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Published at the Department of Geography, Faculty of Science, Jan Evangelista Purkyně University, Ústí nad Labem, Czechia

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Available online at geo.ujep.cz

GeoScape 1, Vol. 2(2007) 1



Foreword

After one year, we introduce the second issue of the GeoScape Journal. During that year, our considerations as well as reactions of readers, authors of contributions and our colleagues got us to some conceptual changes of the journal design. According to our meaning, these changes respect the “scientific environment” of central-European research and educational teams, to which the journal is especially addressed, and can be summarized into the following paragraphs:

- The lack of any platform for presentation of research performed by pregraduate students brought us to an idea of preparing the special issues of the journal. This idea is based on an assumption, that student’s research could well represent the perspectives of scientific research and education in the field. If a sufficient number of quality papers will be submitted, the editorial board will publish them in so called Underground Issue of the GeoScape Journal. Otherwise, these will be included in standard issues (Professional Issue). Thematically, contributions can be based on bachelor, or diploma thesis, or another research conducted prevalingly by student. In this issue for instance, the first paper (Trávníček 2007) represents such a research based on bachelor thesis.

The instructions for authors are similar to the Professional Issue. We will be grateful for informing your students about this opportunity to publish their results.

- Since some research results were impossible to publish because of language barriers, we decided to class the German among the journal’s official languages.

- Henceforth, the editorial board will receive and publish also the information about concurrent research topics being solved at various institutions, and presentation of these institutions. We hope that this step can help to improve the nation-based or international cooperation of institutions. The information about research and presentations of institutions will be published in the section *Selected publishing and Events*.

- Changes outlined in the previous paragraphs do not transform the original aim of the journal nor its structure. These rather transform its design in a sort of “professional newspaper journal” by bridging manifold information related to the geographical and environmental research and educational community.

Best wishes,

Editorial board



Landscape structure in The Vítovický stream drainage basin (Central Moravia, The Vyškov Gate)

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Received 28 February 2007; received in revised form 20 March 2007; accepted 23 March 2007

Abstract

In recent years, the possibility of using modern methods in the research of a landscape has rapidly increased. One of such methods is remote sensing which provides outputs that are comprehensive and rich in information. However, it is hardly possible to replace a regular and long-term field research and communication with the local population which are the main methods employed in this kind of work. The Principal objective of the research is to introduce the regionalisation (delimitation of landscape units) complex as possible. This is achieved by its division into two levels. The first level (3 monomicrochores) is based on these criteria: landscape structure, land use, matrix and environmental problems/conflicts. The second level (27 topochores) is defined by the character of landforms (as well as by gradient, phytocenoses - edaphic series with or without significant soil water influence, soils etc.). Another objective is the determination of the conflicts in landscape, the analysis of their causes and consequences of possible solutions.

During the research a discussion among the local population was invoked. In this way a subject that will be more actively involved in local autonomy gradually emerges. The research continues in a larger part of this area. It is focused on the changes in the landscape that have been taking place since the beginning of the eighteenth century.

Keywords: landscape structure; land use; landscape ecology; the Vítovický stream drainage basin

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1. Introduction

In the present landscape we constantly find consequences of inconsiderate economy and human conduct, whose effects began to be most prominent since the beginning of the Industrial Revolution (Kender 2000). It is the landscape ecology that has the potential to detect and analyse these negative consequences.

Ideally, the results from the researches are put into practice. By the help of suitable interventions, we try to minimize or even remove the negative consequences. The landscape is an open system, which is a product of the activity of natural and anthropogenic agents. While researching its present structures

it is almost impossible to leave out the influence of man, as a creator of present cultural landscape. His activity is very dynamic - it is reflected in material (rationally, economically) as well as spiritual level (Žigrai in Herber 2004). The study of present cultural landscape thus requires its conception to be as complex as possible.

1.1 Key approaches

This paper is based on a *geosystemic approach* (Miklós, Izakovičová 1997) and its application on different scales (e.g. Hynek, Trnka 1981; Pipková, Pipek, Hynek, Trnka, Herber 1983). Other applied approaches include *ecosystem conception* with the emphasis on biota (Culek et al. 1996; Neuhäuslová-Novotná et al. 1998), the *geobiocenologic conception* - for example the works by Z. Ambros, a J. Štykar (1999); and the focus on the structure, ecological networks and biodiversity (Forman, Godron 1986).

The important sources of information are the publications dealing with the land use e.g. Žigrai (1983) and its perception. The particular directions and development in landscape ecology is described in greater detail for example by Herber (in Herber 2005 ed.).

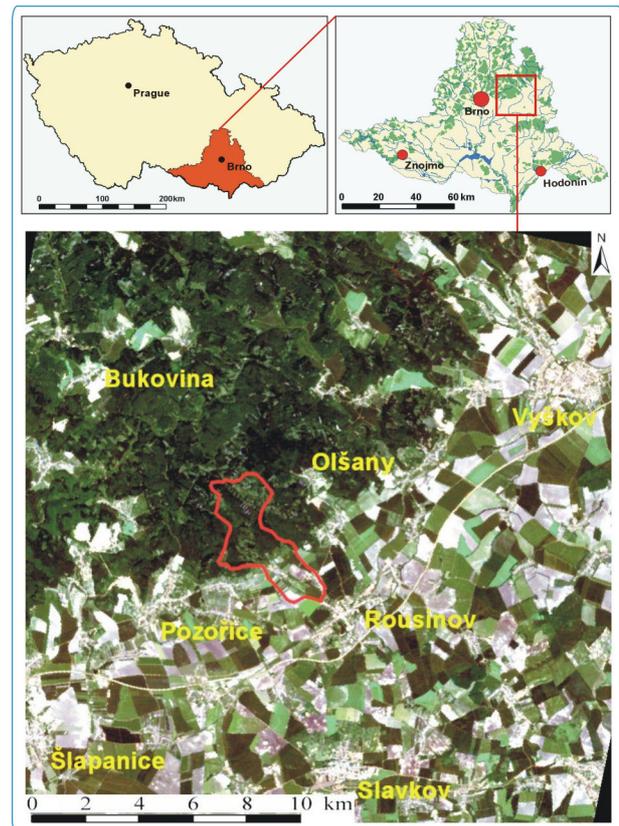
The solution to the given problem (defined by the above mentioned approaches) is further influenced by the possibilities of the use of Remote sensing during the study of landscape (contribution by Dobrovolný, Herber a Hynek in Balej, Peštová 2002 eds.) including the aerial photographs (Forman, Godron 1986; Lipský 2002). The specific significance can be ascribed to the evaluation of the landscape character by Löw and Michal (2003), the concept of the stability of landscape (Míchal 1994) and its practical application (Maděra, Zimová eds. 2005).

1.2 Studied area

The research was carried out in The Vítovický stream drainage basin, on the area of 9.1 square kilometers at an altitude of 247—535 metres above sea level. The stream drainage

basin lies on the south border of the Drahanská highlands/Vyškov gate near the town of Rousínov - 15 kilometers far from Brno.

Fig. 1 Delimitation of the area of interest-geometrically transformed picture from the satellite in natural colours (RGB 3 2 1); May 24th 2001 (source: Landsat 7, scanned by ETM+, modified by author)



It is markedly elongated in the northwest-southeast direction. In the spring area (the remnants of the planation surface) the valley has a gradual shallow character. Towards the edge of the Highlands the slopes of the valley steepens. The stream gains the character of the deeply incised stream with the stony river bed and steep riverbanks. We can find here very frequent rock outcrops. This northern part of the drainage basin lies in the higher altitude over 500 metres above the sea level and is virtually completely forested. The deep valley ends in a fault scarp (multifunctional small-scale exploitation) and the Vítovický stream goes on to the Vyškov gate, which is agriculturally utilized. Here the surface falls away from the

margin of the upper slope of the Dražanská highlands lower to the Rakovec stream.

Fig. 2 On the left: the view of the fault scarp of the Dražanská Highlands from south-east; On the right: the character of the Vítovický Stream at the point with the highest declivity. (source: author)



The character of the relief was highly influenced by the periglacial geomorphological processes (the formation of dry valleys, asymmetric valley slopes and loess covers - for greater details see [Demek 1965](#)).

