

IDENTIFICATION OF HISTORICAL CULTURAL LANDSCAPE USING THE EXAMPLE OF SELECTED MUNICIPALITIES IN THE HINTERLAND OF BRATISLAVA

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In spite of the prevailing consensus regarding the definition of the term *cultural landscape* as landscape recreated by humans, the content of this term is ambiguously interpreted. Its varied interpretation leads to misunderstandings that appear not only in the basic and applied research but also result in a negative impact on interpretation and implementation of legal provisions and the territorial management. Differences in interpretation of the term are identified and principles of typological classification of cultural landscape are presented in this article. Analysis of natural and socio-economic factors determining the origins and character of cultural landscape was used as the source material. Great importance is ascribed to the factor of time introducing the term *historical cultural landscape*. Precisely the ignorance of the time dimension is considered one of the most important sources of confusion in the use of the term cultural landscape. A sample of the practical application of the outlined theoretical background is identification of historical cultural landscape exemplified by the territory of four municipalities in the hinterland of Bratislava.

Key words: historical cultural landscape, cultural landscape concept, typification, Bratislava hinterland

INTRODUCTION

The aim of this article is to contribute to the discussion about the terminology and theoretical and/or methodological aspects of cultural landscape in geography. Another aim is the analysis of factors, which may modify the formation of cultural landscape. The third aim is identification of historical cultural landscape using examples of municipalities in the Sub Little Carpathian Region. The Institute of Geography SAS has recently participated in the international project Vital Landscapes – *Alternatives for the Development of the Sub Little Carpathian Cultural Landscape*. The target territory of the Project was the Sub Little Carpathian Region, a strip of 24 municipalities between Bratislava and Smolenice. For detailed results of the Project see, for example, Podolák (2010), Podolák et al. (2011), Cebecauerová and Madajová (2012), Šebo et al. (2012), Hanušin et al. (2013 a, 2013 b), Hanušin and Oŕahel' (2013) and Oŕahel' and Pazúr (2013). Four municipalities (Budmerice, Modra, Pezinok, and Svätý Jur) with significant remnants of historical cultural landscape (HCL) of different natures and particularly the grapevine-growing landscape typical for this part of Slovakia were chosen for identification of HCL.

TERMINOLOGY, THEORETICAL AND METHODOLOGICAL BACKGROUND TO THE THEORY OF CULTURAL LANDSCAPE

The concept of *cultural landscape* has appeared in specialized literature for almost one and a half centuries. Jones (2003) reports that the geographer Friedrich Ratzel introduced it in 1895-1896. Mathewson (2011) points out that although Ratzel is believed to be the disseminator of the term, studies by other German geographers used the term cultural landscape a quarter of a century earlier. For instance, Joseph Wimmer used the term in 1885 in his work *Historische Landschaftskunde* and Carl Ritter used the term *Kulturlandschaft* in the well-known *Die Erdkunde* published already in 1822-1859 (Mathewson 2011). The term *Kulturlandschaft* was abundantly used in early 20th century German geographical literature. Carl Sauer, professor from the University of California, Berkeley introduced the concept of *landscape* into American (cultural) geography. He published his landmark essay "*The Morphology of Landscape*" (Sauer 1963). For Sauer, landscape was meant an "area" or a "region" that was a product of natural attributes of climate, soil, and plant and animal life and of cultural attributes of population, housing, economics, and communication (Hoelscher 2006).

