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## Contents:

### ■ FOREWORD

### ■ STUDIES

**Peter Bahleda** 3  
SPATIAL ASPECTS OF THE SOCIAL INCLUSION / EXCLUSION WITH A FOCUS ON IMMIGRANTS

**Peter Bláha** 11  
URBAN SCENE SAFETY – PROPOSAL OF URBAN SAFETY ASSESSMENT METHOD

**Denisa Brighton** 16  
IMPROVING THE EFFECTIVENESS OF KNOWLEDGE AND TECHNOLOGY TRANSFER OPERATIONS AT UNIVERSITIES IN THE CEE REGION

**Pavína Mišková, Mária Kozová** 22  
LANDSCAPE QUALITY OBJECTIVE: FROM EXPERTS' TO THE PUBLIC FORMULATION

**Veronika Poklembová** 26  
URBAN GOVERNANCE. SUSTAINABLE MANAGEMENT OF PUBLIC SPACES AS COMMONS

**Marián Vunhu** 31  
MIGRATION AND KNOWLEDGE BASED SOCIETY

### ■ REVIEW

SAFETY AS SPATIAL QUALITY 34  
– CASE STUDY TRENČÍN

### ■ UPDATES

**Dagmar Petříková** 36  
THE INTERNATIONAL CONFERENCE “SUSTAINABLE URBAN LAND USE” THE INTERNATIONAL CLOSING CONFERENCE THE PROJECT CIRCULAR FLOW LAND USE MANAGEMENT – CIRCUSE

**Michal Maco** 38  
PARTICIPATION OF THE STU SPECTRA CENTRE OF EXCELLENCE TEAM AT THE JOINT AESOP- ACSP CONGRESS IN DUBLIN, IRELAND (15-19 JULY 2013)



The broad scale of the problems in the spatial development in central European space is a big challenge for spatial planning practice, theory and education. New tasks and new frameworks, brought by current development of the formation of knowledge based society, require the implementation of new approaches, new methods and new instruments in the spatial development management, new understanding of the role of planning. Those challenges address young generation of researchers in spatial planning, who present their papers in this issue of TERRA SPECTRA.

The effort of their research work is to contribute towards sustainable development and the processes of economic, social and cultural integration in Europe as well as towards its territorial cohesion with the interdisciplinary research and education emphasizing the integration of landscape-ecological, economic, social and technological aspects. Research and the proposals, focused on optimising of spatial structures contribute to the fulfilling of the criteria of sustainable spatial development to balancing

the regional disparities and at the same time to preserving cultural and ecological diversity, to improving the quality of life and to strengthening of social cohesion in Europe.

Interdisciplinary based research project of young researchers have been focused on creative research work on the issues of complex planning of sustainable spatial development with the focus on optimising the functional use of territory, including economic and other activities, mobility, relations and functioning of urban and rural structures, creation of sound environment for living, preservation of cultural heritage and ecological balance, based on cooperation with the population and other stakeholders of spatial development.

I believe that the papers will address academic society in the field of spatial planning in the whole Europe to see the topics and projects of young researchers in the CEE countries and at the same time bring impulses for their own research.

**Maroš Finka**



Peter Bahleda

## **SPATIAL ASPECTS OF THE SOCIAL INCLUSION / EXCLUSION WITH A FOCUS ON IMMIGRANTS**

### **Introduction**

The issue of migration is greatly robust and in this paper we attempt to focus on its impact at the local level, highlighting the existence of the spatial quality problem and in doing so, pointing out not only spatial perception as a framing unit of ethno/racial concentration, but also the position of migrants in such a space. We try to reveal this barely explored phenomenon in relation to macro and micro incentives that led to residential polarization. The importance of this issue is also underlined by the active approach of the European Commission which is putting increasing pressure on individual countries to adopt more effective actions to secure inclusion with regard to topics such as the acceptance of diversity with emphasis on social cohesion and the implementation of integration policies with the aim to promote equality and diversity based on recognition of the pluralistic nature of European society (Rudiger and Spencer, 2003).

The purpose of this paper is to critically examine and compare specific modifications in the transformation process of contemporary European cities linked to transnational and transcontinental phenomenon of migration, mostly emerging from the poor regions of the world. Revealing, detection and further endeavour to understand the spatial characteristics of urban ethnic enclaves seems to be one of the major challenges for European cities in the 21st century. The actual demonstration of the problem is in fact the first step in an effort to improve life in urban ethnic enclaves, required for achieving social cohesion in cities as well as creating more balanced spatial interplay of the physical structure of cities.

Ethnic clusters and especially their subgroup: enclaves are characterized mainly by the spatial concentration of economically disadvantaged population of minority groups. In the Western Europe, these characteristic formations are serious problem since the late nineties of 20th century. Recent incidents in Great Britain from the summer 2011 are a clear evidence of this issue and reflect a deep dissatisfaction of local people with their situation. Migrants are not identified with their minority status throughout society, as well as the quality of their environment, these aspects are also linked to the process of urban governance and in this case we discuss the untamed structure that is unknown even for the official power. This state is a result of many years of inaction and imprudent application of so called multicultural approach in the true sense, when the presence of minorities is only passively accepted, but not part of the citywide identity. For this reason, it was impossible to build the image of the city incorporating all the city dwellers. From the perspective of

urban planning, it seems very useful to understand, what levels of spatial quality are reached in areas wherein we can find higher percentage of the reference group of this research 1. The task is to answer the question: What planning measures should be employed by European authorities towards disadvantaged areas characterized by higher rates of immigrants?

We hope, we can get closer to a conclusion in use of case studies from selected European cities and in further understanding of context, we would be able to point out several best practices. The hypotheses to confirm or to refute are: Europe does contain urban ethnic enclaves often localized in less attractive areas with lower level of spatial quality. Europe has remarked a transition of immigration policy toward immigrants' integration based on more intercultural approach.

### **Methods**

The entire research of the thesis on which is based also this paper can be divided into four main stages, at first it was a phase of desk research, identifying the most relevant literature in the field of urban ethnic enclaves, also issues related to residential segregation and to steering of diversity. The second phase of the research formulates research question, refines hypothesis of this research, and introduces the conceptual framework - an important theoretical basis for our inquiry. The third part is composed of case studies formed by the combination of various methods, the quantitative as well as qualitative applied on specific cases, accompanied by field studies. The last part is based on comparative analysis and reveals the main characteristics of studied phenomena.

With the aim to respond to a first hypothesis, the principal stress and a large part of the thesis was devoted to the effort of identification and further definition of the spatial manifestations activated by migration process. This phenomenon has reached global dimensions and is affected by many factors, especially by poverty which is reflected into the weak economic power to form an appropriate living environment by its inhabitants, or by different cultural backgrounds implying in specific needs and creation of living spaces. The presence of such specific formations of urban structures formed by migrants is typical mostly for the biggest cities and divers only slightly from one European country to other, depending on many characteristics (GDP, welfare state, immigration policy, historical ties to home countries of migrants - particularly from times of colonization, etc.) which formulates peculiar context of each city. With the aim to obtain certain degree of



diversity but on the background of the similar contexts, we decided to select further reference European cities, as follows: -

- Northern Europe - Nordic region: Oslo ·
- Central Europe: Vienna ·
- Western Europe: Zurich, Geneva

To avoid relatively huge contextual gap between southern Europe (Maloutas and Fujita, 2012) and post-communist countries, we propose to investigate just cases mentioned above.

The scope of the case study: -

- obtainment of statistic data on different ethnic groups in reference cities, setting up definitions ·
- description of recent migratory flux, research of the past documents on the cities development strategies (in use of local database) ·
- use of data for the PJF3's classification + identification of type of clustering, mapping ·
- role and localization of immigrants settlements within the cities, accessibility to urban resources ·
- definition of the visibility and environmental quality of urban enclaves in use of comparative analysis ·
- causes of the residential segregation ·
- documentation of specific spatial aspects, urban typology related to different social groups ·
- documentation of planning interventions in order to mitigate presence of disadvantaged neighbourhoods ·
- results processing and conclusions

## Conceptual framework

Basically it is not easy to make generalisation on cities, but at least, we may claim that cities are open systems nested into the specific conditions formed by a wider context of social, institutional and economic relations, where the term context means a set of alternatives within which actors have to choose (Kazepov, 2005). With the aim to characterize such a context for further case studies, we set a framework which enables to enhance local variations and mitigate the effects of negligence of important relations in concluding chapters. The systematic of the work and the key components are presented in conceptual map (fig. 1) namely: space, social morphology, migration, cultural identity.

Systematic is presented from different perspectives:

- 1. Terms – definitions
- 2. Aspects – features
- 3. Problems – challenges to be solved
- 4. Links to other phenomena

In the case of space, there is a possibility of allocating geographic area and thus the perception of space as a frame for certain phenomenon. However, in addition to

that, the space itself carries some internal values. When it is being assessed in relation to a particular reference entity, which may be a person – human being, we can talk about a certain spatial quality. In the case of the social sphere, we are dealing with issues of social polarization within cities, but also the theory of social morphology presented by Martinotti (1994; 2005), which focuses on the specification of the city population and the issues of rights and urban management. The field of migration, *inter alia*, explains the institutionalization of migration in space and provides synthesis tools of this phenomenon.

Another part is also devoted to a brief description of the fundamental challenges of migration at European level. In the 'culture' chapter, we describe various theoretical approaches of coexistence of different cultures within one area and thus define the theoretical differences between assimilation, multiculturalism, and a relatively new concept in this field, which is inter-culturalism. While the notion of assimilation refers to the unilateral process of integration and adaptation to cultural realities and practices of the host society, the multiculturalism is a theoretical approach that guarantees cultural autonomy of minorities and more or less at this stage the process also ends. In other words, multiculturalism is trying to create a mosaic of cultures within a single urban entity (Rodriguez-Garcia, 2010), but fails at the point where the attempt to bridge the gap should start.

The inter-culturalism could be characterized as bi / multi-lateral process in which different ethnic groups are not only passively accepted, but are actively involved in the overall social events. This approach seeks to avoid the phenomenon of parallel lives, when in the same city there are people of different origins without knowing the habits and practices that distinguish them mentally. Further, we focus on the local level, detailing the phenomenon of parallel lives and to alleviate this occurrence through intercultural approach in theory, significant weaknesses are identified in the communication and its governance. Here we bring new insight into problems through understanding of the existence of informal structures and via a certain degree of formalization of the structure we point to a higher efficiency in solving various problems associated with ethnic clusters.

## General comparisons and conclusions

After the extensive analyses and context description which we do not present in this paper, we assemble lessons learnt from the 4 case studies and provide common view on the current situation of immigrants within selected cities and point out the process of their integration with focus on specific spatial aspects.

It is clear, that each country, each city, each ... is different, presenting characteristic case as a result of the long evolution, influenced by a great variety of variables.



Despite the differences, after precise description of each peculiar context, we hope, we might be able to offer to some limited extent generalizations in three main spheres: at first, it is comparison of segregation as a spatial result, secondly, segregation as a process, which seems even more comparatively feasible than the results of segregation. The last domain refers to a way how different countries, cities have attempted to deal with the issue of residential segregation and there we propose to depict some of the main guiding principles that may be transmissible to other European cases and presented as the best practice. But before, we would like to point out the fact that all the cases share certain similarities. At first all of them are in countries with developed democratic regimes, characterized by European nuance in the welfare system, each urban entity had a long history that started already in Roman times, furthermore in relation to immigration, all the important flows related to the reference group of this research were triggered after WWII due to penury of workers. During 1960s, and in case of Norway even up to 1975, all of them opted for workers from relatively homogeneous sources originating in countries out of Europe, though later, authorities from these countries did stop immigration of unskilled workers, they agreed to allow immigration by the reason of family reunification. Furthermore, all of them are listed amongst top countries in terms of refugee and asylum seekers. Generally, in the context of reference group of population, there is a relatively high coincidence amongst investigated countries.

With the focus to residential segregation as the result that may be identified by employing of quantitative methods, we did discover the highest levels in term of reference group concentration in the case of Oslo, followed by very similar concentration patterns in Geneva, and Vienna, succeeded by Zurich. As illustrated by fig. 2, it seems that all the distribution mechanism are following very similar pattern, based on practically regular distribution of the reference group across all framed concentration levels. Furthermore, except of Oslo, the predominantly Non-European population group of people with migration background status is reaching very similar values. In practice it means that in case of Oslo, there are areas where slightly more than 60 per cent of residents are people, who are subject of our research group. This is the only sample from above mentioned cities where persons predominantly of non-European origin are forming majority within city sub-districts. In other cases, such as Vienna and Geneva, the concentration levels are reaching maximal threshold of 30 per cent, furthermore in case of Zurich, this figure is even 10 per cent lower, that means, there are no sub-districts that could be characterized as predominantly populated by the reference group of this research, though we may still notice their presence.

Focusing on more local level, generally, we could identify two groups of districts within which we are able to find culminations of the reference group. All of them are classified as disadvantaged districts. The first group is

characterized as the one that is in the inner city, and forms parallel entity to indigenous city core that could be perceived as a sort of schizophrenia of the entire urban entity, since there is no relation between them and none of them recognize the other one. The second group is composed of districts localized in outskirts, predominantly mono-functional areas built mostly in post-war period with a high level of rigidity and renouncement of the traditional notion of street that was replaced by the pure notion of road.