1.3 Aims

The stream drainage basin of our interest was chosen for its many contrasts and a significant gradient in all levels of the landscape structure - primary level (difference of the morphology of the geological composition of the Dražanská highlands and the Vyškovská gate); secondary level - the transition between the forested area in the north and the agricultural and residential area in the south; tertiary level - for example administrative boundaries and leisure time activities.

The main aim of the thesis is to introduce the complex physico-geographical profile of the studied area. This profile is then used as a basis for delimitation of the spatial landscape units. At the same time the research is aimed at the revelation of the main participants that influence the processes in landscape, and the recognition of conflicts and the conflict of interests between them.

Subsequently, the thesis should form the basis for the discussion about the problematic topics on the municipal level.

2. Methods and material

2.1 Basic methods of the research

The core of the whole research lies in the regular and long-scale exploration of the surveyed territory. The exploration was carried out on foot, cross-country skis (3 months of the cross-country skiing season thanks to the suitable weather conditions - long snowy winter 2005-2006) and by bicycle (the both ways had a great significance for the understanding of the dynamics and risks of the mobility of people in forests). The modern methods, used not only in the landscape ecology (satellite and aerial photographs, GIS), were used during the preparation phase as well as for the completion of the surveyed information.

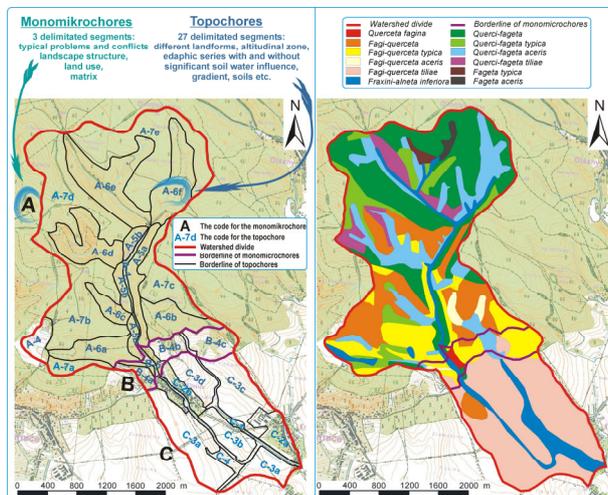
Another important method employed was the personal communication with the local population. The research is supplemented with the rich photo documentation (especially the photos of risky or other accentuated phenomena).

2.2 The principle and methodology of the delimitation of the landscape units

The core of the whole research is the delimitation of the landscape units. The approach of [Hynek and Trnka \(1981\)](#) played an important role with its delimitation and definition of spatial taxonomic units (topochores and monomicrochores). Thesis of [Klapka \(in Herber ed. 2004\)](#) served as the examples of its application.

The particular segment (the area of interest) is a multifarious mixture of structure and utilization, with contrasts and diffusion, sharp boundaries as well as gradual transitions. These are some of the reasons why the regionalization that was rendered uses the individual and typological approach.

Fig. 3 On the left: Graphical representation of the principle of the delimitation of the spatial units; On the right: the groups of types of geobiocens of the drainage basin. (source: Author, foundation map: The Raster Base Map of the Czech Republic, scale 1 : 25,000; Colour seamless)



The delimitation of the landscape units is divided into two levels (see **fig. 3**, on the left): On the *first level* there are delimited *three monomicrochores*. The northern forested area of the drainage basin (situated in the left upper corner of the map - code A); the southern segment with the prevailing agricultural and residential function - code B; and the transition zone, where the both extremes combine - code C. On the *second level* there are delimited *27 topochores*.

These spatial units are divided into seven groups and lined up according to the altitude from the lowest (1. Water course, alluvial plain) to the highest (7. Ranges, slope plateaus, remnants of the planation surface). By the combination of these two aspects (see **fig. 4**) 27 segments could be identified (topochores are discussed in greater detail in **2.3**).

2.3 Physicogeographical analysis—sources and methodology of the delimitation of topochores

In the delimitation of the landscape units (see **chapter 2.2**), on the level of the topochores, first of all physicogeographical typology is respected - based on categories, which are briefly summed up into the

informative chart belonging to each topochore (example - **fig. 5**).

Fig. 4 Landscape units in the area of interest (source: author)

MONOMIKROCHORES ▶	A - Forest landscape	B - Transition zone	C - Agricultural landscape
1 - Water course, alluvial plain	A-1 Střední tok Vit. potoka		C-1 Dolní tok Vit. potoka
2 - Settlements, neighbouring gardens			C-2a Královopolské Vážany C-2b Vitovice C-3a Hudlešy C-3b Mezi potoky C-3c Za Žlebem C-3d U rybníka
3 - Fields			
4 - Various utilization (orchards, hedgerows, meadows)		B-4a Vitovické louky B-4b Pod myslivnou B-4c Pod Lichnami	C-4 Kopaniny
5 - Steep slopes (the Vitovický žleb)	A-4 U šumické hájenky A-5a Z. svahy Vit. žlebu A-5b V. svahy Vit. žlebu A-6a Pod Vit. hrádkem A-6b Nad Vitovicemi A-6c Suchý žleb A-6d Bukovec A-6e Pod Kálečnickem A-6f Údolí homího toku Vit. p.		
6 - Steep slopes-valleys of tributaries	A-7a Nad Vinohrady A-7b Zadní vysoka A-7c Lichny A-7d Kálečnick A-7e Červený vrch		
7 - Ranges (slope plateaus), remnants of the planation surface			

In the following text there are shown the sources for the particular attributes and their codes are in **fig. 5**. The problem is discussed in greater detail in the author's bachelor thesis (**Trávníček 2000**).

The data concerning the rocks (*code HO*) are taken from the publication of **Chlupáč et al. (2002)**. Morphosculpture as the set of the erosive-denudational and accumulative surfaces (*code MO*) is appropriated according to the work by **Hynek et al. (1981)**.

Gradient (*code SK*) is adjusted according to the legend for PLO 30 (Forest Natural Region), the **Drahanská Highlands (2001)** including the codes and intervals used here. The legend forms the basis for the abbreviations of the species of trees of the natural species composition (*code PSD*) and for the forest typology (*code LT*).

The vegetational tiers surfaces (*code VS*), trophic scales and hydric scales (*codes TŘ* and *HŘ*) are taken from the multimedia textbook (**Maděra, Zimová 2005 eds.**) and adjusted according to local TSES - Territorial system of ecological stability (in Czech "ÚSES"; **Kolářová et al. 1994a, 1994b**) and information from the forest typological maps (available at <http://212.158.143.149/index.php>).

These sources were also used for the conversion into the Group of the types of the geobiocens (*code STG*) - along with the work by [Ambros a Štykar \(1999\)](#) and consultations with [J. Lacina \(2006\)](#). The soils (*code PT*) are described on the basis of the Soil map of the ČR (1995), Valuated Soil-Ecological Units code (in Vyhláška MZE ČR č. 327/1998 Sb.) that is recorded in the map ([Benešová et al. 1998c](#)) and forest typological maps ([available at http://212.158.143.149/index.php](http://212.158.143.149/index.php)). The abbreviations of the soil types are chosen as a compromise between the legend for PLO 30, [Drahanská Highlands \(2001\)](#) and the taxonomic classification system of soils of the ČR ([Nemeček et al. 2001](#)).

Fig. 5 Example of the characteristics of the toposchore on the example of the unit “A-5a Západní svahy Vítovického žlebu” (source: author)

HO	MO	SK	VS	TŘ	HŘ	PT	STG	PSD	LT
5, 4	3 (4)	vm-př	2	B	3	KAmb	FQt	DB6 BK3 HB1 LP	2B1
			3	AB	4	LUmg	QFt	BK1 DB3 HB4 JV2	3H5 (3S9 3L1 2H2)

If there are more options for the particular characteristic of the toposchore, the most common one is on the first place in the information chart (see [fig. 5](#)). The uncommon cases are in the brackets. In the agriculturally intensively utilized areas (where the forest is not preserved) the information on the forest types and natural composition of the species of trees is missing. If there are more large areas of forest types in one toposchore, the characteristics (starting with the vegetation tier) are given separately for each type. Columns 4, 5 and 6 form together the code STG (column 8). The surface distribution in the area of interest is in the [fig. 3](#) on the right.

