 (Tracz, 2013).

Out of the total number of sheets, tasks related to geography of the world predominated in 9 sheets, while tasks related to geography of Poland prevailed in 5 sheets. At the basic level of the matura examination, greater emphasis was put on the knowledge of geography of Poland, while at the extended level – on the geography of the world (Wójcik, 2013).

**Zadanie 19. (2 pkt)**

W tabeli zamieszczono wartości salda migracji wewnętrznych ludności Polski w wybranych latach.

Lata	1961–1965	1971–1975	1981–1985	1986–1990	2000	2002	2003	2005	2006
	przeciętne roczne w tysiącach osób				w tysiącach osób				
Saldo migracji w miastach	+100,6	+187,6	+137,2	+131,6	-4,2	-17,6	-30,4	-32,6	-35,1

Na podstawie: Świat w liczbach 2007/2008, 2008/2009, WSiP, Warszawa

**a) Sformułuj wniosek dotyczący migracji w Polsce między miastem a wsią w latach 1961–1990 i 2000–2006.**

.....

.....

**b) Podaj dwie przyczyny zmian salda migracji wewnętrznych w Polsce po 2000 roku.**

1. ....

.....

2. ....

.....

Fig. 1. Example of questions from a geography sheet I-basic level

Source: [archiwum.cke.edu.pl/image/stores/matura\\_czerwiec2012/geografia/geografia\\_pp.pdf](http://archiwum.cke.edu.pl/image/stores/matura_czerwiec2012/geografia/geografia_pp.pdf)

Through the analysis of the number of Matura examinees, one may observe an increase in students' interest in choosing geography. Popularity of geography was rising in 2005–2009 – from 76 200 examinees in 2005 to 201 400 in 2009 (Fig. 2, Fig. 3). Geography is of particular interest to the students of technical secondary schools (48–49% of students taking geography) and specialized secondary schools (38–40% of the examinees). These schools' students had a significant contribution to frequent selecting geography for Matura examination up to 2009. Grammar schools students, on the other hand, showed lower interest in geography (20–25% of examinees).

In comparison to other subjects, only social study (wos) showed similar increase in the percentage of examinees in Matura examination in 2005–2009 (Tab. 1). Some researchers connect the increase in popularity of geography, social study (wos) and history in Matura with the scope of their subject matter which is frequently related with contemporary events (Kurczaba-Dzięcioł, 2011; Szmigiel, 2007). Moreover, Tracz's research (2008) showed that the change in the Matura examination in geography form, from oral to written, caused larger interest by students in this exam in relation to previous years when geography could be chosen only as an oral exam.

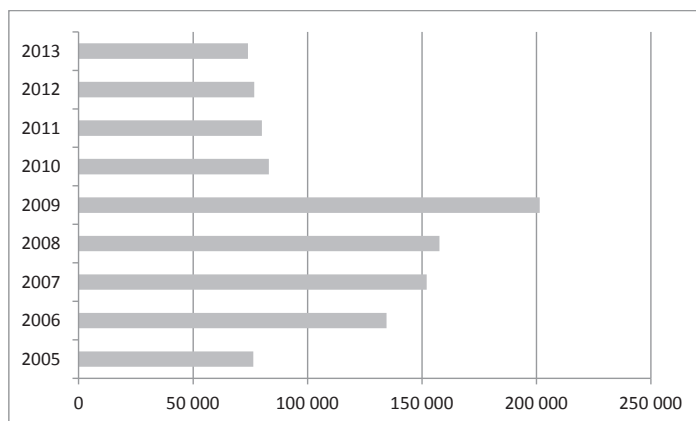


Fig. 2. Number of students taking geography in Matura examination in 2005–2013

Source: Sprawozdania z egzaminu maturalnego za lata 2005–2009, CKE, Warszawa

Since 2007, when the procedures of choosing extended level were introduced, examination in geography on this level has been chosen by noticeably fewer students. The highest percentage of students who choose the extended level attend grammar schools. In relation to other subjects, over 50% of students taking mathematics, physics and chemistry chose extended level (Tab. 1). The data on obligatory subject's choice from the group to choose in Matura in 2005–2009 lead to the following conclusions:

- the most frequently chosen subjects in Matura, i.e. geography, social studies and history, were selected by most students on basic level,
- science subjects, less frequently chosen for Matura (physics, chemistry, mathematics), were taken by most Matura examinees on extended level (Table 1).