We suggest that the concentration levels may also be one of the factors that may point to the specific urban features and elements of district tissue within areas of immigrant culmination. For instance, in case of Oslo, the traditional religious dominant of community – the church was replaced by the mosque. Furthermore in the downtown district, mostly in case of Vienna and Oslo, we could identify cluster of shops with exotic goods, oriented predominantly to specific group of customers. Although when pointing to cases from Switzerland we did not really discover any specific concentration of ethnic facilities; those are predominantly dispersed without any specific concentration. Moreover, in Switzerland, it is more likely to find ecumenical centres with multi-purpose rooms than the mosques, a fact that is also a reflection of a higher diversity of non-European immigrants and a fact that in case of Muslim population, e.g. most of them are Kosovar or Kurds who are less adherent to religion as it is in case of Pakistanis in Oslo. Though, in Switzerland, there is also particular legal institutional frame that for example prohibits the construction of minarets, but since this measure is relatively recent, we cannot evaluate its impact to urban fabric.

Except of the case of Oslo, we state that all other samples did not revealed any particular ethnic polarization that in terms of ethno/racial segregation would point to formation of further cultural entities, rather, we did reveal formations based on social polarizations. This evidence may also be a partial response to a question why there is regular distribution of reference group across all the concentration levels within each sample since this is based on the social status.

To sum up the segregation as an outcome having impact on urban fabric, we state that from the cases studied in this work, only one fits the criteria of higher polarization of population issued by immigration background from third countries. Namely, it is in case of Oslo wherein we may identify formation of entities that Li (1998) called 'ethnoburb', the denomination characterizing the area within which the indigenous population<sup>4</sup> is in position of minority, and the majority is formed by various ethno/racial groups. In other cases, we did notice moderate or low levels of concentration of reference group. The evidence of various concentration levels is also reflected into the physical environment and the elements that might be characteristic to such areas, though, due to limited economic force of these inhabitants, they opt often just for



adjustment of the existent urban fabric in a minor way than constructing particular urban components, features related to their cultural use.

Regarding the issue of segregation as a process we claim, this is related to various mechanisms. At first, it is important to note that the issue of concentration is predominantly referring to people who came in each of cases in 1960s and 1970s as guest workers, and decided to stay to host country and ultimately have invited members of their family to join them. As the first mechanism that led to this situation we point out the institutional migration frame, namely immigration control policy that was highly influenced by economic pressure in order to respond to a high demand of workers during the period of economic boom. Later, this mechanism allowed also cessation of the influx and prevented countries from being places characterized by even higher presence of reference group. Although the economic migration was highly restrained, the one based on family reunification and refugee reasons are still enabled.

Speaking about immigration policies, the other evidence that might have had impact to segregation process was inexistence of efficient immigration integration policies - a package of measures that would focus on first as well as on second generation of reference group in order to ease their integration into the entire society. In many cases, this had impact to this population by limiting their chances to succeed on the labour market since their language proficiency as well as general educational background could suffer from neglecting of proper integration measures.

Later, all of the investigated countries implemented robust integration policy measures in order to help immigrants to gain equal chances within the host society. In this case it is important to underline that the chances were not limited due to discrimination but due to inability of people with immigration background to integrate themselves into the proper educational, labour, and social life of the host country.

Furthermore, we did find evidence that housing market is a relevant factor that enters into residential segregation, predominantly as a result of uneven planning decisions from the past, what applies mostly to cases of Oslo, Geneva and Vienna. Moreover in the latter, there was also an institutional measure that restricted majority of the people from our reference group to access particular form of public housing. It is important to note, that the issue of ethno/racial segregation based on the discrimination reasons of specific population group has not been revealed in studied cases, however, there are indices that point to ethno/racial affiliation as a respond to some form of concentrations, mostly in the case of Oslo.

Furthermore, each study clearly deposes a fact that there is rising socio-economic diversity in urban space pursuing the subdivision of former broader social and functional division of the cities from the past, when the city development was not equal and some of the areas where

highly prioritized due to process of city's population polarization. Thus, we may found also radical division on the west-east, south-north, centre-periphery a fact, that is also mentioned by Maloutas (2012). We claim, therefore, that one of the primary roles in segregation within cities is played also by planning measures. Mostly in relation on how authorities did form environment, what form and function was assigned to particular areas that might subsequently become more vulnerable to social changes than other parts of the city.

Focusing on the main causes of residential segregation in each case study, we notice few nuances that are result of particular context, in case of Oslo we underline the composition of urban fabric and unfortunate planning decisions from the past as well as the higher level of ethno/racial affiliation, that is also related to higher rates of reference group of the research and respond to our theory on distribution of immigrants. In case of Vienna, the main difference points to quality of housing stock and relates the issue to planning decisions from the past. In case of Geneva, we identified also tax burden that may play its partial role in the robust mechanism of the residential segregation, alongside with the planning decisions from the past. Furthermore, the last case, from Zurich suggests that relevancy of spatial planning should not be omitted.

Hence, in relation to particular cases studied in this thesis we may state, that the segregation of predominantly Non-European immigrants is not an issue of socio/ethnic difference, but the one based on the social polarization of the entire society wherein, most of the people from the reference group of the research are economically weak, the evidence that is also supported by the character of the past migration flows into each of countries that are the object of our interest within this thesis.

Additionally, the question of the formation of specific urban ethnic enclaves should also be perceived in more global relations such as transformation process of European cities from the industrial to post-industrial, knowledge-based society, the reality that was also reflected to spatial pattern. This change implied closure of many industrial activities within cities what meant significant job loss in this sector (Frey and Smetana, 2006). The, tertiary sector progressively gained its leading position within the bulk of economic city portfolios. Moreover, since we speak about immigrants who came to European cities in massive migratory waves as guest workers, far from being highly qualified, regarding to their language knowledge as well as to their education background, we suggest they become highly unable to adapt properly to such a change and thus vulnerable to slide into unemployment trap.

To resume four case studies of this work, it is clear, that residential segregation patterns varies and are shaped by particular phenomena, such institutional setting of each country or canton. Any changes in housing segregations are strongly nested with macro-level institutional changes such labour and housing market, thus state and urban policies.



On the other hand there are so called micro-level change – such as personal values and norms, individual strategies and choices as documented by our research (Fujita, 2012).

This paper based on the results from dissertation also exposes the main areas of various ethno/racial concentrations, as well as those, where their presence has always been minimal. We compare the quality of the living environment respectively and furthermore point to the incentives that led into the residential segregation. Both aspects of segregation, the result and the process allowed us to focus on particular strategies from the each city to underline on how different authorities have attempted to cope with this issue. We speak about measures that have been taken in order to improve quality of life within disadvantaged areas that at the same time figure amongst sites wherein higher concentration levels of people with immigration status have been revealed. In all four cases this issue is treated with different intention and with a different degree of centralisation of projects. For instance, in the case of Oslo and Vienna, projects are regrouped into one general programme that is dealing with various qualities to be changed. In case of Oslo, the Grorud Valley project deals with 4 main areas, touching issues such as sustainable transport system, secondly, there is stress on green spaces and leisure time, thirdly the 'area lift' targeting the physical features of the urban environment and fourthly, there is the robust social, and health issue related to the multicultural reality.

Vienna has also tools that are to a large extent centralized, but in both with local action scope. When assessing planning interventions within Switzerland, these are to a high degree fragmented and represented by various smaller initiatives emerged at local as well as federal level. This difference may be explained by different political tradition and a fact, that in Switzerland, the governance procedure may be characterized by sectors, while in Vienna and Oslo, this is more question of various levels with horizontal mixture of different sectors. In both there are pros and cons, for instance the first one, characterised as a robust action plan typical for Oslo or Vienna may avoid the project overlapping, and the structure may be much easier to be understood by people at the local level, while the structure which is operating according to selected sectors across various levels may be seen as fragmented, often overlapping areas of action with other projects. On the other hand, the second case, may allow the faster adaptation and response to selected issues that arise as problematic during the implementation phase.

Nevertheless, each case represents different tradition in the issue of planning and tools that have been used to reach sustainability of urban entities and to cope with ethno/racial segregation as well. In the first case, the planning decisions from the past are highly responsible for the current situation and reflected into the unbalanced urban fabric of Oslo, notably the division on the western and eastern side. It was not sooner than in 1990s when authorities

recognized urgency to implement new measures in order to decrease social polarization that was to a high extent the result of form and function employed at the district level, and a fact that the planning was not focussing on consequences of its actions.

In case of Vienna, we may also speak about social polarization that was caused by planning actions from the past that allowed formations of extensive labour class districts a fact that on one hand at the period of industrial society was not misconduct, though later, with the further transition towards post-industrial age, these districts did not follow the same pace as the country's economy. Therefore, these areas were disadvantaged and later inhabited by people originating from the third countries and resulted in formation of neighbourhoods with higher concentration of the reference group.

From the planning perspective, we did identify as strongly relevant the form of urbanization and the function of area as the most pertinent variables in further social designation. This applies mostly to the cases presented from Oslo and Geneva that clearly point to a fact that areas of a higher concentration of immigrants, as well as of socially disadvantaged people are characterized as areas composed of block of flats, with predominantly mono-functional zones, or those in down-town areas with low quality housing. It is important to note, this is always interplay of various variables, and as evidence we may cite the case of Vienna in which the form may be omitted if the function fits to criteria desired by a broader society. The case of Vienna reveals that amongst the main relevant factors for segregation, the quality of housing plays also an important role, together with the institutional frame, since this case points to the occupation of lowest standard flats to a high extent by the reference group of the research.

All studies underline evidence that in each site that may be affected by some unfortunate planning decision is localized an immigrant group that is an object of our research. The areas, with a very low presence of reference group, are on the other hand those, without any particular social problems or issues to be dealt with. The crucial point of this section, therefore, is in understanding main principles of actions within each case, that attempt to improve status of disadvantaged neighbourhoods, and to propose general guidelines in order to cope with the situation of the social polarization within European cities.

At the initial stage, in each case, the authorities have analysed the main issues that led to the concentration of marginalized group of population, in order to improve living conditions and to avoid further aggravation of situation. Besides the detailed analysis, all projects involves participation stage, in various forms and extent, basically seeking to reveal main problems, but also to get into confrontation with suggested solutions with the aim to satisfy demand of people that do live within target areas and prevent the past planning steps that were made only by a selected group of people, often by specialists, though without any affiliation to the area of action.





All projects involves renovation interventions, in terms of flat improvements or even merging of several flats with the aim to propose more diversified offer at the local housing market. For instance, in the case of Geneva, the renovation attempts to merge several studio apartments to provide more room flats for families with kids, and thus contribute to social mix, though this measure is not excluding vertical segregation. Furthermore, all of the programs that are focusing on disadvantaged districts try to improve public spaces and form places that would have potential to form meeting spots, often based on a higher level of neutrality to prevent cultural conflicts since one of the important goals in each site has involved a target to form a more coherent local society. This includes a wide range of cultural activities that are focusing not only to local inhabitants, but tempt to attract people from neighbour districts and erase stigmatisation, change the district image in the eyes of other city dwellers.

The Vienna case reveals also the importance of employing gentle tools with the aim to overcome gentrification process that would lead on one side to a rapid upgrade of districts under operation, though to widening gaps between rich and poor and thus increasing social polarization of the city on the other hand.

Even though the various operations are forming several steering levels, at the bottom - the very local level, employees use very similar measures in order to cope with problems and issues in vulnerable areas. All of them confirmed the presence of informal governance structure that was sketched in the theoretical discussions on intercultural approach.

At the national level, we did discover that countries presented in above-described case studies show a common move in the concepts of immigration integration policies toward more multi-lateral process, focused on the position of people with immigration background in the receiving society. This assumption is supported also by other researchers such as Penninx (2013).

After all, we claim that the role of planning seems to have essential impact on the social polarization, since this is a tool with a great power that may contribute to a more balanced urban tissue, and decrease 'upward' mobilities to other neighbourhood based on the vision of the better educational institutions, amenities and overall district image. All regulations and restrictions that are apt to change unequal situation are in hands of planners as legal instrument to frame and mitigate outcomes of the purely capitalist societies. We claim, therefore, the importance of planning measures, also in the relation to the ethnic residential segregation has been for a long time omitted and discussions were spinning round identification of the segregation situations across selected cities, mostly those in U.S. literature, but much less speaking about the mechanisms of residential segregation, and almost not at all about measures that are taken in order to resolve this situation, in attempt to form inclusive society. The specific approach of spatial planning, not that much present in

studies of residential segregation, focuses precisely on the diversity and spatial distribution of urban components. This is also the reason why we tempted to reveal past planning decisions within each case and propose a review of current projects, mostly operating within the most disadvantaged areas in order to mitigate this peculiar factor originating in current state of urban tissue.

The planning as a tool, therefore seems highly relevant in order to create less segregated society, this evidence is supported also by successful traditional use of this measure in Zurich which reveals very low concentration levels of reference group. On the other hand this evidence is supported also by unsuccessful planning decisions from the past of Oslo. We may claim, therefore, that situation of European ethno/racial residential segregation in compare with the one in U.S. is different also due to a specific planning approach that is highly peculiar to old continent.

## Discussions

Although in our research we confirmed validity of all hypotheses, at the same time, it is important to note that issues related to human society, cities, are highly contextual and thus even our cases show that the theory highly coincides with the reality we should keep in mind all the settings that are thoroughly described in each case study.

At the same time we recognize a possibility that our research results do not apply to each city of the developed world, however under the particular conditions, that are described in this work, we reckon there is a high likelihood that for any other city from European context, that suffered by penury of labour forces shortly after WWII and subsequently invited workers from third countries, there may be the very similar evolution scenario there. In particular if the migration flow was highly homogenous. Since we attempted to avoid contextual divergence, this work does not contain examples from post-communist central European countries.