There are several interesting new trends in cultural landscape studies. Much recent work in human geography has examined the relationship between the built environment and the media that depict it. For example, Cosgrove (1998), characterized landscape not as an object or a geographical area, but rather as a "way of seeing" – a pictorial means of representing or structuring the world. During recent years a large number of diverse studies emphasized the communicative and representational aspects of landscape (Hoelscher 2006). Matless (1998) in his work *Landscape and Englishness* showed how powerful are the relationships between landscape and English identity. In his interpretation social interests and historical actors create an organic sense of Englishness rooted in land and soil. Ira (2010) has objected to the quality of life concept that represents the advanced possibility for geography to interpret spatial structures of the cultural landscape in a comprehensive and integrated manner. What is more, the regional or local research level makes it possible using both the objective and subjective indicators and highlighting the regional or local specific features and problems. Some studies are concerned about the social and ecological cost of urban sprawl and environmental degradation in (historical) cultural landscape (e.g. Hanušin et al. 2013 a). Presumably, the Slovak geographers also took over the term from German literature. One of the first if not the first study by a Slovak author who used it was Hromádka (1943) in his *Všeobecný zemepis Slovenska* (General Geography of Slovakia). This author used the term "cultural land" albeit it is clear from the context that he meant cultural landscape in analogy with the term of "natural land" which is a synonym of natural landscape. Use of the proper term "cultural landscape" was frequent in the mid-20th century in countries with an advanced traditional *Landschaft School* (Otremba 1952, Uhlig 1956 and Zabelin 1961). Žigrai (1972 and 2000), Lukniš (1977), O'ahel' (1996), Drdoš and O'ahel' (2007), Kozová et al. (2008), and Chrastina (2009) were Slovak geographers studying and commenting on the issue of cultural landscape in a wider (empirical) or a specialized (theoretical-conceptual) sense.

Definition of the concept of cultural landscape is not simple. Its content is manifold and disparate. It is often freely used with the risk of potential misunderstandings and terminological vagueness. Several authors such as Aitchison (1995) or Fowler (2001) admit this fact when they talk about cultural landscape as an unusual term with ambiguous content.

The common denominator of practically all definitions though, is the acknowledgement that cultural landscape is the product of human activity; it is the original natural landscape recreated by humans. The origins of cultural landscape lie in the external energy added by humans (society) to natural landscape and its properties are determined by the amount, nature and timing of the energy added. The concept of cultural landscape is then most often interpreted as the landscape recreated, cultivated and modified by man in the sense of tolerated additional attributes such as *anthropic*, *humanized*, *real*, *contemporary*, *geographical* (Leser 1976, O'ahel' 1996 and Drdoš 2004), or secondary landscape structure (Miklós and Izakovičová 1997) and the like.

Žigrai (2000) presented a definition, based on the study of older works by Slovak and foreign authors, according to whom cultural landscape represents a hybrid open natural-anthropogenic system, which is a result of human impact and human society in time and space.

Some authors like Žigrai (1972 and 2000) and Leser (1976 and 1991) point to the conflict between the terms cultural and landscape in cases where humans depreciate landscape. Bevilacqua (2007) proposed the use of terms "civilized" or "colonized" landscape, while "cultural landscape" is the one corresponding to the target quality of landscape in the sense of the European Landscape Convention. Farina (2000) and Schmitz et al. (2003), for instance, interpret cultural landscape in a much narrower sense limiting it to agricultural and forest landscapes. The idea is cultural (cultivated) landscape, which is a mosaic of various production areas (patches) separated from each other by structures of non-forest woodland vegetation (Schmitz et al. 2003). Farina (2000) opines that the complexity of cultural landscape is expressed via its three components (natural, cultural and economic).

The principal source of misunderstanding and inconsistencies in interpretation of the phrase *cultural landscape* is perhaps the semantic conflict in the very concept of culture. Some authors consider cultural landscape a synonym for a kind of cultural superstructure, cultural heritage projected into landscape. The diametric difference in interpretation of cultural landscape emerges when the concept of *cultural* means civilized, recreated by the human, denaturalized and when such a landscape that has nothing in common with culture, one deprived of cultural assets in the sense of the proper understanding of culture, must be considered a cultural landscape.

Perhaps the ambiguity of the term is the reason why some authors avoid it, using other terms that they consider more specific; terms oriented to the real function of landscape. For instance Forman and Godron (1993) definitely evade the term cultural landscape and they rather talk about the grade of landscape adaptation on an imaginary scale of its use starting with the natural, followed by the managed, worked, suburban landscape and ending with the urban landscape. Another problem of terminological interpretation of the concept is its temporal

aspect. Humans create and continuously modify cultural landscape over time. In the majority of cases, for centuries humans cultivated and recreated the already existing cultural landscape leaving more or less conspicuous remnants of its original layers and structure from time to time. The protected and valuable cultural landscape (in the sense of the UNESCO List, for instance) is only a temporally and spatially delimited part of cultural landscape and even here the common term of cultural landscape is applied without specification.