3. Discussion

In this part of the text, we will be dealing predominantly with tertiary structure of the landscape. Our primary concern will be the relationship between its ecological and physicogeographical characteristics ([chapter 2.2 and 2.3](#)), its utilization and the socioeconomic conditions of the region. Both of

these characteristics were included into the criteria for the delimitation of the monomicrochores—now we will deal with each of these landscape units separately.

3.1 The Northern forested area of the drainage basin (*code “A”*)

The utilization of this area is quite evident. In general, we have the tendency to perceive the forested area as a peaceful and harmonious area without conflicts. The research proved that this is not the case for the studied region. On the level of the monomicrochores dominates the economic function of the forest - so it is virtually impossible to satisfy the different views on the foresters concerning the optimal quantity of the game. Especially the population of mouflons and fallow deers is kept low. In the last 15 years there has also been decrease in the population of the deer and roe-deer (estimation was based on the pronouncement by foresters, forest managers and the planned hunting - [The statistical report on game keeping and hunting, 2005](#)). The only species with growing population are foxes and badgers thanks to the general application of the rabies vaccine. The considerable growth of the motion of the people in the region and their indiscipline stands against both of the interests (game keeping and forestry economics). This phenomenon is formed by three basic factors:

1. The borders of the forested areas can be easily approached thanks to the network of asphalt roads which are the official bicycle tracks (see [fig. 6](#) - on the right), paved paths and forest pathways.

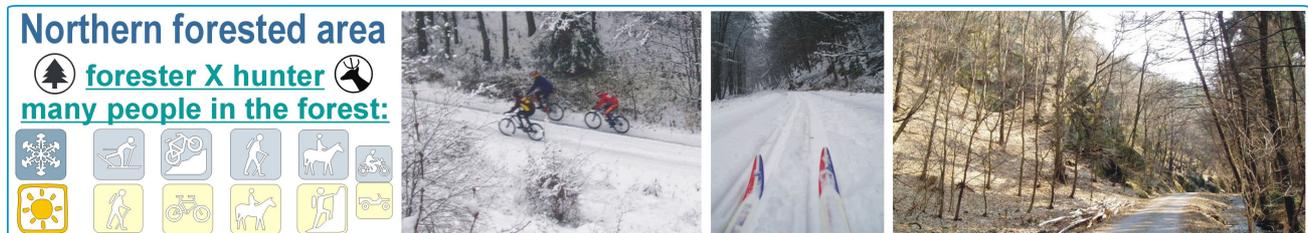
2. Close to the borders of the studied area there can be found the Olšany village (see [fig. 1](#)) with its extensive tourist and recreational facilities as a farm built by the famous Czech actor Bolek Polívka. His farm is a popular destination for a great number of tourists who then move across the surveyed territory.

3. The inhabitants of the neighbouring villages constantly react on new trends and situations in the region. The growing popularity of the cycling (see [fig. 6](#) - on the left) and horse-riding represents an example. Another

interesting phenomenon is the growth of the interest in the cross-country skiing, e.g. winter 2005-2006 was, from this point of view, climatically extremely favourable; in the lowest

parts of the area in question the skiing season lasted for more than two months; see **fig. 6** - in the middle.

Fig. 6 Description in the text of **chapter 3.1** (source: author)



Horses have posed specific problems over the past few years. The horse breeding can be found in almost all the villages situated by the borders of the studied area - suitable conditions, clear plots of land, profitability and substantial demand. Horses, cross-country skiers and cyclists often wander off the marked paths. Their reasons may include adrenalin, relaxation or the challenge of a more demanding terrain. They also use the forested area all the year round, for example the “winter cycling” (see **fig. 6** - on the left). To this we can add the movement of the mushroom-pickers, walks of the local population, hikers or the collectors of the forest fruit. From what was mentioned above follows an interesting paradox. The game causes virtually no damage (nibbling of the bark and leaves) in the areas on the borders of the forest, where we basically expect their highest concentration. Instead, game withdraws to the more peaceful parts of the area—to the centre of the Drahanská Highlands or to the agricultural landscape when the thickness of the snow cover is too big.

3.2 The southern segment with the prevailing agricultural and residential function (code B)

The anthropogenic influence is dominant in this monomicrochore. Only rarely do we find any more significant *biocenoses* here. The extent of the fields is too large, which is very unlucky if we consider the extensive water and eolian erosion. The amount of hedgerows is insufficient and most of them are in bad condition. The most significant green areas are the gardens in the residential area

The solution is, however, at hand. For the solving, or at least the reduction, of the above mentioned problems it would be sufficient just to execute the items of TSES that are described in great detail in the work of the Kolářová et al. (1994a, 1994b). It would also cause the rise of attractivity, stability, and aesthetic and landscape value of the agriculturally utilized space. However, on the level of the municipal administration there is no will for changes (see **chapter 4.**).

Fig. 7 The two pictures on the left: the same place at the time of the minimal and maximal flow rate recorded during research; in the middle and on the right: the regulated river basin in the agriculturally utilized alluvium during the spring snow melting. (source: author)



3.3 The transitional zone where both extremes combine (code C)

The transitional zone with the width not exceeding 1 km) is an interesting “landscape mixture” of various small-scale segments that serves for the settlement, recreation (cottages, garden colonies; see **fig. 8** - on the right), forestry as well as agriculture. We can find here the hints of wetland ecosystems, thermophilic vegetation, meadows with the spring areas or the hedges with the combination of fruit and seeding wood species. According to the mentioned TSES more than the half of the territory is evaluated at least as conditionally ecologically stable.

This territory was put into danger by the extensive land rush in 2006. This land is

subsequently used as paddocks for horses - it results in the expansion of the area of the utilization and in the fading out of the differences in this unique segment of the landscape (see **fig. 8** - on the left). On one hand it is the alternative to the unrealistic mowing from the point of view of the municipal office in Rousínov. On the other hand the species composition changes. The advantaged species are those that stand up to the bark nibbling, trampling and the poisonous species which are indigestible for horses (Horník et al. 1986). Another aspect is the significant worsening of the accessibility of the landscape - high hedges with the electric lines as a barrier for other animals and especially people.

Fig. 8 In the middle: in winter the game causes damage even in the open country; on the left and right - described in the text of **chapter 3.3**. (source: author)



3.4 Perception of the environmental issues on different levels

The preceding three chapters deal with the particular problems and conflicts. If we are looking for the ways how to change the contemporary situation for the better, it is useful to take into consideration the current “environmental situation” of the Rousínov area.

In the area of interest and its neighborhood, there operate several organizations as well as individuals, who are willing and trying to improve the environment and the “quality of life” in their immediate neighborhood. This concerns especially: CSOP (Czech Association of Nature Conservation), ornithologists, teachers of the ecological education on grammar schools and the political party Strana zelených (Green

Party). However, their actual influence is very limited. We can find two main reasons:

1. the common approach is missing;
2. their representation at the municipal level, where the economic aspect is most important, is minimal. Another problem not only in this particular region is the lack of participation of young people in the affairs of the municipality.

What is positive is the functioning of the “feedback” between the actions of the municipal office and the local population, whose reaction is mostly negative. As an example the strong criticism of the timber felling can serve, or that of building on the high quality soils.

4. Conclusions

In this work the author tried to introduce as complex characteristic of the studied area as possible. However, the processes and phenomena described don't appeal only to the area of the Vítovický stream drainage basin. If we use several times smaller scale of the area of interest, we gain the region of the transitional zone between the Dražanská Highlands and the Vyškovská Gate. If we proceed even further, we inevitably get to the conclusion that similar phenomena and processes can appear at the borders of many highlands of the middle Europe.

The research continues in a larger part of this area. It is focused on the changes in the landscape that have been taking place since the beginning of the eighteenth century. The following work will concentrate on the study of historical documents (military maps, chronicles, archives, old photographs) and the spatial analysis by means of GIS.

Even before the actual commentary of the research the author anticipated on the impossibility of application of his research directly at the level of local government. What a pity the "economic-oriented" municipal council is without interest in the problems of the environment. That is the reason to try raising an interest of the local population from the beginning of the research. The first attempt was to form the social group, organization or political party that would take part in the municipal elections in November 2006. However the gain of the confidence of the population proved to be a long-term business. Another attempt of this kind will include the cycle of public lectures that is planned at the end of the year 2007. The local population will be informed in this way about the results of the research and it might lead to the change of the attitudes of the local government by the "impulse from below".