The reasons are several, at first, in case of Slovak cities as example, in regards to population, the only comparable with Oslo and Geneva would be Bratislava. However, within this city, statistics do not reveal any increased levels of immigrants or more precisely the reference group. Furthermore, post-communist countries have not been exposed to "guest workers" phenomenon as it was in case of countries studied within this thesis. Other reason would be touching the issue of Roma people, since these are not considered by our research as non-European immigrants. Furthermore, this group is under-represented in official statistics what would lead into highly invalid results, mostly when comparing segregation as a result into urban fabric. The outcomes of our research, the main contributions are divided into theory as well as into the practice. At the first place we attempted to introduce the issue of immigration and the impact of this robust phenomenon onto urban



entities in relation with spatial planning theory. We introduce also new theoretical knowledge on urban ethnic enclaves as a result of migration that is directly reflected into urban fabric. We believe that spatial planning has been for a long time underestimated discipline in relation to immigration issues. This thesis clearly points to its position mostly in regards of ethno/racial and social segregation within cities. Additionally, the research design we developed may be reused for further investigation directed to other cities and allows relatively high degree of comparisons of the residential segregation as a result into the urban tissue, but also as a process.

On the other hand, our work attempted to reveal the main principles, guiding lines for project developers, coordinators and consultants. The principal features that are transmissible to other sites are presented in concluding chapter. This seems to be a useful tool for future projects and may significantly ease the planning process. Furthermore we introduced also the steering structure of cultural diversity that may more effectively resolve possible conflicts.

**Notes**

- Predominantly immigrants and their descendants originating from developing countries.
- Partially presented in Bahleda (2012).
- Mike Poulsen, Ron Johnston and James Forrest – henceforth PJF as employed by Wright, Holloway, & Ellis (2011).
- In our research, the indigenous population is complemented by people with European immigration background.

**Figures**

CONCEPTUAL MAP - main themes

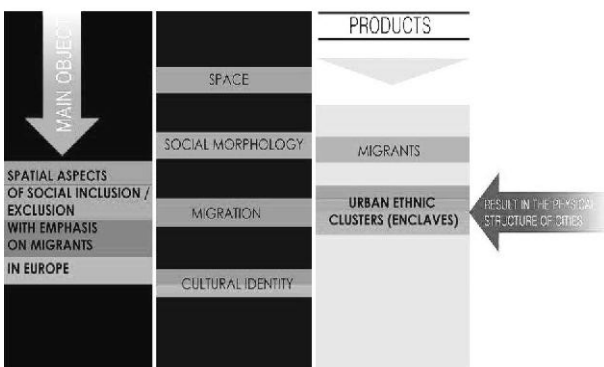


Fig. 1- Conceptual map, source: author

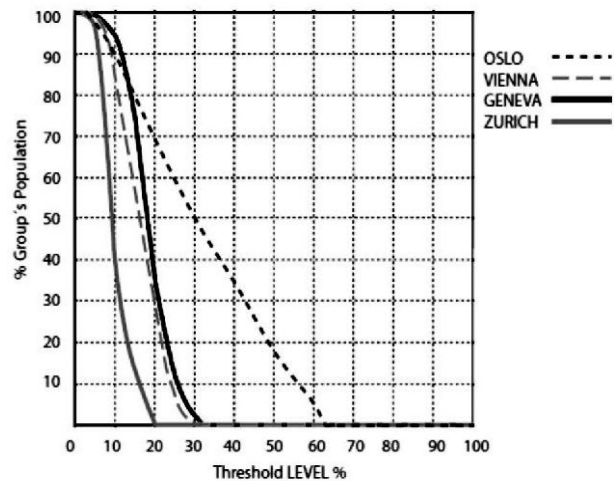


Fig. 2 – comparison of concentration levels within studied cities, author (2013)

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Peter Bláha

## URBAN SCENE SAFETY – PROPOSAL OF URBAN SAFETY ASSESSMENT METHOD

### Introduction

Urban safety is not strictly a new issue, but so far it has been quite little conceptually addressed and there is no single universally applicable and generally acceptable definition, yet. An exact definition, moreover, may vary depending on the country in which the term is used. The expression is composed of two relatively easily understandable words (urban + safety), combination of which, however, leads to formation of a new term whose meaning acquires a wholly new dimension. The general definition of safety or security is no longer sufficient when we discuss the so called urban (city) safety. For this purpose, it is clear that we have to add the “dimension of the city“ to the safety/security definition.

Urban safety, or rather public safety, includes a wide range of aspects and activities primarily linked to publicly accessible areas, from crime (prevention) through physical environment safety, accessibility (barrier-free solutions and principles of design for all - "universal design") to institutional and organisational aspects. **We define the urban safety (always, unless explicitly stated otherwise) as safety of any kind with respect to a person in any area within the city (urbanised area), where the public has more or less free access without restrictions (i.e. in public spaces, with emphasis on outdoor space), or any kind of person-related safety tied to phenomena and activities in these public areas.**

### The Objective of the Research

As the universal way of assessing the state of safety in a city currently does not exist, the aim of the research was to present the proposal of methodology of how the urban safety can be comprehensively and particularly objectively investigated. In such analyses of urban areas four basic elements should be considered:

- Volume-spatial composition, especially public spaces (i.e. street spaces, passages, buildings, parks, greenery areas, sports facilities, etc.)
- Human element - people (taking into account differences in age, sex, social status and their communities, etc.)
- Technical elements (transport systems, lighting systems, access control elements, elements of spatial orientation, etc.)
- Organizational and institutional elements (neighborhoods, safety and emergency services, civic initiatives, unions and associations, etc.).

### Safety Classification

The very concept of safety is related to several domains related to life within the city organism and safety can be further particularised and subdivided by different criteria.

Safety can be classified according to:

- **origin** (e.g. safety situations caused by intentional activity - terrorist act, assault, etc. or safety situations of random origin – e.g. car accident, heavy snow disasters, etc.)
- **spatial dimension** (e.g. safety situation related to a particular area – nightclub, busy crossroad, etc. or without any commitment to a particular area - theft, car crash resulting from driver's carelessness, etc.)
- **time dimension** (e.g. safety situation pertaining to a specific time period - morning traffic jam, night, winter, etc. or without any regard to the time aspect - an accident injury, a random car accident, etc.).

The time dimension of safety can be further sub-divided into:

- **everyday safety** – (daily) safety situations with the potential hazard of a permanent nature – e.g. areas with higher concentrations of people - bus and train stations, subways, city center, areas in the city attractive for tourists, etc.
- **spasmodic safety:**
  - episodic - disposable (safety situation happening once, e.g. scaffolds collapse in a construction site during a building reconstruction, etc.)
  - periodic (impact situation, but recurring with some frequency, e.g. school year ends, periods of social benefits payment, public holidays, weekends, etc.)

All categories and classifications of safety and security should also be considered from two perspectives:

- **volumes and space without human factor** (e.g. building structures safety, historic buildings, medieval walls, natural terrain modifications)
- **“Person” in the environment** - adding a human element to the environment (socialization, crime, community, human behaviour in different situations), threats or rather improving man's safety by another man.

Safety can be further divided according to the perception of the receiver into the following categories:



- **Objective safety** = safety whose quality is evaluated on the basis of certain objective data (e.g. casualty statistics, number of criminal acts in an area, etc.)
- **Subjective safety** = perceptible, it is individual and unique for every person.

### Proposal of Urban Safety Assessment Method

The proposed method of assessing urban safety can be simply visualized as a large chart that has been created by the intersection of the vertical (y axis) and the horizontal (x axis) levels. The vertical part has been formed by the space feature holders that make up some quality of the environment. The horizontal part of the chart is a list of those risks we come into contact when dealing with urban safety.

It is obvious that we can find quite a number of space feature holders as well as potential safety/security threats in an area. They need to be logically sorted into major categories in the very first stage. For the field of risks they are the following four ones:

- A. Health risks (endangering human physical condition and/or life)
- B. Socio-psycho-pathological risks
- C. Economic risks and losses on property
- D. Energy/resource safety

The field of space feature holders consists of five main categories as follows:

1. Physical structure (volume and space)
2. Functional structure (space function and management, traffic safety)
3. Person and society (social environment) – human being as a passive or active actor of the environment
4. Person as an object of reference (safety for whom)
5. Legal and institutional environment

The base of the urban safety model is to determine reciprocal interactions between the above mentioned groups of risk and components of the urban environment as feature holders relevant to the urban safety. With regard to the interactions between them, we can assume that some interactions will occur so infrequently that their mutual influence can be considered negligible or with no mutual influence at all (e.g. street lighting quality is in meaningful way unrelated to the long-term risk arising from genetic and evolutionary disorders for our investigation). When analyzing the safety and security situation, all the risks and all the components of the urban environment related to the urban safety (regardless of their importance) should be noted and only after this analyze their impacts.

The methodology brings a systemized overview and allows focusing only on the relevant forms of interaction - in detail it is thereafter possible to focus only on the most important of them in a particular district or part/area of the city. The resulting "table" will then take the following form: vertical section = feature holders (of the environment quality), horizontal section = main risks in the environment. The space between them is occupied by the mutual interactions. The less important and the insignificant ones may be marked by digit 0 and the relevant ones by digit 1, or rather by direct description of the interaction.

The result of such a procedure and a detailed description of interactions in broad representation, a general framework of methodology to assess the state of urban safety was obtained, which is applicable in any (urban) environment. Certain characteristics of a city and particular area in it are "transferable" and can be generalized, but on the other hand, every city as well as areas in it are specific and some qualities are unique for them. The methodology of assessment of urban safety will therefore be more effective with application of specific knowledge on the evaluated area, in cooperation with local structures (i.e. application of the general methodology and its "translation" into evaluation usable in a specific area require due to higher objectivity and evaluation efficiency from the very beginning cooperation with entities involved in the city life).

### Procedure for Urban Safety Factors in a City - Analysis

The proposed general methodology for urban safety assessment lies at the intersection of "horizontal" and "vertical" levels of urban safety model in matrix form, i.e. identifying and describing interactions of space feature holders and potential risks. To increase the effectiveness of safety quality assessment is based on local characteristics necessary to select from interactions key areas and forms of risks that are essential to that given specific space/place. However, processing the methodology is only the first step in improving safety situation in an area. The methodology thus becomes an instrument, when after evaluating the properties of space in relation to the risks we should be able (based on summary of the knowledge from particular area) to exactly define measures for given specific space that would demonstrably improve the quality of urban space in terms of safety.

***The objectives of interventions in a particular area are not only properties of the physical space elements but rather properties of community in space, which includes its inhabitants (or space users).***

As mentioned in the introduction, an important aspect of safety is the perception of urban environment on the basis of subjective impressions, feelings and emotions. Subjective feeling of safety and objective state of safety of



the same area are two related but still not the same things. For investigating the merits in a particular area, therefore, neither of these safety role should be neglected - for analyzing any area, it is necessary to use a triple combination of methods, which captures both extremes of safety assessment - from subjective perception (analysis by the sociological survey), to objectively review (based on exact data, statistics, standards, laws, limits, databases). The intermediate step between the two methods is the so called "expert evaluation method", when as part of field research in a particular area multiexperts review takes place, during which the territory is analyzed by an expert team, composed of various fields specialists.

In all three methods for evaluation recording the semantic differential method is recommended as it is the most objective one for such needs and, at the same time, acceptable for both general public as well as professional assessment. Thanks to semantic differential method it is possible to quite accurately assess the status of each selected aspects in particular environment and the overall quality in terms of safety.

### Case Study Trenčín

The proposed methodics for assessing the quality of urban safety has been tested in practical life in Slovak conditions in the City of Trenčín. The study presents a practical model application of methodology for comprehensive evaluation of urban areas in terms of safety, developed during the project "Safety as Spatial Quality". The study shows not only how the complex issues of urban safety can be seized but it also offers practical tools and measures that municipalities, as well as state and public governments, can use to deal with safety challenges of urban spaces.

Study feasibility of Trenčín took place in the months of April to December 2012. Their results form the basis for further planning activities in the city that will lead to increasing the safety level in urban areas. Mainly experts from the Slovak University of Technology and Spectra - Centre of Excellence led by Professor Maroš Finka participated in the practical implementation of the study. Outcomes of this case study were published in publication "Bezpečnosť ako kvalita priestoru – štúdia mesta Trenčín" (FINKA, M. 2012).

### Methodology for Evaluating the Proposal and Implementation of Measures to Improve Urban Safety

Apparently the most important benefit of the whole research was the fact that it was not formed by a separate isolated individual work but it formed an integrated part of the project Safety as Spatial Quality with the participation of more investigators. Each of them contributed with their efforts and knowledge to achieved results. Great advantage of the research was also the fact that this contained a comprehensive theoretical (theoretical preparations and methodology design) as well as extensive practical part (fieldwork) that again was only possible thanks to the many investigators involved. Based on these two parts of research and the unique know-how obtained during the process, it was possible to formulate "so-what factors" and recommendations for using them in practice. The complexity degree of which the project approaches the phenomenon of urban safety at present is unprecedented. Last of the efforts outcomes is elaborated design of solutions to safety problems process, which is versatile and flexible, while its basic backbone is constant.