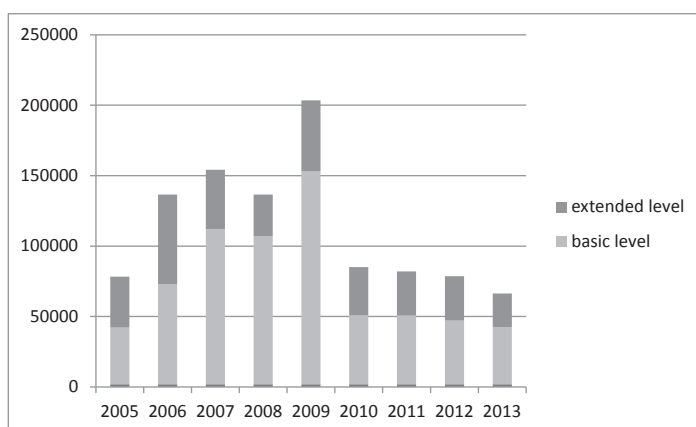


Fig. 3. Number of students taking geography in Matura examination in basic level and extended level in years 2005–2013

Source: Sprawozdania z egzaminu maturalnego za lata 2005–2009, CKE, Warszawa

Tab. 1. Students taking obligatory subjects from the group to choose in Matura examination in 2005–2009 [in %]

Subject	Altogether					Extended level				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Biology	23	24	27	24	23,9	59	58	45	48	47
Chemistry	8	8	9	9	9,0	72	97	87	88	87
Physics	6	6,5	6	6	5,9	73	98	89	87	85
History	19	14	14	11	9,6	66	80	60	56	51
Geography	21	29	37	39	50,8	40	42	23	21	25
Mathematics	26	18	19	18	19,4	60	78	52	52	46
Social studies (wos)	10	13	28	32	29,9	49	68	48	39	34

Source: Sprawozdania z egzaminu maturalnego za lata 2005–2009, CKE, Warszawa

On the basis of these conclusions, one may claim that potential positive results in Matura examination was a vital factor determining the choice of the third obligatory subject which was especially clearly visible among students of technical and specialized secondary schools (Kopeć, Michalski, 2007; Soja, 2008). As far as geography is concerned, the thesis was proved by pilot survey carried out by Piróg and others (2007) among 197 students of post-gymnasium schools. As main motives for their choice of geography, the respondents mentioned: easiness of questions (26%), interest in geography (17,0%), university recruitments (13%).

Tab. 2. Students taking additional subjects in Matura examination in 2010–2013 [%]

Subject	Altogether				Extended level			
	2010	2011	2012	2013	2010	2011	2012	2013
Biology	19,8	18,6	19,1	21,0	54,5	58,9	41,1	60,0
Chemistry	9,9	10,5	11,5	12,7	80,1	81,1	80,3	77,4
Physics	7,8	8,5	9,6	9,6	41,0	54,1	48,0	44,3
History	7,5	6,6	6,2	6,0	54,3	52,5	49,2	50,1
Geography	22,6	22,5	22,4	23,5	41,2	39,1	41,1	41,3
Mathematics	85,0	85,5	82,5	83,0	15,0	14,5	17,5	17,0
Social studies (wos)	16,7	17,1	55,2	15,4	46,1	44,7	54,8	38,9

Source: Sprawozdania z egzaminu maturalnego za lata 2010–2013, CKE, Warszawa

The modification to Matura examination in 2010 introduced changes within obligatory and additional subjects. Since 2010, the number of students taking geography for Matura has diminished. Taking into consideration the data on the choice of additional subject from the group to choose in Matura in 2010–2013, one may draw the following conclusions:



- the number of students choosing geography decreased by 50%, and the subject is still taken by most students on basic level,
- the number of students choosing science subjects (physics, chemistry) did not undergo any significant changes.

Although the number of classes allowed for teaching geography has been systematically decreased, the subject is still popular among students as a Matura one (Piróg et al., 2007; Tracz, 2009, 2013). It has been observed that since 2010, students of grammar schools have chosen geography more frequently. Therefore, a question arises about the motives that stand behind students' choice of geography for Matura examination.

## Methodology

In order to find factors determining the choice of geography in Matura after the modification to procedures of Matura examination, diagnostic research has been carried out since 2010. Its goals were:

- finding the motives for the choice of geography as a Matura subject by students of various types of schools,
- recognizing relations between the choice of a subject and students' further educational plans,
- finding forms of classes that students take part in to prepare for the exam.