Terminological incongruity in defining cultural landscape calls for the use of more precise terminology which specifies the term on a temporal axis by adjectives like “historical”, “traditional” “ancient” and the like placing it in a particular past which is fixed although based on the objectives and needs of the specific research. An example of this approach to the study of cultural landscape is the concept of traditional landscape introduced in Belgium in the 1980s and further developed by Antrop (1997). Traditional landscape is the one with distinct and discernible structure reflecting the relationships between its built elements and important natural, cultural aesthetic assets. The author suggests that the traditional landscape is no synonym for cultural landscape. Matless (2008), for example, uses the term ancient landscape. As far as the temporal classification of the origins and development of cultural landscape is concerned, a date/period as a limit for considering the cultural landscape as historical is important.

Historical landscape structure (HLS) is the term used in Slovak and partially also in Czech literature. Huba, ed. (1988) introduced it asserting that historical landscape structure represents a specific, temporally limited and spatially diminishing subtype of landscape structures as a whole. The relationship between the content of the concept cultural landscape and historical landscape structure is not definite. Both terms are relatively freely used. HLS is a specific part of cultural landscape; its synonym is historical cultural landscape, the term preferred by the author of this study. Like in the case of historical cultural landscape, HLSs are classified based on different criteria, most often by the nature of the original use. Jančura (1998) presented an example of such classification. Štefunková and Dobrovodská (2009) and Špulerová et al. (2010), addressed the methodological problems of the historical agricultural landscape structures in our country.

METHODS, DATA AND TOOLS FOR THE STUDY OF HISTORICAL CULTURAL LANDSCAPE

Regarding the long-term development of cultural landscape it is appropriate to analyse and spatially interpret its status by layers of development. The original natural layer as the genetic memory of landscape is the one most recreated by humans. It is identifiable via geo-ecological methods (Mazúr et al. 1980, O’ahel’ and Poláček 1987 and Minár et al. 2001) applied to integrated research, reconstruction and diagnosis of landscape. Reconstruction of vegetation or mapping of potential vegetation (Michalko et al. 1986) also analyses the genetic memory of landscape (Balej et al. 2010). The physical status of landscape, the land cover, (Feranec and O’ahel’ 2001) is recorded in historical topographical maps, aerial and satellite images fashioned for different time horizons. They are spatial documents suitable for the analysis of the development and changes of cultural landscape (Boltížiar et al. 2006, Cebecauerová 2007, Haase et al. 2007,

Hofierka 2008 and Ivanová 2013). Analyses of the developments that took place in cultural landscape using remote sensing data (Feranec et al. 2013) or those of land cover databases of Slovakia's CORINE land cover (CLC) at the scale 1:100 000 for the years 1990 (CLC 1990), 2000 (CLC 2000), 2006 (CLC 2006) and 2012 (CLC 2012) are especially efficient and spatially correct. The long-term development of cultural landscape can be analysed particularly appropriately in the context of the natural landscape's assets (Otáhel' et al. 2004, Antonson 2009 and Van Eetvelde and Antrop 2009). Analyses and cartographic documentation of selected physical landscape statuses from 1949 and 2003 using aerial images (Cebecauerová and Madajová 2012) offer correct background material for interpretation of the developments in cultural landscape. Awareness of the history of settlement, demographic changes and causalities of land use history constitute an adequate base for interpretation of functional, cultural and information aspects of the studied region.

Apart from the physical (biophysical) status of landscape (land cover), identification of its functions in the context of social use and spatial organization of cultural landscape is also important. Socio-economic functions are immaterial elements of cultural landscape and their spatial analysis is often crucial for the establishment of their hierarchy and legal relevance for interests of nature protection, forest and water economy and management, strategic assets of natural resources and mineral materials (Otáhel' 1996 and Miklós and Izakovičová 1997).