### Procedure for Identifying and Eliminating Problems Related to Urban Safety

Despite the fact that the urban safety approach must reflect the uniqueness of each city (district), following key points of procedure for solving safety in a settlement can be defined based on available knowledge and experience:

- 1) Identifying the problem - finding and naming problems / issues within the area (of a city). In practical life, it is often possible to meet the "resignation" approach – when everything "is" a problem or with opposite extreme - nothing is a problem, especially if we ask for specific details (nobody does anything against it, i.e. everyone is "satisfied" with the current status). Precise problem identification is, therefore, an important first step, without which no remedy can be done.
- 2) Objectives definition, i.e. target quality to be the result of application of measures with a vision to improve the safety state in the area. At this stage, it is important to realistically evaluate possibilities and decide whether to address a wider problem (in that case also take responsibility for such decision, often associated with greater financial and / or time requirements for reformation), or focus on a specific problem that can be, to some extent, solved "in isolation". Defining the goals is also important because of feedback - after the implementation phase ending, when clearly defined goals at the beginning, it can be quite clearly verified whether the measures have made



sense or the whole effort came in vain (or was only partially successful). Problems reformation related to urban safety is generally a complex process and formulated objectives should, therefore, represent a vision - a reference point along the safety improvement journey in order not to wander from the correct path.

- 3) Identifying all the factors that are related with the problem. In this phase, risks are selected that are associated with the problem as well as space feature holders that by their presence or absence and their activity or inactivity participate in creation / persistence of the problem. Equally important is to reach out and collaborate with entities involved in the existence of a problem. Safety problem cannot (or can only temporarily) be removed by regulation or implementation without cooperation of subjects involved in given environment. Examining the relevance and interconnections of involved factors is an important part of this phase.
- 4) A detailed analysis of the area in which the safety problem shall be solved; selection and examination of relevant interactions between risks and characteristics of space using the described model of urban safety assessment method. For maximizing the objectivity of obtained data, we suggest at least three levels of data collection from environment - subjective data (collected by sociological surveys - controlled interviews, polls, questionnaire method), objective data (evaluation based on precise and clear standards and regulations) and partly objectified data (independent experts assess the problem directly in the environment).
- 5) Synthesis of collected data - finding the actual problem cause in an area. Based on the evaluation of quantitative and qualitative data, diagnosis is elaborated that should explain why the problem occurs in a given area, which other factors are further linked with it and what are its broader context in the environment. This is necessary because the expected cause of the problem (whatever it may seem clear, logical and irrefutable at first glance), may sometimes be not the real reasons or are only one of several causes of a problem creation or its persistence. Before implementation phase, it is necessarily important to know real, not imagined reasons that can be evaluated only on the basis of objective analysis. Focusing attention on subjective causes of problem and eliminating its effects rather than causes, generally does not lead to sustained improvement but only temporary improvements in safety conditions.
- 6) Solution strategies - this phase is to prepare concrete measures to improve safety in urban space. It is divided into five parts which must be

given careful attention (recommended to abide logical sequence but can also be considered parallel, or modify their order). These are the following:

- Resources
  - Solution process definition
  - Institutional framework
  - Activation of stakeholders
  - Determining availability of appropriate specific tools and identification of any limits of their use
- 7) The very implementation of measures - implementation of specific solutions in real environment.
  - 8) Monitoring - in real life the most underestimated and neglected part of project implementations. Constant monitoring of actions consequences, re-evaluating the situation (varying according to new operating factors depending on time elapsed from the actual implementation), is the only guarantee of new space quality sustainability. If the monitoring indicates newly arising or persistent urban safety problems, it is essential to "re-enter" the environment again, and so re-start the process using the proposed methodic.

### Theoretical and Practical Contribution of the Research

The objective of the work was to analyze in detail the issue of urban safety in Slovak conditions. We designed a system of how safety could be classified and what measures could contribute to increase its level within the spatial planning.

From this perspective, safety/security has not been addressed so far and no one has analyzed it that way. The parameters according to which safety should be assessed were discovered (analytic tool – in order to be able to find and use measures to handle it), their interdependencies were described and planning interventions were proposed.

Different types of safety should also be reviewed on different levels - as an example the fire safety. It can be seen in the micro - meso - macro scale (at the architecture, at the zone and the whole city level). Physical structure of space itself will play the role as the most important factor in all evaluations - size is definitely one of the most important parameters in urban safety. Social interactions in population (physical organization structure affects the formation of communities, etc.), social control over the area, and others, would be derived categories.

Practical benefits of work constitute designed methodology proposed for objective assessment of public spaces in a city. This methodology is flexible it can be easily



adjusted and improved in future. Its pilot version was tested in practical conditions and can serve as a contribution to debate on urban safety issues and basis for further research in the field of urban safety.

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Denisa Brighton

## IMPROVING THE EFFECTIVENESS OF KNOWLEDGE AND TECHNOLOGY TRANSFER OPERATIONS AT UNIVERSITIES IN THE CEE REGION

### Introduction

Knowledge and technology transfer (KTT) has been an inherent part of many universities' activities since the middle of 20th century. More and more research in the United States and Western Europe has been devoted to improving the efficiency in managing all the relevant processes whilst accommodating local specifics (cultural, legal, economic etc.). Commercialisation of knowledge and technologies has become an important instrument to increase university income in times when many governments gradually reduced their funding. As universities are one of the core creators of knowledge, it has become their responsibility to create effective mechanisms to transfer knowledge to the public to boost economic or social development. Most contemporary universities will have well-developed infrastructure and policies in place to support the transfer of knowledge from the university to business and public via several channels (Feldman, Stewart, 2006, p.2). Universities' departments, most often referred to as Technology Transfer Offices (TTO), are a part of this infrastructure and work to support academics with research findings and inventions who want to engage with industry partners.

Knowledge transfer from universities to the regional economy may take various different forms including:

- formal research collaborations;
- scientific publications and conference papers;
- consultancy;
- collaboration with industry;
- commercialisation of research (licensing and spin-off creation).

TTO as an establishment originates mainly from US research universities which accelerated the commercialisation of their research largely after the passage of the Bayh-Dole act in 1980 (Friedman, Silberman, 2003, p.17). The act gave US universities the right to patent inventions resulting from federal funded research and required that all discoveries originating from national research grants be disclosed through the university TTO. The act gave US universities the right to patent inventions resulting from federal funded research. The number of US TTOs increased from about 25 around 1980 to the current number of about 200 (Reiner, 2010, p.2).

In Europe, TTOs as internal intermediaries, started to appear at universities in the mid 1990s as a result of adoption of Bayh-Dole like legislations in several countries. TTOs as specific institutions or departments were created to advise on intellectual property (IP) issues, business

planning, financing early stage inventions (these are often subject to market failure due to lack of financing at this stage, etc.). TTOs are able to accumulate inventions across research units and promote them to technology buyers. Hence to be efficient, they need to possess a portfolio of knowledge from different industry sectors, understand both cultures – academic and business (Mowery, Sampat, 2006, p.211), be well connected and have adequate capacity. The establishment of TTOs that improve the efficiency of knowledge diffusion seems therefore justified from an innovation system and economic development perspective.

Commercialisation success varies across the board and is heavily dependent on a number of variables – e.g. quality of research, university strategy and leadership, management of KTT (implementation of an IP policy which motivates researchers to disclose their inventions), university's organisational culture, financial resources and demand for new knowledge and inventions (Feldman, Stewart, 2006, p.3). Some higher education and research institutes are successful in setting up and making good progress at KTT where others lag behind. In this paper we analyze the development of TTOs based predominantly at universities in the CEE region (Central and Eastern Europe). Based on the results of the RU Innovation Union Scoreboard ([http://ec.europa.eu/enterprise/policies/innovation/files/ius-2013\\_en.pdf](http://ec.europa.eu/enterprise/policies/innovation/files/ius-2013_en.pdf)) we consider the countries ranked as modest and moderate innovators as countries with underdeveloped innovation culture unlike countries ranked as innovation leaders and followers. We have found very limited research available in KTT management and development in ex communist countries with innovation systems that are underfinanced and lack strategy and consistency. The aim of our research was to investigate various factors and their interrelations in respect of effective KTT from higher education and research institutions to industry.

The paper will in the following sections present the overview and method of the survey. It will be followed by the section focused on outcomes and comparisons with outcomes from other surveys and analyses. The last section includes conclusions and recommendations for improvements on various levels.

### Survey overview and methodology

The research was conducted between February and June 2013 using archival, survey and interview data relating to selected TTOs at eleven education and research institutions in the Czech Republic, Hungary, Austria, Poland, United Kingdom and Slovakia. Three participants



were universities in the Czech Republic, four from the Slovak Republic (three universities and one government research institute - the Slovak Academy of Sciences) and there was one participant from universities in Budapest (Hungary), Krakow (Poland), Vienna (Austria) and York (United Kingdom). Six out of the surveyed institutions are technical universities, four are universities incorporating humanities, life sciences, natural sciences and economics and management. The Slovak Academy of Sciences has a portfolio of 56 subordinated institutes covering the most areas of science.

Our objective is to confirm that the university management plays a key role in developing an effective TTO and its relationship and linkages with the university researchers, partners/other intermediaries and the industry. Knowledge and technology transfer is a relatively new initiative at universities and research institutes in the CEE region (mostly less than 10 years), hence university leaders and policymakers seek guidance on specific organisational practices related to strategic objectives, incentives, internal structure and processes, and measurement and monitoring mechanisms in order to improve technology transfer effectiveness (Phan, Siegel, 2006, p.4). In the U.S. technology transfer has become a multi-billion dollar industry and figures for Western Europe show the same trend of a very fast increase (Sterckx, 2009, p.46), particularly in the number of academic patents and licences (ProTon Europe 2009). The European network of 'Knowledge Transfer Offices' and companies affiliated to universities and other public research organisations, ProTon Europe, provides an overview of 'knowledge transfer' in Europe across 17 European countries, but only one of the TTOs we researched were a member.

Our findings propose that these universities need to concentrate on:

- developing TTO services based around researchers needs, i.e. legal and business advice and IP valuation services, to build up relationships with researchers;
- setting up clear rules which make the KTT easier for researchers and include motivating rewards;
- generating KTT results from high quality research of researchers who are willing to cooperate with the TTO and in those areas of expertise where they can compete on international markets. TTOs need to have the support of different types of intermediaries including the support of well designed financial instruments deployed by the government. TTOs also have focus on developing a range of university–industry linkages in terms of the scope of activities and the types of firms with which they interact.

The questionnaire addressed to TTO managers enquired about:

- when and how the TTO was established and what was its legal structure; the size of the TTO;

- type services it offers to researchers and external companies and organisations;
- the type of contracts it administers;
- support the management of the institution's management provides to knowledge and technology transfer activities;
- the TTOs budget for IP protection, marketing and business development, legal services, education/training and proof of concept;
- the institute's intellectual property policy; results achieved in terms of enquiries from researchers, utility model and patent (applications and granted), consultancy and research contracts, and spin-offs established;
- the type of marketing activities they engage in and how often; whether they use a project and client management software to make their work more effective;
- the type of support and networking organisations they work with;
- the membership in professional organisations/associations;
- barriers that the TTOs have faced and
- how they overcame them.

## Survey outcomes

### 1. TTO Maturity Stage.

Out of the eleven institutions surveyed, one Slovak university (Technical University in Zilina) was only in the process of setting up a formal TTO and presently employs one person to advise researchers on IP protection. Three TTOs (universities in Krakow, Ostrava and York) were established over 10 years ago, two over eight years ago and five were set up approximately 4 years ago. All surveyed TTOs operate as university departments. With the exception of the Austrian and British TTOs, those in the CEE region were set up with the help of EU funds. At institutions where the EU funding supporting TTO operation ceased, they struggle to survive and produce any meaningful outputs.

### 2. TTO Size.

The largest size TTOs were placed at the University in Krakow (20 FTEs), University of York (17 FTEs), Czech Technical University (16 FTEs and 15 part time employees), Technical University in Ostrava (16 FTEs) and the Technical University in Vienna (13 FTEs). Mid size TTOs was located at the University in Brno, Czech Republic (9.3 FTEs). The other five TTOs were small having only one or two FTEs.

### 3. TTO Activity Profile.

Out of all the surveyed institutes 73% of TTOs manage license agreements and R&D contracts, 45% manage consultancy agreements, 27% manage material transfer agreements and spin-offs and 18% manage national and international R&D project contracts. Two universities in



Slovakia (Technical University in Zilina and Comenius University) do not manage contracts related to knowledge and technology transfer. 73% of TTOs manage the combination of license agreements and R&D contracts and 45% of TTOs manage the combination of license agreements, R&D contracts and consultancy agreements.

#### **4. TTO Support by Institution's Top Bodies.**

All respondents stated the top management of their institution supported the establishment and/or the sustainability of the TTO to some extent. The adoption of the cross-institutional IP protection policy and a policy for commercialising IP (incl. a reward scheme) across the whole institution are one of the key elements of effective knowledge and technology transfer and require strong management support. The IP protection policy was adopted at 73% (8) of the surveyed institutions and the policy for commercialising IP was adopted at 64% (7) of the surveyed institutions. The three institutions where neither policy has been adopted are the three Slovak universities; the Slovak University of Technology however plans to adopt the policies this year.

When asked whether they thought the measures the institution's management took to improve the outputs (i.e. the number of patent/utility model applications, the number of patents/utility models granted consultancy agreements, research contracts) and outcomes (i.e. better recognition of the TTO by researchers, university funding for TTOs operations and activities) of the TTO's performance, 18% (2) of the respondents strongly agreed, 45% (5) agreed, 27% (3) neither agreed nor disagreed and 9% (1) disagreed. TTO managers who agreed the university management was corroborative listed the following areas of their support as significant in making progress:

- Building of trust between the TTO staff and researchers;
- Implementing an IP policy with a motivating reward system for researchers;
- Provision of finance - to employ experienced professional staff (primarily IP and commercial law specialists, support staff helping to obtain research project funding and TTO operational funding, project managers with PhDs in relevant scientific fields and with commercial experience to help commercialise technologies) and to fund IP protection and activities (networking, training, marketing, business development etc.). Those TTOs that have grown to strength were financed by the university during periods when no or insufficient public funding was available;
- Developing contacts and networks with businesses and other players within the region;
- Granting authority to the TTO manager to allow for flexibility and speed in processing clients' requirements (internally and externally). The Slovak TTO managers have almost no authority to make decisions about commercialisation.