Acknowledgements

I would like to thank V. Herber and J. Lacina for their help with my BA Thesis, A. Hynek for his comments and suggestions on

an earlier version of the manuscript, and Z. Klímová for comments and translation.

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The Eastern EU enlargement - a challenge for deepening regional/cross-border cooperation among NW Bohemian and SE Saxonian companies?

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Received 15 April 2007; accepted 11 June 2007

Abstract

The enlargement of the European Union towards Eastern Europe (so called eastern enlargement) has brought many benefits for economy of both former and newly joined countries, but has also revealed many problems of such cooperation on regional level. The inquiry which was processed in scope of the research project devoted to cooperation among companies in the NW Bohemia and SE Saxonia focused on concrete forms of such cooperation, and differences in benefits and problems in each country being involved. The results of inquiry and interviews with representatives of selected companies showed a lack in exploiting the potential of the cooperation, and its diverse perception. While the Czech companies appreciate the cooperation as dominantly trouble-free, companies in SE Saxonia mentioned many problems of recent cooperation.

Keywords: the EU enlargement; companies; cross-border cooperation; Saxonia; NW Czechia

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1. Introduction

In scope of EU enlargement towards the East, which has been realized in May 2004, the whole regions of north-western Bohemia (Karlovarský, Ústecký and Liberecký region) and of south-eastern Saxonia (Chemnitz region, NUTS-2) form a part of the European internal market and, as territories located on former external EU border, these are affected by both positive and negative influences of the enlargement to a specific degree. Economic theory is based on an assumption, that the

economic integration of former border areas transforming in presentday central ones should be represented by stronger cooperation of regional companies of both national border areas (Krätke 1999, Huber 2003). This can then be realized by several ways including increasing crossborder activities, direct investments, or cooperation of companies. The cooperation of companies as a higher form of company internationalization is defined as intrecompany cooperation between legally, resp. economically independent companies (in the

regions not affected by cooperation). At the same time, this cooperation is realized for minimally middle-term periods, however more frequently for long-term periods, and may be formed with or without capital share.

The cooperation between companies present on one hand an alternative of internationalization in comparison with purchase/sell the effects of market, on the other hand then overall control of efficient capacity. In relation to persistent development, new economic centres and agglomeration areas in cross-border territory are often formed, and these increase the potential for development and competitiveness of the internal market **(Niebuhr, Stiller 2004)**. Thanks to the spatial nearness, specific benefits exist for participants in cross-border area on microeconomic level **(Blaas 2002)**: a) lower transportation costs **(Ragnitz 2002)**, b) location benefits, c) benefit from communication concerning knowledge which is non-codified and not connected to any individual, d) simplified formation of companies interconnection **(Schmidt 1998)**.

In the past, Saxonia reached the rise of foreign trade turnover with Czechia **(Alecke, Untiedt 2001)** and it can be expected, that market potential is not fully capitalized (esp. in the border area). Firstly in relation to the integration of internal market in liberalized sectors (e.g. demand oriented services), the direct commercial relations, or other effects on the regional level may be formed. Furthermore, we can expect also the indirect impulses based on increasing salaries (removing the differences in life standard in comparison with Germany) in Czech borderland **(Ragnitz 2002)**. Recent disparity in prices and salaries between Saxonia and Czechia in the middle temporal horizon can represent the cause for formation of the complementary specialization in foreign trade which accords with comparative advantages of expenses **(Sander, Schmidt 1998)**. However, it seems that this advantage of internationalization is temporarily limited and not desirable for now thanks to the fast upgrading process of new EU members **(Ragnitz 2002)**. Industrially based division of labour promises many benefits involving competitiveness and general profit.

Therefore, the regionally efficient integration of companies should process more progressively and by way of effectivity growth.

From the theoretical viewpoint, best forms of cooperation are these based on intensive creation of values and innovation, which would activate endogenous growth potential of both regions. Notwithstanding above mentioned suggestions, the border areas are often underdeveloped and burdened by specific deficits due to their peripheral location **(Gerling, Schmidt 1998)**. In our research, the deficits of studied regions are showed as socialist heritage as well. Besides infrastructural lacks (esp. transportation and communication), there are also deficits in a concentration of companies and labour market as well as in insufficient facilities of production factors such as human and material capital (c.f. **Heimpold 2003; Gerling, Schmidt 2000**; focusing on German borderland).

Also the company and sectoral economic structures of borderland seem to be underdeveloped in a viewpoint of potential regional development, resp. they form a weak starting position for this development. The networks of companies are less developed in comparison with agglomeration areas **(Barjak 1997)**. These contemporary deficits are intensified by remnants of former central planned economy. Theoretical priority of low transportation cost related to new foreign trade may have also negative consequences, while giving the opportunity of hard economic competition not only to „tradables“ companies, but also to „nontradables“ (e.g. some services) on the other side of borders **(Niebuhr, Stiller 2004)**. These structural lacks create specific barriers for borderland companies, which crimp the cross-border economic interconnection of the area. In case of former external EU borders, we can also consider the disadvantage of different language, mentality and „company culture“, which often cast doubts upon theoretical profit of centrality (in common market conditions) for former border areas.

With respect to above mentioned theoretical and practical problems of international company cooperation, the present

contribution aims at contemporary state of this cooperation in NW Bohemia and SE Saxonia, its perspectives, deficits and wishes of company representatives.

2. Methods and Material

2.1 Study area

Following chapter briefly characterizes the study area, in which the research proceeded; i.e. on Czech side the Ústí nad Labem Region and Karlovy Vary Region (NUTS 3) and, on the other side of the border the Saxonia (NUTS 2).

Both areas show some similarities according to macroeconomic data, e.g. the unemployment rate. Territorial diversities in life standard are lower as well when compared to national scale (**Gerstenberger 2002**). For instance, the comparison of regional purchase power in 1996 between directly neighbouring regions reached the ratio of 100:91 to Germany (**Riedel et al. 2001**). In the future we expect next homogenization of salaries and purchase power in the border area.

From the viewpoint of economic branch structure, all three regions (two in NW Bohemia and next one - Saxonia) demonstrate the intensive orientation on processing industry. In comparison with Saxonia, the Ústí nad Labem Region focuses on heavy industry (steel industry, oil processing and chemical industry) and natural resources (mining industry and energetics) in a higher degree, but also deals with processing industry. In both industrial sectors, the region raised significant investments. In the Karlovy Vary Region, traditional branches are represented (besides mining) primarily processing industry (such as glass and porcelain-processing, metal-processing), tourism, spa, and musical instrument manufacture. Generally, the industry is much more developed than tertiary and quaternary branches in the

NW Bohemia. The eastern EU enlargement commonly enables to West-European companies to transfer into the less competitive areas of Central and Eastern Europe Countries (CEEC) and to benefit from lower expenses. According to **Pellegrin (2001)**, the cooperation can be then mutually advantageous:

- companies in CEEC can gain knowledge and technologies;

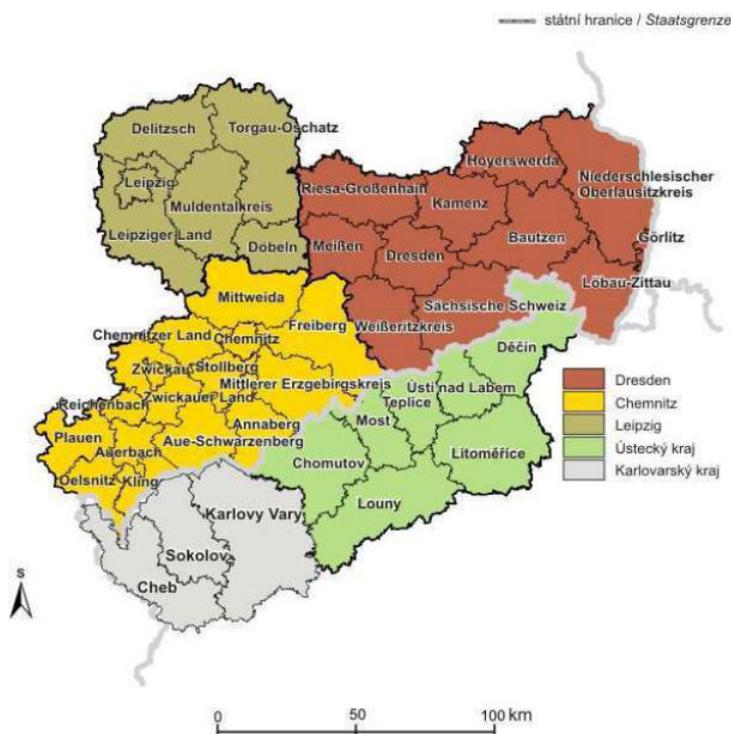
- West-European companies can reach lower expenses and increase their competitiveness.