The author used a questionnaire for reaching the goals. The survey covered third-grade students of post-gymnasium schools who chose geography for their Matura examination in 2012. The sample comprised 271 students from 14 post-gymnasium schools (10 grammar schools, 3 technical secondary schools, 1 specialized secondary school). Among the respondents, the students of grammar schools accounted for 85%, technical secondary schools – 10,6%, and specialized secondary school – 4% which constituted a representative sample of students taking Matura exam in geography with division into types of schools in Poland. The surveyed students received the following marks in geography in winter term: 8,2% the highest mark – excellent, very good – 31,1%, good – 28,3%, satisfactory – 19,0% and the lowest – mediocre – 13,4%.

## Results of the survey – motives for choice of geography for Matura after 2010

The question of what motivates students to choose geography for Matura relates to psychology of motives. Many internal and external factors have impact on the choice. Important factors of students' choice of geography for the exam in 2012 were: university or college recruitments (37,5%), interest in geography (27,5%), easiness of the subject matter (17,0%), other people's suggestions (9,2%) – (Table 3).

When taking types of schools into consideration, there were no significant differences as far as the motives for choice of geography for Matura is concerned. On the other hand, there are some discrepancies in relation to the size of a center

where the school is located: students from smaller centers – up to 100 000 citizens, mentioned university or college recruitments (Tab. 3).

Tab. 3. Students' motives for choice of geography for Matura in 2012 [%]

Motive	Total	Students from large centers (over 100.000 citizens)	Students from smaller centers (up to 100.000 citizens)
university or college recruitments	37,5	18,0	57,0
interest in geography	27,0	28,6	25,2
suggestions from other people (teacher, friends, parents)	9,2	15,6	3,5
easiness of the subject matter	17,0	25,8	8,5
accidental	4,1	4,6	4,7
other	5, 2	7,4	1,1
TOTAL	100	100	100

Source: questionnaire research

When comparing the motives for choice of geography in Matura in 2012 with the results of the research carried out by Piróg et al. (2007), we observe an alteration in the Matura examinees' motives hierarchy. Data show that the choice of additional subjects is more conscious and related, to a sizeable degree, with university or college recruitments, as a consequence of respondents' further education plans, and interest in geography (Table 4).

Tab. 4. Main groups of motives for choice of geography in Matura in 2006 and 2012 year [in%]

Groups of motives	2006	2012
university or college recruitments	13,0	37,5
interest in geography	28,0	27,0
suggestions from other people (teacher, friends, parents)	10,0	9,2
easiness of the subject matter	33,0	17,9
Accidental	7,5	4,1
Other	8,5	5,2

Source: questionnaire research and Piróg, Tracz, Gurgala, 2006

The students' responses to the question about their further career plans prove the facts mentioned above. According to the survey, 94% of the sample declared the will for further education. The respondents mentioned the following fields of study: geography – 7,1%, teacher training in geography – 2,5%, studies at fields of studies related to geography – 42,1% (nature preservation, tourism and recreation, spatial

economy, geology), technical and other studies (economy, law, computer science) – 48,3% (Fig.4). Similar results about students further plans in education were taken in the research by Wójtowicz & Tracz (2011) and Tracz (2011).