#### **5. TTO Budgets and Funding Structure.**

In comparison to other countries TTOs at Slovak institutions disposed of the lowest budget for all main areas of their operation – IP protection, legal services, education, marketing and business development, and proof of concept. Presently they can only access funds for IP protection and IP evaluation services provided by the National centre for TT (national project funded by EU Structural funds until the end of 2014); there are no other specific sources of public funding for the main areas listed above and the institutions' management more or less does not provide any funding apart from match funding should there were any relevant projects available. TTOs have only one employee with the exception of the Slovak Academy of Sciences which has two. They do not have a budget to recruit experienced professionals in IP commercialisation, to develop TTO staff's knowledge and skills or for networking (incl. memberships in international KTT support or industry associations).

The effectiveness of TTO is very dependent on the culture and ability of the institution to support commercialization (Bergman, 2009, p.312). At most institutions, the TTO staff have limited or no direct experience in managing commercialization projects. The institutions' management should provide resources for staff development and increasing their understanding of the commercialization process to ensure educated and commercially viable decisions.

TTOs at Czech universities benefit from EU funded projects which enable them to finance approx. 90% of their expenditure on the main areas of operation. Their staff structure consists of project and business development managers with scientific or engineering background, lawyers, IP advisors, business advisors and administrative support. Czech TTOs which participated in the survey have sizeable operations with the average number of almost 14 employees.

At the British and Austrian TTOs the majority of costs are funded by the institution and TTOs business earnings. Legal services at the Hungarian and Polish TTOs are paid for by the university, IP protection is financed as a combination of EU, national and university funding. Marketing, education and proof of concept at the Hungarian TTO are predominantly financed by the university (50%). The industry covers about a third of education and proof of concept costs, the rest is met from national projects. The Polish TTO uses merely EU funding for marketing, business development and education. National projects pay for proof of concept needs.

The English and Austrian TTOs do not use EU Structural funds. Out of the nine other TTOs, five TTO managers stated their experience with using them was good, three said it was neither good nor bad and one said it was bad. In a follow up interview all said the EU money came at high cost due to extensive administration requirements and restrictions, but they could not progress without it.



### 6. TTO Performance Results.

In terms of measurable results, we took the English and Austrian TTOs out of the comparison as they have considerably higher level of output than the rest. These universities have significantly higher research budget and the TTOs also benefit from higher income provided by the university and considerable government support. The Austrian government for instance offers SMEs innovation cheques worth up to EUR 10,000 to enable them to collaborate with selected research institutions. Similar scheme has also been implemented in the Czech Republic. Other Austrian schemes include giving EUR 50,000 - 150.000 to selected innovative projects from universities, feasibility studies funding as well as funding for launching product or service innovations following a successful R&D project. Specific programmes in Austria and in the UK support technology-oriented spin-offs from the academic sector. Knowledge transfer partnerships, scheme supporting academic placements in R&D departments in companies, has been very successful in developing long-term collaborative partnerships between industry and academia.

Additionally, British and Austrian TTOs are not restricted by the limitation posed by regulations of projects funded from EU Structural funds (i.e. they do not allow any devices or equipment purchased to be used for producing a commercial output; IP generated in the course of such project cannot be commercialised without penalisation).

The most active (the highest number of granted patents and utility models and applications) out of the nine institutions based in ex communist countries is the Czech Technical University in Prague (Figure 1). Masaryk and Krakow Universities have also been successful in gaining patents and utility models. Since they were established all three Czech and the Polish TTOs have shown continuous growth and development - staff skills, capabilities and the number and portfolio of results. The Slovak TTOs struggle on all fronts mainly due to lack of financing and commitment from the institutions' management. With the exception of Slovak TTOs, others organise internal and external seminars on a monthly basis a take every opportunity to promote their university's research results at partners' professional events. Likewise, they attend international tradeshows and conferences at least twice a year.

### 7. Membership in International TT Associations.

Only four TTOs are members of international KTT related associations. Two are members of the Licensing Executives Society ([www.lesi.org](http://www.lesi.org)), one is a member of ASTP ([www.astp.net](http://www.astp.net)) and ProTon Europe ([www.protoneurope.org](http://www.protoneurope.org)) and one is a member of the European Business and Innovation Centre Network (EBN, [www.ebn.be](http://www.ebn.be)). Majority of the TTOs do not have funds allocated for such memberships.

### 8. The Most Significant Barriers to KTT (as perceived by the TTOs are the following):

All TTO managers were asked what they perceived as the most significant barriers to KTT. They named the following:

- Lack of funding (highlighted by all excluding the English and Austrian universities), particularly for:
  - a. quality staff and staff development;
  - b. professional legal support (mainly at Slovak institutions);
  - c. proof of concept.

	No. of patent & utility model applications	No. of granted patents & utility models	No. of research & consultancy contracts
Slovak University of Technology	0	0	4
Zilina University, Slovakia	11	2	0
Comenius University, Slovakia	10	1	0
Slovak Academy of Sciences	3	2	2
Czech Technical University	145	131	25
Ostrava University, Czech Rep.	62	8	0
Masaryk University, Czech Rep.	16	14	0
Krakow University, Poland	47	22	26
Budapest University, Hungary	26	1	10

Fig. 1: Overview of outputs from higher education and research institutions in the CEE region in 2012 (Source: own survey data)

- Deficient interest and support from the institution's management in relation to funding, delegating responsibilities for various aspects of KTT management;
- Lack of interest from researchers, mainly research project leaders who are over busy to engage with TTOs. They are overwhelmed by the administration demands of research projects funded by EU Structural funds which help to finance the shortcomings in government funding



for research and research infrastructure and are more accessible than other sources of finance. The heavy administration burden was also identified as a major reason for the decline in research quality and inventiveness – researchers barely find the time to attend expert presentations and fora to widen their horizons and get inspired by the work of others. Providing research project outputs do not include protected IP, researchers have no proclivity to seek the help of TTO staff;

- Excessive administration (incl. public procurement procedures) attached to projects funded by EU Structural funds;
- Lack of researchers' mobility – foreign researchers or researchers returning from study stays or work experience from abroad tend to bring new ideas and dynamism;
- Insufficient time and capacity of TTOs which are short of staff, funding and skills;
- Problems in communication between academics and business representatives (i.e. understanding industry needs and timescales).
- Limited interest of companies to innovate and to collaborate with universities. Particularly in Slovakia and Hungary there are no schemes to stimulate partnership working on developing innovations.

### **Conclusions and recommendations**

Following the consequences of the Bayh-Dole Act in the U.S. and successes in university IP commercialisation there has been a fast increase in knowledge and technology commercialisation at Western European universities and lately in the CEE region. This activity is driven, in part, by reports relating to the financial promise of university technology transfer, i.e. the lucrative stream of licensing revenue and IPO-related wealth resulting from Internet search engines and browsers etc. (Phan, Siegel, 2006, p.45). Some universities pursued commercialization due to reductions in government funding and increased costs. Many higher education and research institutions have however not been able to achieve planned results. It is clear from previous research that consistency in organisational management and design, culture and values across the whole institution, incentive schemes and entrepreneurial attitude are some of the critical success factors of KTT (Clark, 1998).

Recommendations to improve KTT operations:

- Develop and maintain good relations with the institution's management to gain their support;
- Implement a cross-institutional IP policy which motivates and rewards researches who disclose their inventions and collaborate with the TTO across the whole institution.

- Use champion researchers who succeeded in commercialisation of their research results as TTOs advocates;
- Respond to researchers' needs, i.e. start by supporting them on research projects which may entail legal support in relation to IP protection from the very beginning of the project, preparation of various agreements and contracts with project and industry partners;
- Use every opportunity to promote TTO's services internally and the university's or research institute's know-how and IP externally.

AUTM (non-profit association of technology managers and business executives who manage intellectual property, [www.autm.net](http://www.autm.net)) survey and in-person interviews of 100 university technology transfer stakeholders (i.e. academic and industry scientists, university technology managers, and corporate managers and entrepreneurs) at five research universities in the U.S. also concluded that IP policies and organizational practices can potentially improve or hinder technology transfer effectiveness (Siegel, Waldman, Link, 2003, p.32). Additionally, it found that strong business and marketing experience in the TTO and the need for incentive compensation were very important. Universities and research institutions in the UK and in Austria benefit from significantly higher level of R&D funding distributed by various government innovation intermediaries and funding awarded by the government for research outputs transferred to businesses or other organisations. Furthermore, the respective governments deploy various tools to incentivise both academic institutions and businesses to collaborate for mutual gain. It also boosts the social relevance of the KTT and increases the higher education institution's competitive edge. The innovation ecosystems of these countries ought to inspire fast and efficient response by the countries with underdeveloped innovation culture.

Slovak and other institutions (with the support of their governments) in countries with weak innovation systems (modest or moderate innovators according to the Union Innovation Scoreboard) clearly have to place more resources behind KTT activities and their leaders have to implement the necessary recommended steps to achieve results. The institutions' management should provide adequate funding for staff development and increasing their understanding of the knowledge and technology transfer process to ensure informed decisions. Establishing a functional TTO which can effectively respond to researchers' and business needs requires a strong and long-term commitment.



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## LANDSCAPE QUALITY OBJECTIVE: FROM EXPERTS' TO THE PUBLIC FORMULATION

### Introduction

The changes connected to the intensive landscape use as well as the effects of different factors (e.g. transformation processes and global ecological crises) are visible in the conversion of the landscape appearance and in the character of the different landscape types. The occurrence of landscape changes can not only be visually prevented any longer, but they are also recognisable by more sensitive part of the public. And so in this regard the landscape perception is not a theme at the edge of the interest as it use to be in the 90th of the last century, but it is becoming closer to the centre of the attention. The landscape quality has become an important part of spatial and regional planning and management. At the international level such tendencies are supported by force of drafting a joint European approach towards the landscape as the common identity and cultural heritage.

A significant document which brought a framework on the Pan-european scale is the European Landscape Convention (Council of Europe, 2000). The convention is the first international treaty predominantly focused on the improvement of all types of the European landscapes in a form of the written agreement with the respect to the common attitude to the landscape management. As one of the novelty, the convention has introduced a new term – the landscape quality objective. Since methodological manual or verified methodologies are still missing, the landscape quality objective is applied in the practice only sporadically.

The article brings the assessment of the actual attitudes towards the landscape quality objective from the perspective of the stakeholders – from the experts, the state administration, local municipalities, and the public. The current situation of the practical implementation of the landscape quality objective is illustrated on the examples from the selected European countries. From the existing experience it emerged that the key steps for the formulation of the landscape quality objective are the appropriate combination of the methodological instruments, the interface of the objective and subjective methods, an the consensus of the various stakeholders.

### Formulation of the landscape quality objective

According to the European Landscape Convention (Council of Europe, 2000), the landscape quality objective means, for a specific landscape, the formulation by the

competent public authorities of the aspirations of the public with regard to the landscape features of their surroundings.

There are similar terms used in research of the landscape which define the landscape quality such as the landscape quality as an attribute of the life quality, the quality of nature and landscape, qualities related to the landscape diversity, the visual landscape quality, the pictorial quality of the landscape, historical and narrative values of the landscape, the character of a place (genius loci or sense of the place), etc. By Finn (2000) the experience with landscape quality or coexistence with nature qualities is a central part of the good life and it is considered as an ethical question. The crucial issue here is to which degree is the quality a subjective or objective parameter (with subjective or objective features). Among the experts there is not an agreement achieved on this topic yet.

The objective formulation of the landscape quality objective requires the effective participation of the important stakeholders – not only the experts, but also the connoisseurs, and the involved local communities. According to Finn (2000) the connoisseur is a person, who knows the qualities in a certain area well, who is capable of identifying them, and at least to a certain extent, of weighing them against each other on a scale of importance. Despite more than 10 years of the existence of this term, the landscape quality objective (fr. objectifs de qualité paysagere, čes. cílová charakteristika krajiny, slov. cieľová kvalita krajiny) is still a relatively foggy term. The first international conference on this topic with the title „Landscape Quality Objective: from theory to practice“ (Conseil de l'Europe, 2007) was held in Gironne, Spain, in the year of 2006. One of the most important conclusions of the conference was that „for the definition and the approval of the landscape quality objective is to include all the know-how, all the knowledge of the territory and the landscape. It is also necessary to establish the procedural sequence to validate the landscape quality objective from an initial social participation and its scientific and regulation verification, to its political implementation in planning and management tools“. Antrop (2007) speaks about an important linguistic confusion which should be noticed in the translation of the term. The English concept „qualities“ refers more to properties than values. As the landscape is a complex concept, different sets of qualities can be defined: physical and ecological, cultural and historical, aesthetical, social, structural, functional. Often the main problem is to combine and integrate quantitative and qualitative assessments, and continuous and discrete ones. Wherefore the current Czech translation of the landscape quality objective („cílová charakteristika krajiny“) Weber et



al. (2004) recommend to substitute by the terms which would target better the meaning of this new effort („cíle kvality krajiny“ or „cíle krajinné kvality“). The defined objectives are linked with diverse development scenarios in the decision-making process about the landscape.