2.2 Data collection

In January and February 2004, the Department of economic relations of the Bergakademie TU Freiberg (Internationale Wirtschaftsbeziehungen, Technische Universität Bergakademie) together with the Industrial and economic chamber of SE Saxonia (Industrie- und Handelskammer Südwestsachsen) addressed 4959 companies in the region (NUTS II - Regierungsbezirk Chemnitz) by the way of standardized questionnaire.

In September 2005, the Department of Geography at the J. E. Purkinje University proceeded the similar inquiry involving 2000 companies in the Ústecký Region (NUTS III). To support the inquiry, partly standardized interviews with representatives of selected companies were realized (29 from Saxonia during May-June 2004, October-November 2004 and April-May 2005). These companies were selected according to former questionnaires in the region. Next 27 companies from the northern Bohemia were selected in a similar way during the April-September 2005. Main aim was to follow the methodical procedure realized in the Saxonia (see **Jeřábek, Brezinski, Leick 2006**).

Fig. 1 Map of the study area (source: authors)



Tab. 1 Basic characteristics of the inquiry (source: authors)

	<i>UJEP</i>	<i>TUBA</i>
quantitative research		
companies adressed	2 000	4 959
questionnaires returned	221	603
	11,1	12,2
period of realization	September 2005	January-February 2004
qualitative research		
interviews	27	29
period of realization	April-September 2005	May-June 2004, October-November 2004, April-May 2005

Source: self inquiry UJEP Ústí n. L., TUBA Freiberg

When looking at the structure of companies involved in the inquiry, we can observe some significant similarities, or differences:

- NW Bohemian companies as well as SE Saxonian ones are established in legislative forms of „personal“ companies (59,3 % of Czech - s.r.o.; 79,2 % Saxonian GmbH; note:

bothe abbreviations means Ltd.); share of capital companies is in the NW Bohemian sample higher than in Saxonian one (15,8 % to 1,5 % of joint-stock companies);

- in both random samples is a high amount of economically independent companies (81,2 % and 86,4 %). Therefore, home or foreign

business groups and companies integrated in concerns represent the minority;

- when analyzing the companies size according to number of employees, we can state that there prevails smaller plants and companies in Saxonia (less than 10, resp. 10-50), whereas these are almost not represented in the NW Bohemia;

- there are differences of no consequence related to engagement in research and innovations. Exactly 81,2 % of NW Bohemian companies invest less than 1 % per year in the research and innovation, in Saxonia this amount is approximately two thirds of all companies investing less than 1 %. The investment in the research can withal represent an effective tool to indicate the economic level of companies.

4 Selected results

4.1 General problems after the EU enlargement

The inquiry performed showed, that the recognition of different problems is slightly more strict from the viewpoint of SE-Saxonian companies, than from viewpoint of NW-Bohemian ones. For NW-Bohemian companies, which were addressed within the inquiry, a deficit of qualified labour is the most distinct problem (20,8 %). Another problems concern the accessibility to international markets, finance, technologies, and competition with other European and Third-World companies. According to our results, companies feel the threats mostly in relation to global processes and factors, than to cross-border situation (for an overview see **tab. 1**).

Most significant problems of SE-Saxonian companies are these of disadvantageous expense structure and financial problems (for at least ca 35 % of companies this represents a significant problem), acquiring the access to international markets due to problems in regional sales. Contrarily, competition with Czech companies was mentioned as secondary problem.

Tab. 2 The importance of different effects of the EU enlargement for NW-Bohemian companies (% of answers „very important“ and „important“) (source: UJEP Ústí nad Labem)

the EU enlargement effects	%
higher prices, higher economic competition	22
better conditions for international cooperation	22
better finance conditions	14,6
better sale conditions	14,3
more intense pressure on rationalization	11
higher purchase power in the region	8,3
lower transportational expenses in neighborhood countries	5,8
better labour recruitment	4,6

4.2 Cross-border commercial relations between companies

The aim of this issue was to analyse the structure of cooperation in the cross-border region in relation to the EU enlargement. Towards the time of inquiry, approximately one-third of NW-Bohemian companies cooperated with German ones, while next 4,3 % planned future teinning of such cooperation. When looking at SE-Saxonian comapnies, it was only one-fourth of companies cooperating with Czech partner, however the valid comparison of these shares is not possible due to different periods of inquiries on both sides of border. The existing commercial relations are shown in the **table 2**; **table 3** then summarizes the types of commercial cooperation.

Tab. 3 Existing commercial relations with comapnies of neighbourhood country (source: UJEP Ústí nad Labem, TUBA Freiberg)

commercial cooperation	NW-Bohemia	SW-Saxonia
existing	35	25
being prepared	4,2	3,5
none	60,8	71,5

Most of these cooperating companies deal with processing industry (1/3), while other branches were such as building industry or agriulture were less reposed (1/10).

Tab. 4 Comparison of cross-border commercial cooperation types (multiple choice) (source: UJEP Ústí nad Labem, TUBA Freiberg)

commercial cooperation types	NW-Bohemia with German companies	SW-Saxonia with Czech companies
longterm delivery	95,8	70,8
capital share	6,9	11,5
work (wages)	2,8	17,7
licence/francheesing treaty	2,8	1,8

4.3 Successfulness, problems and motives

NW-Bohemian companies rate the cooperation with German partners as generally successful, which does not completely stand for SE-Saxonian ones. These consider the existing relations rather unsuccessful. They profit especially in a field of lowering the expences and more efficient utilization of their capacities. However, it seems that NW-Bohemian companies profit much more than SE-Saxonian ones. Furthermore, they gain technologic inovation. Contrarily, German comapnies almost do not profit in the field of qualification improvement, know-how, or the development of new products.

4.4 Limits and barriers

Limits and barriers of commercial cooperation can be summarized in the following groups as mentioned by inquired companies from SE-Saxonia:

- companies exporting products to Czechia complain about problems with access to market due to different mentality, language barrier, lacking information when looking for partners and contractors and customers;

- companies with long-term commercial relations usually overcame these problems; yet, some of these still complain about lacking own initiative and willingness to gain new knowledge and communication among different levels of management;

- uncertainties related to possible changes of ownership, resp. management in independent Czech partner companies (i.e. those, which are not being a part of concern); other risks are oscillations of price relations and exchange rates;

- companies with subsidiaries in Czechia complain about lack of qualified labour with language skills, specialized education, flexibility, etc.;

- general problem is a deficit of Czech companies suitable for commercial cooperation or its continuation, resp. improvement.

4. Discussion

The empiric inquiry showed that companies from SE Saxonia did not sufficiently appreciate the potential for cooperation, resp. did not react on possible negative effects of this process in the period before EU enlargement as well as after the eastern enlargement. Although a part of all companies is able to realize the decrease of expenses thanks to foreign activities in Czechia, these companies assess the late experiences in cooperation as not enough successful at the same time.

Administrative unifications due to EU enlargement created the motive for cooperation only for a few of SE Saxonian companies. However, we can observe that these companies active also in the Czechia prefer the area of Czech NW borderland when looking for any partner. Contrary to this, Czech companies are much more oriented towards Western Germany to realize their exports in this area and to strengthen their position in trade. These companies then profit more than Saxonian companies economically active in the Czechia.

It is absolutely clear that existing and acceptable limits for cooperation are for SE Saxonian companies too high to represent a motivation of participants concerning the integration in domestic market. These limits could be, according to opinions of companies representatives, removed by economically-political institutions and their activities. This result emerges also from the high share of information-based contacts.