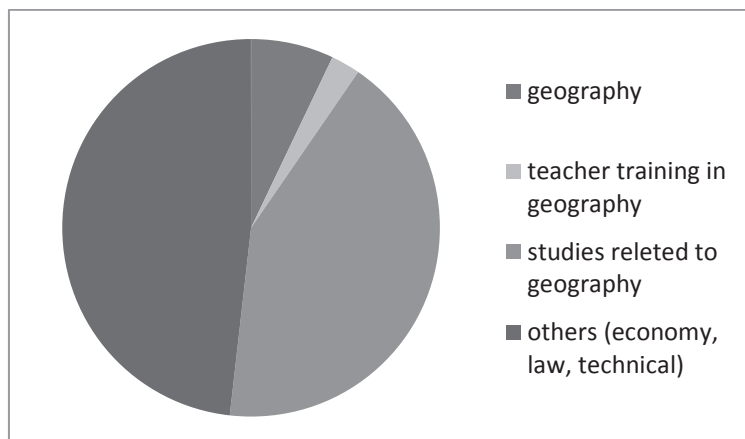


Fig. 4. Students' further career plans in education

Source: questionnaire research

Another confirmation of more conscious choice of geography for Matura are students' responses to the question: when did your interest in geography start? The answers show that for 32% of respondents it began in primary school, for 47% in gymnasium, and for 17,5% in a post-gymnasium school. Only 3,5 % of Matura examinees stated that they had been interested in geography only since the beginning of third grade of a post-gymnasium school (i.e. just before Matura). The level of the respondents' interest in geography was diverse. Only 23% of the respondents considered their level of interest in geography as very high, 46,5% as high, 25% as average, and 5,5% as low.

The respondents were also asked about the declared level of Matura exam in geography. In the schools chosen for the survey, 47,2% of students selected basic level (in the technical secondary schools and the specialized secondary school – 79%). The extended level was chosen by 52,8% of students (in grammar schools – 66,5%). On the basis of the gathered data, the author established that students from prestigious grammar schools had chosen geography only at extended level.

Since the introduction of written Matura in geography, teaching that subject at school presents a considerable challenge for teachers, especially in technical secondary schools where there is no possibility of getting extra classes for teaching it due to simultaneous preparing students for vocational examinations. The respondents were asked how they revise for Matura exam in geography apart from attending regular geography classes. Most of the respondents (51,6%) mentioned

additional geography classes organized at school, self-studying on the basis of literature provided by a teacher – 26,7%, and taking private lessons – 9,4%.

## Conclusions

The researches provided information about changes that took place in relation to the motives for choice of geography as an additional subject in Matura examination. The results allow for stating that at present the choice of geography for Matura is, to a large degree, dependant on students' self-motivation, their interests, the aims they pursue and outside determinants.

There is no doubt that the change in hierarchy of motives for students' choice of geography was influenced by decisions of the Ministry of Education in relation to the rules of conducting Matura examination after 2010. The introduction of Matura obligatory examination in mathematics significantly modified students' choices of additional subjects; it resulted in a decreased number of students taking geography in Matura, although it is still the subject most frequently chosen out of the group of additional subjects.

The alterations to obligatory subjects examinations have also impact on recruitment policies of universities and colleges. In 2005–2009, when a large group of students chose geography as a compulsory subject for Matura, it used to be included in recruitments for various fields of study. Since 2010, many universities and colleges take mathematics into consideration, which is taken as obligatory by all the Matura examinees.

Although data show that geography still counts as a recruitment subject for some fields of study, most of them require the basic-level exam. Therefore, students have no motivation for choosing an extended level in geography. In order to increase the rank of geography as a recruitment subject, it seems to be necessary for Geographical Education Commissions of Polish Geographical Society to take actions for suggesting university centers to take into consideration an extended-level Matura exam in geography for fields of study related to geography and other.

It is worth noticing that out of all outside factors influencing students' choices, especially among those students who have not yet decided about their future, the teacher has some impact. The data gathered show that 5,1% of respondents chose geography for Matura after conversations with their geography teachers. It leads to a conclusion that during their training, geography teachers-to-be should be comprehensively prepared not only for realization of geographical education aims (established in the core curriculum), but also for expressing possibilities of career plans and interests' realization through geography.