The remained questions here are: Who defines the objectives? How those objectives can be accomplished? Who controls and evaluates the result? Lipský (2010) believes that the definition of the landscape and the formulation of its quality objective come out from the participative approach which is considerably anthropocentric. The critical roles in the perception and forming the landscape have the local public. The scientific definition of the landscape as geo/ecosystem remains aside by purpose. The same author considers the definition of the landscape quality objective as purpose-built. The term evokes the projection of the ideal solution, however the landscape as much as the perception of the public, is changing. The landscape is dynamic, it is impossible to keep it away from the changes. Similarly the other authors (for instance Salašová, 2006; Loginbühl, 2006) emphasize the pure impossibility to speak about the objective as the final stage of the landscape since it is a dynamically generated system. And so, the landscape quality objective is not possible to achieve, but to head towards to instead.

Nogue, Sala (2010) highlight a consequentially strategic position of the landscape quality objective. According to them its assessment should serve as a supporting tool towards a new culture of landscape management and planning. Such the new culture would demand a higher sensitivity to the intervention in the landscape from all stakeholders and the society as such. A related mission of the landscape quality objective then is to contribute to the awareness rising of the public about the landscape in which they live.

### **Methodological procedure, the tools to identify the landscape quality objective, and case studies**

Based on the evaluation of the practical implementation of the landscape quality objective in the European states, we can observe that the level where the landscape quality objective is put into effect – is on the regional, sub-regional and local level. The cases where it was applied include the management plans of the world heritage sites, the master plans, the plans of the economic and social development, and the integrated strategies of the local action groups. Further we describe several tangible examples of how the landscape quality objective is dealt with in the European continent.

#### ***Catalonia***

In the Catalan Landscape Catalogue (Nogue, Sala, 2010) the landscape quality objective is defined according

to the characteristics/ features, values, and challenges collected from the public opinion. The objectives were compiled for each region of Catalonia and for each landscape unit having the same character. The authors (Nogue, Sala, 2010) present that the landscape quality objective is the answer to a simple and at the same time difficult question “Which kind of the landscape do we want to have?” Speaking from the catalogue experience, to link the formulation of the landscape quality objective with the identification of the landscape types (landscape typology) is essential.

#### ***Portugal***

Ramos (2010) presented methodological approaches to address the definition of landscape quality objectives by proposing the use of the exploratory landscape scenarios as a framework that is able to consider alternative drivers of change in the definition of plausible futures capable of triggering discussions among stakeholders on desirable futures for their landscapes. Scenarios can be considered as tools for ordering one’s perceptions about alternative futures through constructions of internally consistent views of what the future might turn out to be. The approach represents attempt to combine the openness of intuitive scenario techniques with the conceptual and visual richness of landscape scenarios. A set of four questions was used as guidance through the interview in municipality Mértola: (1) Which scenario is most likely to happen?; (2) What is the most desirable to happen?; (3) Which scenario will be preferred by local stakeholders?; and (4) What would they name each scenario. This application to Mértola presents two types of results, referring on the one hand, to the content of the responses from experts and local stakeholders regarding this specific landscape and, on the other, the important methodological aspects.

#### ***Flanders***

Van Eetvelde and Antrop (2011) show that in Flanders, the values and qualities of immovable heritage are legally defined. For the landscapes, four groups of values are recognised: natural, historical, socio-cultural and aesthetical values. The formulation of the quality objectives is entirely done by the Flemish administration competent and responsible to deal with the monuments, sites, landscape and archaeology, in particular by the civil servants working at the provincial agencies. Their task is not only to describe, assess and define the quality objectives for protection and management of the heritage, but also to check if these objectives comply with other legislation and policy goals. The scientific quality control of their proposals is done by an independent committee of experts, the Royal Committee for Monuments and Landscape. When a proposal is approved the assessment procedure by sector administrations and public can start. The public is defined as the residents in the municipalities concerned and landowners that are directly confronted with the decision.





### **Czech Republic**

As a model for the implementation of the landscape quality objective in the Czech Republic Lipský (2010) states the project „The Implementation of the European Landscape Convention Measures in the Intensive Agricultural Landscape with the Remains of the Historical Composition, the pilot study Nove Dvory – Kačina“. The project has brought the experience of the public participation in the practise in a form of the landscape workshops attended by the representatives of the state administration, local municipalities and the public. The public participation has been applied also in the SWOT analysis of the study area and helped to identify contradictions and conflicts in the landscape. The SWOT analysis has showed that the diverse stakeholders who manage the landscape have different opinions on the topics like the suitable management of the landscape, what the strengths and weaknesses of the landscape are, what the potential threats of the territory is, and what the opportunities for the future development are.

### **Conclusions**

The landscape quality is not only the implication of the notable decisions and the implemented projects beneficial for the public, but the significant role here plays also the individual behaviour of the owners and managers of the landed estates and properties. The formulation of the landscape quality objective is a challenging task because its aim is to predict and to prepare the ground for the future by the assistance, advice, and the opinions of the most diverse spectrum of the stakeholders.

According to Loginbühla (2006) the formulation of the landscape quality objective is faced with many different challenges focusing on the interaction of the different dimensions. In a fact it is a search for the consensus among a high number of the stakeholders in the formulation of the landscape quality objective in the dynamically changing landscape where they live. Involving of a large number of non-state actors and the right to participate in planning and assessment processes has significantly changed the overall character of the decision-making processes and brought a higher risk of conflict of interests.

The new ethics of landscape must be based on the ethics of responsibility, taking into account the dignity of nature, the rights of future generations to enjoy quality landscapes and the rights and duties of today's citizens whose interventions transform landscapes and with them their collective identity, their quality of life, their physical and social welfare (Cortina, 2011). The cardinal issue is to find an acceptable consensus on the local or regional level by the consciousness of the co-responsibility of the stakeholders for the final outcome coming from the formulation of the landscape quality objective. What is at the stake depends from the ability of the local municipality

to find a common language with the state administration, the local community and the rest of the stakeholders to find an agreement on the generally acceptable and long term vision in compliance with the sustainable development of the territory. It requires a proposal of the concrete requests how to achieve the landscape quality objective and the constant feedback from its realisation – whether the development activities (common or individual) support the selected development direction in a long term horizon.

Therefore to search for the improvement of the information distribution in the local communities is essential, as well as to make recognition of the landscape values more attractive. What is more to strengthen the cooperation of the experts, state administration, local municipalities, private sector a local populations in the process of creation of the public spaces in the villages as well in the urban areas with an emphasis on genius loci and the image of the place is unavoidable.

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Veronika Poklembová

## URBAN GOVERNANCE. SUSTAINABLE MANAGEMENT OF PUBLIC SPACES AS COMMONS

Commons are all that we share. During the last decades extensive research was done on the topic of commons governance. Elinor Ostrom (2009 Nobel Prize for Economics laureate) and a growing community of researchers have dedicated much effort to discover and gather existing commons stories to establish a knowledge base for meta-analyses and broad comparative research (Ostrom, 2010, Walljasper, 2010).

So far commons research was focusing mostly on natural shared resources such as forestry, fisheries, irrigation systems (we call them traditional commons) but new fields of interest are continually emerging – e.g. knowledge commons, cultural commons, urban commons etc. As they were recently recognized as commons or there is little research on these topics, we call them new commons (Hess, 2008).

Public spaces in urban environment can be regarded as commons (urban commons) – due to their characteristics similar to other types of commons – subtractability and non-excludability (they loose their quality excluding users from access to them). They are also often facing problems very similar to those of traditional commons, where absence of proper institutionalized or not institutionalized management rules, contradicting requirements and conflicts among actors in their development processes is often resulting in deterioration (Dietz, Ostrom, Stern, 2003; Poklembová, Kluvánková-Oravská, Finka, 2012). How to design the processes of public space management to sustain the quality of public space in long-term?

However, based on numerous empirical cases Elinor Ostrom has identified a set of design principles associated with robust institutions that have successfully governed shared resources in a long-term. To what extent it would be possible to apply commons solutions on public spaces? What are the critical issues?

Verification process of this research questions on case studies from Slovakia and its results are described and critical issues for application in the context of management of public spaces are discussed in this paper. Paper is presenting the empirical part of author's doctoral research.

### Theoretical Introduction

Management of public spaces we understand here as a “set of processes and practices that attempt to ensure that public space can fulfill all its legitimate roles, whilst managing the interactions between, and impacts of, those multiple functions in a way that is acceptable to its users (Carmona, Magalhães, Hammond, 2008) and is seen as a key precondition for delivering and sustaining quality public spaces in long-term. According to Carmona,

Magalhães and Hammond (2008) public space management consists of four key interlinked processes “regulation and conflicts between users, maintenance routines, new investments into and ongoing resourcing of public space and coordination of interventions in public space”. Here we are dealing with management of public spaces in a more complex way including the development (phases) of public space – form vision, preparatory phase, through planning, designing, implementation to everyday use/performance of the public space (Stiles, 2010) and the feedback loop of possible redevelopment/adaptation secured by monitoring of the public space quality.

Three basic models of public space management include – state-centered model, market-centered model and community-centered model. Each of them represents other form of distribution and engagement of actors in the management processes (Carmona, Magalhães, Hammond, 2008).

### Public Spaces as Commons

Commons are all that we share. As the key feature of public space is the accessibility for all, we argue that all public spaces can be regarded as commons (common-pool resources) with potential to provide benefits/ services of different character (goods) to their users: private goods - resulting from commercial activities in the area leading to individual profit (parking, streets vendors), public goods - the broader impact of the existence of public space (microclimate, surrounding property prices) and common goods - for a particular community of users (possibility to accommodate various activities - sports, walking, cultural events, walking the dogs and playgrounds for children - that are needed to be coordinated).



Figure 1: Public space as a common-pool resource offering benefits/services=goods. Source: author



It may be understood as well as a product/good if it is seen in the wider context of the city and urban structure. It meets then the two key characteristics/features - non-excludability and subtractability. Excludability is closely related to the 'publicness' of the public space as its essential characteristic, which anticipates accessibility without any restrictions. Public space is also constantly co-created by its users and therefore they can be seen as an integral part of the public space as a commons (Maco, Poklembová, Ondrejčíka, 2013, Poklembová, Kluvánková-Oravská, Finka, 2012). Subtractability in this context can be understood as the inability to accommodate all kinds of activities at the same time in a particular public space, the need for coordination and also understanding of the space as a limited resource (seizure of the public space for new construction or privatization of public space).

We understand here 'public space as a commons' as a common-pool resource. Like most of the traditional (mainly natural) commons public space is a tangible common-pool resource, but its products (goods/ benefits/ services) are in most cases intangible which is a feature similar to the digital (knowledge) commons.

## GOVERNING THE COMMONS – DESIGN PRINCIPLES

“(N)o single type of property regime works efficiently, fairly and sustainably in relation to all CPRs (common-pool resources)”, but it is possible to “identify design principles associated with robust institutions that have successfully governed CPRs for generations” (Dietz, 2003). Based on numerous empirical cases Elinor Ostrom with the help of other scholars has identified a set of design principles (the 8 design principles) associated with robust institutions that have successfully governed shared resources in long-term. The design principles are described and explained in more detail in Poklembová, Kluvánková-Oravská, Finka (2012).

### Methodology and Description of the Case Study Sites

The main research method used here is explanatory case study of three public spaces – in Prešov, Zvolen and Bratislava. They are representing a sample from the variety of the public spaces types and functions. Data were collected primarily in a form of semi-structured interviews with the local actors (conducted from spring 2011 to autumn 2012) and from other sources – observation, existing documentation and archival records. For analysis of the data we use here the IAD framework updated for the purpose of this research. The main criteria are the quality of public space (assessed using SWOT analysis) and sustainability of the public space management (assessed using the design principles as presented by Elinor Ostrom in 2010).



Figure 2: Holá hora in Prešov. Photo: author

First case study site represents former protected area Holá hora that is currently divided into three main parts of different owners: Ekopark - a centre for educational and leisure time activities for children (in municipality ownership), central part - currently an extensive open green space - which has been recently (after a court case) given back to private owners and the third part – Kolmanova záhrada, open green space (garden) having a name of the original donor of the ground from the 19th century (in church ownership). Former protected area Holá hora represents combination of the state-centered and market-centered models. Several attempts have been done to initiate a redevelopment of the area, but were not successful.



Figure 3: Park Lanice in Zvolen. Photo: author

The second case study site is currently an publicly accessible open greenspace with a significant biodiversity level, located on the place of former meanders of the river Hron close to the town centre of Zvolen. It is surrounded by dense urban structure (neighbouring housing development Zvolen-Západ is the most densely populated district of the town) and also because of its size it is of high importance in the context of the whole town. The ground is partly in municipality ownership, but most of the plots are in private hands. Park Lanice is still in the planning phase and represents a combination of the state-centered and community-centered model of public space management



Figure 4: Horský park in Bratislava. Photo: author

The third case study site represents a municipality park of semi-natural character (a biocenter in the Territorial System of Ecological Stability - TSES) and of high importance for the whole city. It is considered as its 'green heart'. Since 1986 it has been under the nature conservation (Act No. 1/1955 Coll.) with the 4th degree of protection. Today the public space is used mostly for extensive leisure time activities and events mostly organized by the Foundation Horský Park and volunteers. Next to the area of Horský park a new open-air gallery – sculpture park has been recently opened for public. All the area of Horský park has been in the municipality ownership since its origin which is dating back to the 19th century. The public space is in full use, with need for interventions (to solve the problem of soil erosion), it represents a state-centered model of public space management with high level of the community engagement.

## Results

Following tables are representing a cross-case comparison of the case study sites, which is focused on the analysis of the sustainability of management (using the 8 design principles). Here it is shown if the statements (representing each of the design principles) are valid for the case study sites. Brief explanation is included.

1A. USER BOUNDARIES: “Clear and locally understood boundaries between legitimate users and nonusers are present.”