The fundamental problem is the existence of information deficits in companies; a lacking knowledge for rise of foreign activities of middle and large companies arises in this context. Weak facilities of many small and very small companies in both borderland regions represents another problem to solve by means of economic-political remedies, which would bring also the possibility to make investment foreign activities. Another suggestion concluded by authors is a foundation of specific advisory boards of these companies related to their activities on Czech market.

Finally, the SE Saxonian companies should be supported during the primary internationalization. This support should enable to test the target markets, which can be more advantageous, before opening the cross-border economic relations. The so called „best-practice“ are specially valuable for companies in relation to the above mentioned alternative way. Information from these cases serve to improve the mutual confidence of both partner participants willing to cooperation. Present research did not testify the scenario publicly proclaimed before EU enlargement, i.e. that Saxonian companies would move to the Czechia en masse. Neither personal interviews did provide any indices to expect this strategy of future development.

The limits for Czech companies to participate in Saxonia, resp. Germany are noticeably lower and, thanks to the initiative of German partners, they found their position on market (significant market esp. when considering export strategies of these companies) quite rapidly. In middle-term and long-term perspective however, many problems arise emerging from dependence on German partner and as a consequence of single-track specialization of these companies. This is probably the reason why there is no effort from Czech companies to establish the cooperation based on creation of new values within the bounds of German participation on Czech market. Economic-political recommendation should be aimed at explaining the negative effects of cooperation based only on wage labour in long-term perspective.

5. Conclusions

Finally, we can note that the interconnection of companies is created only then, when there is a potential of sufficient experiences and of similarities in institutional structures on both sides of the border. These relevant institutes are represented especially by informational institutes such as resemblance in conceptions of values (reliability in observing the terms, etc.), common and unified solution of conflicts and mutual confidence, the role of which increases in scope of integration process. Moreover, we can expect that regional connection of companies will proceed primarily in branches disposing of large companies in the centre of this connection. Authors suppose that suppliers for car industry located in SE Saxonia and NW Bohemia would play this dominant role as first economic branch.

Acknowledgement

The research was realized in cooperation with TU Bergakademie Freiberg and funded by EU Initiative Interreg IIIA: Perspectives of cooperation between companies in Ústí nad Labem region and SE Saxonia (No. CZ.04.481/1.1.00.1/0082. Authors would like to acknowledge this support.

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Lithuania - is it an interesting country for foreign visitors?

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Received 12 March 2007; accepted 16 March 2007

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Today's Lithuania is concurrently old and young country. Old because her statehood exists 700 years, but its name is demonstrably known nearly thousand years. Young is because her renaissance runs 15 years only.

Lithuania is parliamentary republic, state language is Lithuanian, main persuasion is Roman Catholic, in spite of the fact that there exist 9 others official. Lithuania with its territory is only small piece of our planet and is found on southeast coast of Baltic Sea in Nemunas river basin (Nėmen). That is why it was called Nemunas region in past and thanks to incidence of amber the Amber region too.

Total area of Lithuania is 65 300km² (18th position in Europe), its population is 3,4 mil (28th position). Between 200 countries of the World Lithuania counts in second hundred by place and inhabitants too. The country is divided into 10 counties, 60 municipalities and 12 statutory towns. There are 103 towns and 21800 villages of all dimensions.

There are not mineral resources as petroleum, gas or coal, old antic historical building are not too. But well-known are gothic buildings as church St. Anna in Vilnius, Trakai castle or Vytautas church in Kaunas. We can meet nice baroque or classicist monuments.

Lithuania is rich of clean water in rivers or ponds and lakes in beautiful countryside. There do not occur natural disasters, it is country full of green woods and meadows, temperate climate in which "good hearted and hospitable peoples" live - people that had many times in history to fight about their freedom.

Fig. 1 Schematic map of Lithuania (source: authors)



At first the name Lithuania appeared in 1009 however there several ancestors of today country for long time before the date. The ancestors of today's Lithuanians migrated to Baltic region from their original home somewhere in the west of central Russia. In the course of time great and power medieval state – Grand Duchy of Lithuania developed. It controlled great territory from Baltic to Black sea. From second half of the 16th century declining state came in alliance with Poland but after defeat of this commonwealth Lithuania come 1795 under Russian Tsar as small government. This event started the period of strong russification and the name Lithuania was prohibited to use. In the second half of the 19th century Lithuanian language, literature and official press was prohibited too. Disobedience was strongly punished. Also the 20th century was for Lithuanians difficult however “lucky” for two-times. At first the February of 16th 1918, March of 11th 1990 and short time in the year 1940. As well as in case of other CEEC (Central and Eastern European Countries), last 15 years represented the big challenge for Lithuania. The new experience of economy and population in transition offered the potential for new branches, but also the problems of both regional and local development (differences between the core and peripheral areas). Good deal has been done by progress in joining the European transportation networks and creation of investment opportunities for foreign companies.

In Lithuania there are not high mountains even so it is very nice country - it has been shaped by predominantly glacial and periglacial agents and thus it offers an interesting spectrum of landforms, spaces and consecutively modalities of their specific use (land use). Besides romantic plains there are hilly countryside's too; as for instant Zemaitija hills, with highs around 200 meters about sea level. Highest hill is situated on Lithuanian – Belarus border, Juozapine 293,6 meter a. s. l. There are many lakes which increase the potential for water sports. The visitors admire in this countryside not only her beauty, but her life too.

It means animals living in the wild, fishing or picking of woodland fruits.

The most visited town in Lithuania is constantly capital – Vilnius. It is found eccentric in east part of country, but in past its position was in origin on a centre of Grand Duchy. In Old town the visitor can find architecture of many times and styles. This part of town is for cultural wealth in the list of historic and nature heritage of UNESCO. If for Prague and Czech is symbolic the Hradčany castle, for Vilnius and Lithuania it is Gediminas tower with state flag. Down the hill the Neris River is running, and new reconstructed Grand duchy palace stands. Hours you can wander around trough Old town in his meandering medieval streets. They are full of cultural gems, which were only for short time ruins. From sightseeing's only some selected – Vilnius University, St. Ann church, St. Peter and Paul basilica, Cathedral basilica and more all churches.

Next place of interest is Trakai, in history the second capital of Lithuania. It is unique town laying on the bank several lakes of which the Galve Lake is the biggest. On one of 20 islands is situated world-famous Trakai castle. Today it is reconstructed and its museum shows history of Lithuania. Trakai town is renowned for Karaim history, architecture and cooking (kibinaj) or marriage “ritual” carrying newly-married woman over 12 Trakai bridges.

Kaunas, interwar capital, is situated on the banks of Neris and Nemunas rivers. Today it is the second biggest town (420 000 inhab.). The visitor can observe medieval Old town with Vytautas church and other old architecture (Perkunas house, White capital house, medieval street with original houses...) and modern part, known by Laisves aleja (Freedom Avenue).

Not far from Kaunas is situated “Kaunas sea” water reservoir on the Nemunas River with Rumšiškės open-air museum on its bank. Visit of Nemunas river basin is unforgettable. It is possible to begin in Druskininkai spa (to the South). Today reconstructed district offers new and modern balneology facilities, wonderful nature (National park Dzūkija) and history, park with open-air museum (Gruto parkas) showing life in Gulag prison camp and statues from

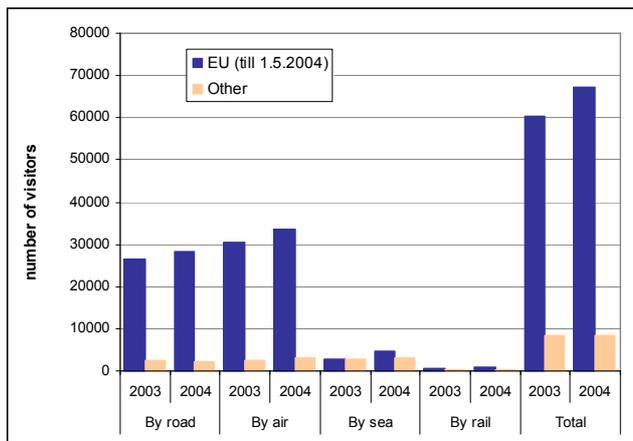
Soviet time (Stalin, Lenin, Dzerzinskij...). Druskininkai is born town of national cultural public person M.K. Čiurlionis.