## References

- Kurczaba-Dzięcioł, B. (2011). Przyczyny zróżnicowania przestrzennego efektów kształcenia geograficznego w świetle wyników egzaminu maturalnego. In: M. Tracz, E. Szkuřat (ed.), *Efekty kształcenia geograficznego na różnych poziomach edukacji*. Prace Komisji Edukacji Geograficznej Polskiego Towarzystwa Geograficznego, Łódź: Uniwersytet Łódzki, 81–96.
- Kopeć, K., Michalski, T. (2007). Sytuacja nowego egzaminu maturalnego ze szczególnym uwzględnieniem geografii. In: A. Hibszer, Michalski T. (ed.), *Geografia na egzaminach zewnętrznych 2002–2006 (wybrane zagadnienia)*. Komisja Edukacji Geograficznej Polskiego Towarzystwa Geograficznego. Peplin: Wydawnictwo Bernardinum, 68–79.
- Piróg, D., Tracz, M., Gurgul, B. (2007). Motywy wyboru geografii na maturze a wyniki egzaminu maturalnego – studium przypadku. In: B. Niemierko, K. Szmigiel (ed.), *Uczenie się i egzamin w oczach uczniów*. Łódź: Polskie Towarzystwo Diagnostyki Edukacyjnej, 271–287.
- Soja, J. (2008). Egzamin maturalny z geografii w latach 2005–2007. In: A. Hibszer (ed.), *Polska dydaktyka geografii: idee – tradycje – wyzwania*. Prace Wydziału Nauk o Ziemi Uniwersytetu Śląskiego, 47, 267–289.
- Szmigiel, M. K. (2007). Drugie podejście do zewnętrznego egzaminu maturalnego z geografii w 2005 roku. In: A. Hibszer, Michalski T. (ed.), *Geografia na egzaminach zewnętrznych 2002–2006 (wybrane zagadnienia)*. Peplin: Wydawnictwo Bernardinum, 54–67.
- Sprawozdania z egzaminu maturalnego za lata 2005–2009. Warszawa: CKE.
- Sprawozdania z egzaminu maturalnego za lata 2010–2013. Warszawa: CKE.
- Tracz, M. (2008). Zróżnicowanie wyników egzaminu maturalnego z geografii na poziomie podstawowym w latach 2005–2008. In: B. Niemierko, M. Szmigiel (ed.), *Uczenie się i egzamin w oczach nauczyciela*. Opole: Polskie Towarzystwo Diagnostyki Edukacyjnej, 475–484.
- Tracz, M. (2011). Interest in geography and its studies among students of post secondary school. *Prace i Studia Geograficzne Uniwersytetu Warszawskiego*, 38, 79–86.
- Tracz, M. (2013). Wpływ egzaminów zewnętrznych na nauczanie geografii. In: B. Niemierko, M.K. Szmigiel (eds.), *Polska edukacja w świetle diagnoz prowadzonych z różnych perspektyw badawczych*. Gnieźno: Polskie Towarzystwo Diagnostyki Edukacyjnej, 440–448.
- Wójcik, J. (2013). Geografia na maturze – zróżnicowanie merytoryczne i ocena zadań z arkuszy egzaminacyjnych w latach 2005–2011. *Annales Universitatis Paedagogicae Cracoviensis, Studia Geographica IV*, 148, 100–115.
- Wójtowicz, B., Tracz, M. (2011). Popularność geografii jako kierunku studiów. In: Z. Długosz, T. Rachwał (eds.), *Priorytety badawcze i aplikacyjne geografii polskiej*. Kraków: Wydawnictwo Naukowe Uniwersytetu Pedagogicznego, 88–100.

**Mariola Tracz**, Ph.D., Pedagogical University of Cracow, Institute of Geography, Department of Geographical Education Interested in: geographical education (geography curriculum, development of geography competency, geography on examination, history of geography education in Poland) and socio-economic geography. The member of the Polish Geographical Society.

## Contact details:

e-mail: mtracz@up.krakow.pl  
 adres/address: Uniwersytet Pedagogiczny w Krakowie,  
 Instytut Geografii, Zakład Dydaktyki Geografii,  
 ul. Podchorążych 2, 30-084 Kraków (Poland)

## Contents

Introduction	3
<b>Zbigniew Ziolo</b>	
The concept of geographical space	6
<b>Witold Wilczyński</b>	
Human geographical ideas of Eugeniusz Romer	23
<b>Agnieszka Kwiatek-Sołtys, Krzysztof Wiedermann</b>	
Spatial structure transformations in small towns in view of rehabilitation and gentrification processes	31
<b>Piotr Raźniak, Anna Winiarczyk-Raźniak</b>	
Housing conditions in selected metropolitan areas in Poland	41
<b>Sławomir Kurek, Tomasz Rachwał, Mirosław Wójtowicz</b>	
Industrial and commercial suburbanization in post-socialist city: the Kraków Metropolitan Area (Poland)	55
<b>Małgorzata Bajgier-Kowalska, Renata Rettinger</b>	
Tourism development in small cities on the example of Pistoia in Tuscany	77
<b>Sławomir Dorocki, Paweł Brzegowy</b>	
Ski and spa tourism as local development strategy – the case of Krynica Zdrój (Poland)	88
<b>Agnieszka Świętek</b>	
Roma ethnic minority risk of social exclusion in Poland	117
<b>Mariola Tracz</b>	
Motives for the choice of geography in Matura examinations in the context of Poland's examination policy	131