1B. RESOURCE BOUNDARIES: “Clear boundaries that separate a specific common-pool resource from a larger social-ecological system are present“ (Ostrom, 2010).

PREŠOV / HOLÁ HORA	ZVOLEN / PARK LANICE	BRATISLAVA/ HORSKÝ PARK
A: partially, B: partially	A: partially, B: yes	A: yes, B: yes
confusing/unclear physical boundaries clear user rules only in the Ekopark	due to its location the physical boundaries are clear rules are evolving	clear boundaries (gates), labels combination of formal and informal

2A. CONGRUENCE WITH LOCAL CONDITIONS: “Appropriation and provision rules are congruent with local social and environmental conditions.”

2B. APPROPRIATION AND PROVISION: “Appropriation rules are congruent with provision rules; the distribution of costs is proportional to the distribution of benefits“ (Ostrom, 2010).

PREŠOV / HOLÁ HORA	ZVOLEN / PARK LANICE	BRATISLAVA/ HORSKÝ PARK
A: partially, B: no	A: partially, B: partially	A: partially, B: partially
Ekopark – locally-crafted way of promoting the activities (approaching schools, bulletin board)	NGOs and civic initiatives (local residents) are cooperating with the municipality	the main initiators – local residents. Various opportunities to support the initiatives in HP – volunteering, donors rules

3. COLLECTIVE-CHOICE ARRANGEMENTS: “Most individuals affected by a resource regime are authorized to participate in making and modifying its rules“ (Ostrom, 2010).

PREŠOV / HOLÁ HORA	ZVOLEN / PARK LANICE	BRATISLAVA/ HORSKÝ PARK
no	partially	partially
low cooperation and participation	NGOs and civic initiatives (local residents) are cooperating with the municipality	public support, informal authority (Foundation Horský park)

4A. MONITORING USERS: “Individuals who are accountable to or are the users monitor the appropriation and provision levels of the users.”

4B. MONITORING THE RESOURCE: “Individuals who are accountable to or are the users monitor the condition of the resource“ (Ostrom, 2010).

PREŠOV / HOLÁ HORA	ZVOLEN / PARK LANICE	BRATISLAVA/ HORSKÝ PARK
A: no, B: no	A: partially, B: partially	A: partially, B: yes
Ekopark – employees, other parts – local residents and visitors – officially complaining	crossing the area daily	daily presence in the area



5. GRADUATED SANCTIONS: “Sanctions for rule violations start very low but become stronger if a user repeatedly violates a rule“ (Ostrom, 2010).

PREŠOV / HOLÁ HORA	ZVOLEN / PARK LANICE	BRATISLAVA/ HORSKÝ PARK
no	no	no
only official sanctions (municipal police)	rather prevention of conflicts	rather prevention of conflicts and intentional friendly approach

6. CONFLICT-RESOLUTION MECHANISMS: “Rapid, low-cost, local arenas exist for resolving conflicts among users or with officials“ (Ostrom, 2010).

PREŠOV / HOLÁ HORA	ZVOLEN / PARK LANICE	BRATISLAVA/ HORSKÝ PARK
no	partially	partially
no platform for communication and solving conflicts, or facilitator	prevention of conflicts by communication, online community platform (social networks)	prevention of conflicts and friendly approach of the Foundation and communication, online community platform (social networks, web)

7. MINIMAL RECOGNITION OF RIGHTS: “The rights of local users to make their own rules are recognized by the government“ (Ostrom, 2010).

PREŠOV / HOLÁ HORA	ZVOLEN / PARK LANICE	BRATISLAVA/ HORSKÝ PARK
no	yes	partially
self-organization may be possible, but haven't occurred yet	NGOs and civic initiatives (local residents) are cooperating with the municipality	Foundation Horský park = informal authority supporting initiatives of park users/visitors and acting on their behalf

8. NESTED ENTERPRISES: “When a common-pool resource is closely connected to a larger social-ecological system, governance activities are organized in multiple nested layers“ (Ostrom, 2010).

PREŠOV / HOLÁ HORA	ZVOLEN / PARK LANICE	BRATISLAVA/ HORSKÝ PARK
no	partially	partially
unique space in the context of the town. Possible connection to the Calvary hill (extension of the current area)	unique space in the context of the town. Zonal land use plan in preparation	multiple nested governance levels, unique space in the context of the city

The case study sites are all representing greenspaces (natural/semi-natural greenspaces) – publicly accessible open spaces with the priority of biodiversity and leisure use. They are representing various models of public space management and diverse stages of public space development. None of them is currently under an officially recognized common property regime. Horský park in Bratislava can be regarded as a kind of informal common property regime, but as there is no long-term agreement or contract, the sustainability of the regime is unsure. In case of park Lanice in Zvolen, as it is still in the planning phase, the regime is evolving. There is a wide community engagement and already established cooperation with the municipality, thus it shows as possible to develop the common property regime. However it is also a question of formal recognition of the regime and nesting if it would be possible to sustain it in a long-term. In case of the former protected area Holá hora in Prešov the situation is challenging, there is not any common property regime, but as the data show there is a potential for it wider community engagement. For developing the regime the 1st - 6th design principles are crucial.

In two cases (Bratislava, Zvolen) bottom-up initiatives have appeared. In the first one it occurred at the critical point when there was a real danger of privatization of park facilities and use for commercial activities contrasting with the public and leisure character of the park, in the second case it resulted from the research on the state of the environment in the town (survey). In Prešov a petition of residents near Holá hora recently emerged to prevent construction of family houses on the privately owned plots in the central part of the area. If this will also result in any specific bottom-up initiative is questionable.

According to analyses, quality of the public space appears as correlated with the engagement of the community and other actors and with the sustainability of public space management. However, more research is needed here to increase the external validity of results.

### Management of Public Spaces as Commons

We are presenting a new concept of the public space management developed from the concept of the community management and lessons from governing of the commons (mainly common property regime and self-organization).

We suggest a new definition for the management of public spaces as commons as a set of processes aimed to ensure and sustain quality public space during the whole process of public space development (with the possibility of redevelopment – feedback mechanism), where the community plays important role in sharing management responsibilities. Recognition of rights and motivation of the users to engage in the collective-action are its preconditions.

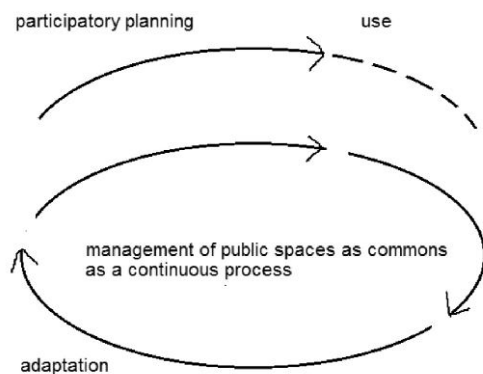


Figure 5: Management of public spaces as commons.  
Source: author

The 1st - 6th design principles are showing to be crucial for development of the regime (and the public space as commons too – we assume, that it could add to the quality of public spaces if they would be taken into account during the all stages of development from the beginning), 7th and 8th design principles as showing as crucial for the coordination in wider context – spatial, temporal and institutional.

What types of public spaces can be managed in what way? Related to the characteristics of the community and public space, we suggest two possible ways of management of public spaces as commons are emerging:

#### COMMUNITY MANAGEMENT:

- particular public space, but not gated communities; right to manage
- key characteristics: self-organization (participatory planning, but starting from bottom-up initiative), recognized autonomy on the collective-choice level (3rd and 7th design principle), nested in the wider context (8th design principle)

#### PARTICIPATORY MANAGEMENT:

- if we can participatory plan public spaces, it premises, that they could be participatory managed > hypothesis for further research
- possibly as a follow-up of participatory planning (building the community and using the potential of community engagement), top-down participatory
- on the local level (particular public space) and on the city level too; right to participate

## Conclusions

This paper is referring to the theoretical introduction presented in Poklembová, Kluvánková-Oravská and Finka (2012), explaining and further developing the concept of management of public spaces as commons using the empirical evidence.

However, we have presented only selected types of public spaces. More research is needed to cover other types of public spaces (possibly meta-analysis). It is needed to explore more what types of public spaces can be managed in what way – to test the preconditions for each proposed form of management of public spaces as commons (community management and participatory management). The hypothesis for participatory management as presented could be verified with the help of experimental research methods.

## Aknowledgements

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Marián Vunhu

## MIGRATION AND KNOWLEDGE BASED SOCIETY

Among assumptions for the emergence and development of knowledge-based society belongs skilled workforce. Knowledge-based society requires from the people for example slickness, knowledge, skills, flexibility, cooperation, very often bigger specialization but, last but not at least their national and international migration too.

At present is in the world more international migrants than at any time in history and their number in present development of international relationships is tend to increase. Almost every country is influenced by this development. Migration is inseparably interconnected with number of global issues, including development, poverty and human rights. There is nothing unusual, that migrants are very often creative and they also are dynamic part of society and huge number of them contributed and still contributes to economic development and cultural enrichment of the country. In sphere of economical development, specifically in questions of knowledge-based economy, migrants may be an important part in case they are bearers of innovations, creativity and expertise. It is obvious, that in demographic issues of European population, the population is aging and the life expectancy is extending, what brings questions about, if it will not be necessary to substitute in the future economically active workforce just by these migrants. In this context is also current the question of sustainability (for instance of social system).

Migration on the one hand actively influences the spatial organization and at the same time reflects its many changes and developmental trends on the other hand. Here we have in mind primarily the role of migration on the regional labour markets or real estate markets, further its relationships with other forms of mobility of population as for instance the movement for work or education and ultimately also its impact on character of source and target regions, primarily in terms of migrant's requirements for work, housing and social services. Appreciable is fact, that, inner migrations as a good indicator sensitively reacts on total changes of political, economical and social conditions in individual countries (Bezák, 2006).

International migration of work forces its topic also for economists, because the mobility for work is topic for many countries not only in the present. In the past we have already seen the lack of workforces for instance in Germany, which solved this question by inviting foreign workers. In result of great depression in seventies originally liberal immigration policy changed on restrictive. Despite these measures the inflow of workers from abroad failed to stop. At present we can say, that number of immigrants in countries of western Europe is high, despite of it other suggestions to solve the lapse of workforce in

some sectors of national economics just by inviting of foreigners is constantly appeared. The example is also Slovakia, which the problem of lack of doctors solved by interest of doctors from Ukraine.

European commission in its publication "Opportunity and challenge" pointed out on unexploited potential of migrants under study of Portuguese nongovernmental organisation Jesuit Refugee service (JRS), which found out, that active workers, which attended its language courses, often had jobs, which did not correspond to its academic qualification. Specifically found out that, many workers in construction sector had also medical qualification. Between immigrants mostly from Russia, Ukraine and Moldova were practitioners, surgeons and other specialists. In cooperation with another voluntary organisation, foundation Calouste Gulbenkian Foundation launched JRS a program for doctors to recognize its qualification. It included courses on school of medicine, practise in hospitals, passing the exam and signing up to Portuguese medical council. Thanks to it is at present more than hundred of these doctors employed in medical sector in entire Portugal (European Commission, 2009). Mentioned study contributes to opinion, that value-added migrants may be element helping to development of knowledge-based society, unless individual countries will be able to utilize its added value.

### The impact of migration of people and knowledge on peripherality

Changes in economy and society in recent years we can summarized as a process of skills mobilization in economical activities, disruption traditional boundaries of sectors and boundaries of companies, mobility of qualified individuals, thoughts, knowledge, knowledge of customers, goods, financial capital and so on. These processes results to base paradigm, that with the transition to post industrial stage of development, we will monitor the increase of intensity of exploitation of knowledge, which will be connected with massive circulation of skills in regions, but at a distance.

Mentioned processes are often developed in space unevenly, which causes various effects. In particular it may occur in the polarization of space, what creates various failures of spatial relations functions, in which the example is peripheral region.

Peripheral region arises as a result of the action mutually conditioning, social, economical, political, cultural and physical-geographic factors.





As long as the spatial polarization takes place, at the same time the economical problems are deepened to peripheral region. Between its fundamental problems belongs its distance from centres of development and innovations. Underdeveloped informative infrastructure together with lower level of human and social capital in peripheral regions causes isolation of companies, grouping of companies do not work in clusters, what causes to so-called closing of region. (Fáziková, Hamada, Milotová). Without wider access to information have company's limited opportunities to learn. People within the peripheral region are educated only within its regional boundaries, which decrease their possibility to increase their competitiveness. The level of human capital also influences decision making of knowledge-intensive departments, which are tend to localize near large cities because of availability of highly skilled workforces and general higher demand for its goods and services.

The development of industry is concentrated mostly on localization of branches of large companies, often with lower added value and labour-intensive production, which employs higher number low skilled workforce. Also in peripheral regions arises industrial zones and these are usually based on networks of small companies and micro companies and primarily are not based on exploiting of local physical sources. However it takes local traditions and unidentified knowledge, specific social and institutional environment, higher level of internal vertical differentiation, well developed marketing channels and high frequency of product and process innovations. In dependence of infrastructural connection we can find in rural regions also a concentration of sectors with medium added value. In sectors with low added value, based on need of low skilled workforce, there may occur a high turnover of employment and by process of relocation production units in dependence of productive cycles of companies in these sectors and of degree of saturation on the market. Existing clusters are located mostly in traditional sectors with lower level of research and development and innovative activities (Fáziková, Hamada, Milotová).