In the second part of Nemunas basin from Kaunas to the west, there are several historical places as Lampedžiai, Kulautuva, Kačergine, Raudondvaris, Raudine, Vilkija, Jurbarkas, ...

We can not forget Nemunas delta Regional Park and Curonian (Kuršiu) split National park (UNESCO). Here is Klaipeda (Memel) port with its troubled history or summer resorts Juodkrante and celebrated Nida in sand dunes. Near from Klaipeda is situated Palanga sea summer resort with completely different climate.

Above-mentioned example put not one's finger on all possibilities. Free Lithuania has available more possibilities for eco-tourism and agro-tourism. We have not spoken about Aukštaitija National park, Žemaitija or Križiu Kalnas near from Šiauliai. There are still many and many places of interesting in Lithuania which have their "genius loci spirit". From the West to the East, from the South to the North, in every four seasons, there is what to admire.

Fig. 2 Number of visitors in 2003 and 2004 during january-april period (source: Statistics Lithuania, Lithuanian State Border Guard Service)



Lithuania is recently not enough known in Europe, but every year more and more visitors come to spend their time there (see fig. 2) They discover very nice countryside with friendly population, interesting history and culture.



A brief glimpse into the late landscape-ecological publishing

To some extent we could claim, that today's landscape ecology is divided into two different approaches: 1) bio-ecological (especially so called „North-American school“) and 2) geographical (e.g. so called „German school“). In last years quite broad array of monographs of North-American school have been published focusing on landscape ecology (**Forman 2003; Forman, Godron 1993; Gergel, Turner 2003; Klopatek, Gardner 1999; Turner, Gardner 1991; Turner, Gardner, O'Neil 2001**):

The seventh edition of Forman's "Land Mosaic, the ecology of landscapes and regions" (first edition published in 1995; **Forman 2003**, Cambridge University Press) shows the development of Forman's scientific paradigm "patch-corridor-matrix" since its premiere in "Landscape ecology" (first edition **Forman, Godron 1986**). In comparison with older prior publication Forman simplifies the structure of the book into five main parts: 1) terminological introduction about landscapes and regions, where he defines the ecology of landscapes and regions including its historical background; 2) patches, consequences of their origin qualities, quantitative, shape and size attributes, the concept of margins; 3) corridors, their attributes, types, including networks and matrix; 4) mosaics and flows, landscape pattern; 5) changes of mosaics, pattern, landscape fragmentation, spatial (landscape) planning and management, closing chapter "Creating sustainable landscape and regions".

Differently, consistently structured monograph written by American authors **Turner, Gardner** and **O'Neil (2001)** offers brief terminological introduction, summary, discussion topics and suggested reading in each individual chapter. Monica Turner does not negate the peculiar scientific approach studying the ecological processes and disturbances of ecosystems (Oak Ridge Laboratory). The content and style classifies the book according to Kovář's opinion (**Kovář 2004**) to first line of desirable border between bioecological and geographical disciplines. The book is clear of superfluous historical, theorizing reading and instead it suggests the questions of application related to modelling and quantification of pattern changes, disturbance regimes, consequences concerning organisms and ecosystemic processes.

The monograph of **Gergel and Turner (2002)** represents a practical textbook for student of sciences. As a textbook, it guides its reader through manifold landscape-ecological concepts and methods with abundant theorems in inserted boxes, practical exercises and examples to solve. Thematically, it correlates with the above mentioned book; the emphasis is placed on quantification of spatial pattern of a landscape, simulation of its changes, landscape metrics and bioecological consequences. The somewhat older publication of **Turner and Gardner (1991)** offers wide ranging scale of quantitative methods created especially by North American landscape ecologists, analyzing and interpreting the spatial mosaic of components forming the final landscape structure, inclusive the array of flow and simulation models.

The editors **Klopatek and Gardner (1999)** summarize the contributions of 11th and 12th American IALE conference participants (conferences in years 1996 and 1997). The variety of presented topics is structured into six sections. The two introduction contributions in the first section

(Issues and Challenges in Landscape Ecology) reflect the concurrent situation in landscape ecology. **P. Risser (1999)** asks whether the science needs only to justify its frontiers, or whether it demands the deeper change. **R. Hobbs (1999)** suggest the question of the position of landscape ecology - should the discipline be the Clark Kent, or rather the Superman (?), where is the phone booth for landscape ecology to change in Superman (?). The following sections bring the perspectives on models, numerical techniques, planning strategies and teaching of landscape ecology. Finally, **Wiens (1999)** summarizes the theoretical and application issues of landscape ecology in the last section.

Also the publication of so called “Italian school” penetrated into the suggested reading of students in landscape-ecological disciplines (**Ingegnoli 2002; Farina 1998, 2000**). Vittorio Ingegnoli, professor of the University in Milano, offers the view of biologist. According to his scientific roots, landscape ecology is perceived as an opportunity to motivate the ecology to revise its theories, on the other hand the opportunity to create more unified ecology. In his book, he presents the transparently summarized thought of manifold ecological concepts belonging in general system theories, theories of life systems and complexities. He also outlines structural models, informational processes accompanying the dynamics on different levels and emerges in metaphoric area of “landscape pathology” (e.g. **Kovář 2004**). Similar (bioecological) orientation can be seen in monographs of **Almo Farina (1998, 2000)**, which are well annotated by **Kovář (2004)**: “The matter supporting and improving the scientific discipline - theory, is continuously reflected as a subject of inquiry in application of the discipline. That is the complex of principles derived from theory.” Through this approach, the new book of Farina’s appropriately pairs with his former one, which gained the popularity in students groups thanks to its pithiness, clearness and direct questions (**Farina 1998**). Its title “Landscape Ecology in Action” fits, since while the first monograph taught the purpose of technical terms in context of landscape scale, measurable properties in relation to processes in a landscape, interconnections between special ecology (local) and general (system), the second book turned the attention toward the evaluation of landscapes, resp. the importance of development scenarios in space and time.

In comparison with the above mentioned, publications of so called “German school” are different while considering its geographical approach and diverse tradition (**Bastian, Steinhardt, 2002; Krönert, Steinhardt, Volk, 2001**). As mentioned by Kovář, the traditional German consistency does not omit the huge historical excursus into the past and late development of landscape ecology. Despite the long German tradition of geographical approach, authors deal also with other inspirational ecological conceptions, from metapopulation disintegration of environmental fragmentation, to ecopsychology and ecosociology. The book make clear that landscape ecology is not about virtual or academic matters, but about terrain science, which knows the ways how to collect data from different sources. It analyzes the landscape structure and processes in detail, focuses on landscape analyses, synthesis and diagnosis. Further it confirms the methodological, assessing and planological direction of Middle-European landscape ecology. In the collective work of **Krönert, Steinhardt and Volk (2001)**, the classical scheme of cultured landscapes - landscape balance and assessment stay in the centre (cf. **Kovář 2004**). Each of ten chapters starts with textbook terms and introductory basis written in short paragraphs and emerging into cases and further suggestions for reading. First chapter devoted to theoretical and historic aspects of the landscape assessment, data processing, creation of datasets and the influence of spatiotemporal scale prepares the main theoretical principles for the following application in landscape assessment in regional planning and landscape management.

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Martin Balej



Web-contact list of Selected Middle-European Geographical and Related Journals (*permanent chapter*)

Notes for simple searching:

1.X Czech journals

2.X Slovak journals

3.X Polish journals

4.X German journals

5.X Hungarian journals

X.1 GEOL-GEOPH geology and geophysics (often combined with geodesy)

X.2 GEOM geomorphology

X.3 GEOGR geography

X.4 SOCIO social aimed sciences (sociology, demography etc.)

X.5 ENV environmental issues

X.6 CART-GEOINFO cartography and geoinformatics

X.7 SCIENCE other unspecified sciences

If you know any other concerned journal, which should be added to this list, we would be grateful for your information. You can also improve the basic information sheet (e.g. characteristic of the journal, e-mail contacts, free web issues, submission conditions, etc.). After the control made by editorial board, the list will be automatically actualized.