Despite the nature and character of peripheral region, it is possible to watch in some of them the increase of qualification and growth of specialization in education, and despite of it the tempo of dynamics lags behind well developed regions. People living in peripheral regions have worse availability to university education and in addition also some higher costs, including for instance transport costs. With increasing migration from the peripheral regions arise existential questions about sustainability of peripheral region. Despite investments embedded to building regional universities and various centres of lifelong education, education and qualification of young people from peripheral regions often migrates from peripheral region to more developed region and the reasons of its migration are perspective of long-term applying. In peripheral regions too distant from metropolitan areas or with poorly built infrastructure, increase the concentration of sectors with innovations and

with medium and higher added value very slowly ( Hudec, Reháč, Buček).

Most significant accelerator of growth of jobs in developing rural regions was spheres of tertial sector mostly because of growth of employment in public services (education, medical service, social services and public administration). Companies in sector of knowledge-intensive services locates in centres of these regions, density of these services decrease with declining size of the city and with increasing peripherality, respectively by rurality of the region. Examples of successful development of peripheral areas are based on specific combination of local factors, where by activation of local endogenous sources with contribution of inputs of exogenous developing factors has managed to start the development of knowledge economy ( Fáziková, Hamada, Milotová).

### **Conception of European cities and satisfying of demand for workforce**

Network of European cities (Eurocities) connects together more than 140 European cities in more than 30 countries. Eurocities allows better understanding and view on that, how some countries of this network implement national migration policies in relation to economy and which at the same time creates specific properties, needs and indicators on urban level. (EMN, 2011). It is very important to remind, that every European cities are tied to national migration policies regardless wether it is the labour migration to any city.

Most cities have clear idea about importance of migration for the city. For instance the vision of Berlin is that the needs of its labour market should be connected with better integration of migrants and also with proactive employment strategy highly qualified migrants, which would provide the support of their migration. Another example is Barcelona, which have intention to build up the pluralistic city that would be able to make the most utilization of benefits causing from positive synergy treated by diversity, in the form of dynamics and creativity.

For satisfying of demand on labour market in Nantes, the representatives of this city communicates needs of local companies on national level to ensure, that needed professions will be communicated and opened also for people from third countries. For the identification of needs of labour market, the city Nurnberg use monthly statistics of vacant jobs, which provides its federal employment office. In addition for better identification of needs, the department of economical relations of the city Nurnberg, created a dialogue with most important employers in the city, with which regularly communicates to identify the needs on the labour market. One of the results of negotiations is also creating of website to help communicate and attract highly qualified people focusing on young experts from other parts of Germany and also from other countries (EMN, 2011).



In year 2009 Eurocities made analysis of labour markets and found out, that although there was great depression, most of cities still identified needs on labour markets. It turned out two trends. The first one is that also in time of higher unemployment in some sectors there was a lack of qualified people. The second result was, that the labour markets reported job offers and demand for qualified and also for unqualified people. The city of Berlin had a lack of people with mathematical education also in medical service and information Technologies, Eindhoven had the lack of experts in high-tech in Ghent companies needed qualified and also less qualified people Copenhagen needed teachers (EMN, 2011). On the base of mentioned needs on labour markets, we can clearly see, how the migration, whether from the other regions, or from the different member states, respectively from the third countries, can help to satisfying of the demand for workforce.

In twentieth century migrants contributed to development of economics in Western Europe and in the twenty-first century are countries focused on development of knowledge-based corporations and economics, where highly qualified experts are appreciated, which potential is not available on every each place.

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## SAFETY AS SPATIAL QUALITY – CASE STUDY TRENČÍN



### SAFETY AS SPATIAL QUALITY – CASE STUDY TRENČÍN

FINKA, M., ONDREJČKA, V. (eds.) 2012.  
Bezpečnosť ako kvalita priestoru - štúdia mesta Trenčín.  
Bratislava : ROAD/Centrum urbánnej bezpečnosti, 2012.

Published by: ROAD / Urban Safety Centre  
and Spectra - Centre of Excellence,  
Slovak University of Technology  
in Bratislava  
2012

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The publication has been created within the project "Safety as Spatial Quality", supported by the Council of Government on Crime Prevention of the Slovak Republic and Trenčín District Office as well as in partnership with the Urban Safety Centre, Spectra - Centre of Excellence at the Slovak University of Technology in Bratislava, District Office Trenčín, Trenčín Foundation and Cesta - Centre of Excellence at the Slovak Academy of Sciences.

This is one of the three publications mapping the process of theoretical and practical research on safety and security issues in Slovak conditions. It was the "Safety as Spatial Quality" project goal to bring a comprehensive view of current knowledge on urban safety issues. This publication has been focused on implementation and testing the objective methodology of urban safety assessment in conditions of Slovak cities. There was chosen city Trenčín as typical representative. It is being followed by the publication "Safety as Spatial Quality – Introduction to the problem" and the textbook "Selected Safety Problems in a Settlement Area". The three scientific outputs together form a complex overview on safety problems in a city and create a contribution to the "safe" spatial planning (with particular emphasis on "soft" factors when examining the qualities of space, with the human individual as centerpiece - a person as reference object).

Municipalities are responsible for creation safety public urban spaces, but term "safety" includes a wide range of aspects from crime (prevention) through physical environment safety, accessibility (barrier-free solutions and principles of design for all - "universal design") to institutional and organisational aspects. For solving the problem with safety urban spaces is necessary to "catch" these aspects and to assess them. Then municipalities can compare the efficiency of potential solutions and choose the best one. This publication is handbook for municipalities and stakeholders, how to assess the safety of public spaces in the city and offer a catalog of potential interventions.

The book itself has been divided into six logical chapters. The first chapter – is an introduction to safety problem in cities and provides the methodological background of the case study Trenčín. The following logical steps of safety assessment methodology implementation were defined here. The next chapter is dedicated to define the main goal and particular aims and to define the key target group of the case study. The follows three chapters define the options of safety quality assessment, as well as risk profile of an area overview, an overview of safety factors (space feature holders) and the assessment methodology itself – a matrix created by mutual interactions of risks and environmental characteristics, choosing the most relevant interactions and focusing attention on the crucial ones. Methods of analysis of any



urban area current situation in terms of safety were described in detail. Therefore, a unique triple combination of methods to cover subjective as well as objective indicators of safety have been used (based on resource that objective state of safety and subjective perceptions of safety are two different things, though largely related, however both of them are equally important). It involves sociological survey, expert evaluation method and evaluation objectification. The result is urban safety profile of city Trenčín.

The last chapter is dedicated to proposed procedures, institutional changes and interventions in order to improve urban safety level in city Trenčín.

Added value of the book lies in providing best practice for municipalities and stakeholders how to use this comprehensive tool (methodology) for assessment the level of urban safety in real space.

*Dagmar Petříková*



Dagmar Petříková

## THE INTERNATIONAL CONFERENCE “SUSTAINABLE URBAN LAND USE” THE INTERNATIONAL CLOSING CONFERENCE THE PROJECT CIRCULAR FLOW LAND USE MANAGEMENT – CIRCUSE



The international final CircUse conference “Sustainable Urban Land Use” was held in Katowice (Poland) on 27-28 May 2013. The conference summed up the CircUse project which was implemented in 2010 through the CENTRAL EUROPE Programme.

27<sup>th</sup> May 2013 was structured in two sessions: At the first session of the conference presentations were held by Rajmund Ryś from the Polish Ministry of Regional Development, by Luca Marmo from the European Commission, by Christophe Ebermann from the Central Europe Programme and by Detlef Grimski from the German Environment Protection Agency. The second session of the conference was dominated by presentations and a panel discussion to the CircUse project. On 28<sup>th</sup> of May conference participants visited the energy-efficient building in Euro-Centrum Park in Katowice and investment realized in frame of CircUse project on degraded areas in Piekary Śląskie. 120 attendees from Austria, Czech Republic, Germany, Slovakia, Italy and Poland took part in this conference.

- How to transform degraded and wasteland areas into developing areas?
- How to create the plans of strategy actions for degraded and wasteland areas?
- How should the strategies of town development include soil protection?
- How to cooperate effectively with the local society?

These and many more important problems for modern towns were raised during the conference **Sustainable Urban Land Use** held on 27<sup>th</sup> of May 2013 by local administration and scientists from Austria, Czech Republic, Germany, Slovakia, Italy and Poland.

Among the invited guests were:

- Rajmund Ryś, The Polish Ministry of Regional Development – Urban areas in the European strategy Europe 2020
- Luca Marmo, The Directorate General for the Environment, European Commission - How the urban development strategies should include soil protection?
- Christophe Ebermann, Central Europe Programme, Joint Technical Secretariat, Austria - Enhancement of competitiveness of cities and regions in Europe in Central Europe projects
- Detlef Grimski, Environment Protection Agency, Germany - Development of sustainable management of post-industrial and urban areas in transnational co-operation





The Conference summed up the Project Circular Flow Land Use Management – CircUse realized from 2010, implemented through the CENTRAL EUROPE Programme through the consortium of 12 scientific and administration units from Austria, Czech Republic, Germany, Slovakia, Italy and Poland. The project is coordinated by Institute for Ecology of Industrial Areas in Katowice.

The representatives of Austria, Czech Republic, Germany, Slovakia and Italy came to Katowice from towns/regions for whom the strategies and actions plans for sustainable use of urban land within CircUse project were prepared

Six action plans for (1) green (2) agricultural, (3) postindustrial, (4) temporary use and (5) mixed urbanistic structures sites were prepared. In Poland an action plan for Brzeziny district in Piekary Śląskie was prepared.

During the conference on this particular examples practical, technical and organizational solutions for economic and natural revitalization of degraded areas were presented.

28<sup>th</sup> of May conference participants visited the energy-efficient building in Euro-Centrum Park in Katowice and investment realized in frame of CircUse project on degraded areas in Piekary Śląskie.



Michal Maco

## **PARTICIPATION OF THE STU SPECTRA CENTRE OF EXCELLENCE TEAM AT THE JOINT AESOP- ACSP CONGRESS IN DUBLIN, IRELAND (15-19 JULY 2013)**



The Association of European Schools of Planning organised in cooperation with the University College Dublin the joint AESOP- ACSP Congress 2013 under the title "Planning for Resilient Cities and regions" thus shifting the topic of planning for resilient cities and regions to this year most debated issue. The event was encouraging the participants to hear, discuss and challenge the latest outputs in planning and policy research and practice. Besides that the one-week programme offered site visits describing planning action and inaction - including new town development, urban cultural and waterfront regeneration, edge city development, post recession urbanscapes, social housing renewal or heritage preservation.

The Institute of Management and the SPECTRA Centre of Excellence of the Slovak University of Technology in Bratislava were represented by Maroš Finka, Zuzana Ladzińska and Veronika Poklebová, Peter Baus, Michal Maco as PhD. student representatives.

On Tuesday July 16, 2013 Veronika Poklebová and Michal Maco were the first ones of the Slovak group to present their paper. As a joint presentation of both

students' PhD. dissertation theses, the concept of commons in the urban environment was introduced and explained. The particular focus within their paper analysed sustainability of public space management using Ostrom's eight design principles for robust governance, demonstrated in three case studies in Slovakia. The next day, Peter Baus presented his paper on "Identification of Urban Development Dynamics Using GIS", based on his PhD. research. The aim was to provide critical instrument to evaluate land use policy and provide strategic proposals against excessive land consumption and urban sprawl as well as to provide framework for more detailed research, based on generally available data. The same day later, Zuzana Ladzińska was the final one of our group to present her paper. Within the Active Critical Learning session, she introduced the topic "BROWNTTRANS





Project as a Representative of Innovative Approach to Life-Long Education”, which was based on a running project on “Brownfield Regeneration Know-How Transfer” (LdV Tol No. 11310 1614) that has started in December 2011, with participation of the CEE countries (SK, CZ, RO, BG).

Prof. Maroš Finka presented the paper in the frame of the Circular Flow Land Use Management - CircUse project No. 2CE174P4 “New Approaches in Urban Transformation Management – Challenges for Future Research Resulting from CircUse project”.

The interesting and fruitful 5-day programme provided new or revised ideas and thoughts on resilience in terms of cities and regions. The Irish organizers acknowledged the reputation of northern hospitality and ability to held a well-organized event. During the whole week, all participants were taken care of by the willing staff, which was providing for all the necessary and even unnecessary services. In addition to that, all in a very nice and vibrant city.





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**Next Issue:**

The next issue of Journal TERRA SPECTRA:  
Real Estate Management

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## ■ STUDIES:

### **Peter Bahleda**

SPATIAL ASPECTS OF THE SOCIAL INCLUSION / EXCLUSION  
WITH A FOCUS ON IMMIGRANTS

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QURBAN SCENE SAFETY  
– PROPOSAL OF URBAN SAFETY ASSESSMENT METHOD

### **Denisa Brighton**

IMPROVING THE EFFECTIVENESS OF KNOWLEDGE  
AND TECHNOLOGY TRANSFER OPERATIONS  
AT UNIVERSITIES IN THE CEE REGION

### **Pavλίna Mišková, Mária Kozová**

LANDSCAPE QUALITY OBJECTIVE:  
FROM EXPERTS' TO THE PUBLIC FORMULATION

### **Veronika Poklembová**

URBAN GOVERNANCE. SUSTAINABLE MANAGEMENT  
OF PUBLIC SPACES AS COMMONS

### **Marián Vunhu**

MIGRATION AND KNOWLEDGE BASED SOCIETY

## ■ REVIEW

SAFETY AS SPATIAL QUALITY – CASE STUDY TRENČÍN

## ■ UPDATES

THE INTERNATIONAL CONFERENCE “SUSTAINABLE URBAN LAND USE”  
THE INTERNATIONAL CLOSING CONFERENCE THE PROJECT  
CIRCULAR FLOW LAND USE MANAGEMENT – CIRCUSE

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