1. CZECH JOURNALS

1.1 GEOL-GEOPH

GeoLines

- *Geological Institute, Czech Academy of Sciences*

<http://www.gli.cas.cz/geolines/>

Journal of the Czech Geological Society

- *Czech Geological Society*

<http://www.geologickaspolecnost.cz/jcgs/index.php>

Studia geophysica et geodaetica

- *Institutes of Geophysics, Czech Academy of Sciences*

http://www.lib.cas.cz/casopisy/cz/Studia_geophysica_et_geodaetica.htm

1.3 GEOGR

Geografie – Sborník ČGS

- *Czech Geographical Society*

<http://www.geography.cz/>

Historická geografie

- *Historical Institute, Czech Academy of Sciences*

<http://www.hiu.cas.cz/period-histgeografie.php>

Moravian Geographical Reports

- *Institute of Geonics, Czech Academy of Sciences*

<http://www.geonika.cz/MGR.html>

Acta Universitatis Carolinae - geographica

- *Charles University*

<http://www.geography.cz/acta/>

Acta Universitatis Palackianae Olomucensis - geographica

- *Palacký University*

<http://publib.upol.cz/~publ/AUPO.htm>

Geografické rozhledy

- *Cartography Prague, a.s.*

<http://www.geografickerozhledy.cz/>

1.4 SOCIO

Czech Sociologic Review

- *Institute of Sociology, Czech Academy of Sciences*

http://www.lib.cas.cz/casopisy/cz/Sociologicky_casopis.htm

1.6 CART-GEOINFO

Geodetický a kartografický obzor

- *Czech Office for Surveying, Mapping and Cadastre; Geodesy, Cartography and Cadastre Authority of the Slovak Republic*

<http://www.vugtk.cz/odis/cd2001/cuzk/adr07/gako/gako.html>

Zeměměřič

- *Czech Office for Surveying, Mapping and Cadastre*

<http://www.zememeric.cz/>

2. SLOVAK JOURNALS

2.1 GEOL-GEOPH

Contributions to Geophysics and Geodesy

- *Geophysical Institute, Slovak Academy of Sciences*

<http://gpi.savba.sk/cgg.html>

Geologica Carpathica

- *Carpathian-Balkan Geol. Assoc.; Geological Institute, Slovak Academy of Sciences*

<http://www.geologicacarpatica.sk/src/main.php>

2.2 GEOM

Geomorphologia Slovaca

- *Association of Slovak Geomorphologists, Slovak Academy of Sciences*

<http://www.asg.sav.sk/gfslovaca/index.htm>

2.3 GEOGR

Geografický časopis

- *Institute of Geography, Slovak Academy of Sciences*

<http://www.aepress.sk/>

Geographia Slovaca

- *Institute of Geography, Slovak Academy of Sciences*

http://www.geography.sav.sk/vyd_cinnost.html#geog_slovaca

Acta geographica Universitatis Comenianae

- *University of Komenský*

<http://www.fns.uniba.sk/~aguc/index.html>

2.4 SOCIO

Sociológia

- *Institute for Sociology, Slovak Academy of Sciences*

<http://www.sociologia.sav.sk/socas/index.html>

Alfa Spectra

- *Faculty of Architecture, Slovak University of Technology*

http://www.fa.stuba.sk/buxus/generate_page.php?page_id=945

2.5 ENV

Ekológia

- *Institute of Landscape Ecology, Slovak Academy of Sciences*

<http://www.aepress.sk/> <http://uke.sav.sk/journals.htm>

Životné prostredie

- *Institute of Landscape Ecology, Slovak Academy of Sciences*

<http://gopher.fns.uniba.sk/zp/casopisy/zp/index.htm>

<http://uke.sav.sk/journals.htm>

Slovak and Czech journals dealing with Environmental Issues

<http://gopher.fns.uniba.sk/zp/casopisy/index.htm>

2.6 CART-GEOINFO

Kartografické listy

- *Slovak Academy of Sciences*

http://www.geography.sav.sk/vyd_cinnost.html#geog_slovaca

2.7 SCIENCE

Journal of Hydrology and Hydromechanics

- *Institute of Hydrology, Slovak Academy of Sciences*

<http://www.ih.savba.sk/jhh/>

3. POLISH JOURNALS

3.1 GEOL-GEOPH

Studia Geologica Polonica

- *Institute of Geological Sciences, Polish Academy of Sciences*

<http://www.ing.pan.pl/stud4www/index.html>

Geologia Sudetica

- *Institute of Geological Sciences, Polish Academy of Sciences*

<http://www.ing.pan.pl/sudewww/index.html>

Acta Geophysica

- *Institute of Geophysics, Polish Academy of Sciences*

<http://agp.igf.edu.pl/>

3.2 GEOM

Landform Analysis (Journal of the Association of Polish Geomorphologists)

- *University of Silesia, Association of Polish Geomorphologists*

<http://www.sgp.org.pl/la/lav1.htm>

Studia Geomorphologica Carpatho-Balcanica

- *Geographical Commission of Cracow Branch of Polish Academy of Sciences*

<http://www.fns.uniba.sk/cbge/studiaCB/index.htm>

3.3 GEOGR

Geographia Polonica

- *Institute of Geography and Spatial Organization, Polish Academy of Sciences*

<http://www.igipz.pan.pl/wydaw/GP.htm>

Bibliography of Polish Geography since 1985

<http://www.cbgios.pan.pl/bazy/bgp/english.html>

Wież i Rolnictwo

- *Institute of Rural and Agricultural Development, Polish Academy of Sciences*

<http://www.irwirpan.waw.pl/>

3.4 SOCIO

CEFMR Working Papers

- *Central European Forum for Migration Research, Polish Academy of Sciences*

<http://www.cefmr.pan.pl/index.html>

3.5 ENV

Polish journal of ecology

- *Centre for Ecological Research, Polish Academy of Sciences*

<http://www.pol.j.ecol.cbe-pan.pl/>

Polish journal of environmental studies

- *Polish Academy of Sciences*

<http://www.pan.olsztyn.pl/pjoes/index.html>

3.7 SCIENCE

Oceanologia

- *Institute of Oceanology, Polish Academy of Sciences*

<http://www.iopan.gda.pl/editorial.html>

4. GERMAN JOURNALS

4.1 GEOL-GEOPH

Geologische Rundschau (until 1999)

- *Springer Verlag*

<http://www.springerlink.com>

International Journal of Earth Sciences

- *Springer Verlag*

<http://www.springerlink.com>

4.2 GEOM

Zeitschrift für Geomorphologie

- *Gebr. Borntraeger Verlagsbuchhandlung*

<http://www.schweizerbart.de/j/zeitschrift-fuer-geomorphologie/>

4.3 GEOGR

Geographische Zeitschrift

- *Deutsche Gesellschaft für Geographie*

<http://www.geographie.de/>

STANDORT - Zeitschrift für Angewandte Geographie

- *Deutscher Verband für Angewandte Geographie*

<http://www.geographie.de/dvag/standort/welcome.html>

- *Deutsche Gesellschaft für Geographie*

http://www.geographie.de/dgfg/verbaende_e.htm <http://www.geography-in-germany.de/>

ERDE - Zeitschrift der Gesellschaft für Erdkunde zu Berlin

- *Gesellschaft für Erdkunde zu Berlin*

<http://www.die-erde.de/>

4.4 SOCIO

Osteuropa

- *Berliner Wissenschafts-Verlag*

<http://osteuropa.dgo-online.org>

5. HUNGARIAN JOURNALS

5.1 GEOL-GEOPH

Acta Geodaetica et Geophysica Hungarica

- *Geodetic and Geophysical Research Institute, Hungarian Academy of Sciences*

<http://www.akkr.hu/main.php?folderID=1589&articleID=3914&ctag=articlelist&iid=1>

5.3 GEOGR

Geographical Bulletin

- *Geographical Research Institute, Hungarian Academy of Sciences*

http://www.mtafki.hu/Ertesito_en.htm

5.4 SOCIO

Sociology

- *Institute of Sociology, Hungarian Academy of Sciences*

<http://www.socio.mta.hu/06.htm>

5.7 SCIENCE

Hungarian electronic journal of Sciences

<http://hej.sze.hu/>

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