The connection of humans with their environs is vital for the definition and research of landscape. Cultural landscape covers not only the material-energy foundations with objects of natural and anthropogenic origins but also their outer manifestations, or effect on the senses. Hence, identification of landscape (object) also means awareness of the aspect associated with the human (subject) as they know, perceive and accept an object. The outer manifestation of the Earth, "the face of the earth" (Hartshorne 1959) is the inherent quality of the physical status of landscape identifiable by the surface or surface landscape objects using verifiable tools (records) and methods. Perception of the physical status of landscape in the broadest sense of the word involves the identification of features connected not only with the visual appearance, character and image, but also with the functioning, life and symbols of landscape (Otáhel' 1996). Such perception covers the holistic interpretation of landscape, its identification and cognition. Landscape is also perceived through acoustic, aromatic signals and as mental response connected with the cognition of the natural phenomena and life of cultural landscape (Hromádka 1943) namely the response given by the history, identification of *genius loci* and definition of the subconsciousness and significance of landscape.

Objective tools such as orthophotomaps, digital terrain model (DTM), 3D landscape model using data about forest areas and artificial surfaces (spatial frequency, height) are appropriate for the visual analysis of the physical status of cultural landscape. Viewpoints were analysed using the example of the study area of the Sub Little Carpathian Region in the hinterland of three towns and rural settlements from the distance of 1,200 m – 5,000 m (Otáhel' and Pazúr 2013).

FACTORS AFFECTING THE ORIGINS AND DEVELOPMENT OF CULTURAL LANDSCAPE

Natural factors

Natural endogenous and exogenous agents dominantly determine the character of landscape. Natural genesis is reflected in the morphological, morphometric conditions and position of landscape. Geographical position, sea level altitude, orientation and inclination of terrain, closedness or openness of the territory also predetermine the additional properties of landscape (Hanušín et al. 2013 a).

The georelief, geological substrate, hydrological and pedological conditions were most affected by settlement and land use. Closeness of streams, raised terraces, hills and promontories above wetland depressions and flood plains were the conditions for settlement in lowlands, basins and furrows. Fertile soils in lowlands and basins also determine agricultural land use and cultivation of crops depending on climate. Grassland and pastures prevail in the sub-mountain and mountain areas. Position and morphology (orientation of relief) substrate, soil and climatic conditions are important natural factors favouring vine growing, which enjoys a long tradition in Slovakia. Settlement of highlands and mountain ranges was connected with the acquisition of land. In Slovakia it gained a specific colonizing character (Lukniš 1987), which has now found reflection in regional types of cultural landscape with dispersed settlements (Myjavské kopanice, Novobanské štály, Detvianske lazy and others). Apart from defence, mountain ranges also provide various natural resources. The forest wealth of Slovakia has been long used and cultivated. Apart from species variety, forest is also imprinted in regional folk architecture and artisan products. The rural cultural landscape of Slovakia is represented by buildings, industrial heritage, wooden churches and settlements inscribed in the List of National Monuments and Reserves or Localities of the UNESCO World Heritage (Miklós and Hrnčiarová, eds. 2002).

Minerals and construction materials determine the economic development while the way of their processing and application determine the nature of settlements and the cultural landscape. Natural riches are closely connected with the traditions of artisan production, industries and consequently industrial structures and infrastructure. Many mineral resources served as the basis for regional traditions and crafts like pottery, ceramics, folk majolica and smithcraft. Such activities contribute to character of the cultural landscape of Slovakia.

Socio-economic and cultural-historical factors

Socio-economic and cultural-historical changes lead to an increased typological and spatial differentiation of cultural landscape although some increase of spatial (regional) differences is a natural and unavoidable process. A number of factors determine the differentiated development of the cultural landscape or cultural regions. Like other authors dealing with regional differentiation in the territory of Slovakia (for instance Lukniš 1985, Korec et. al. 1997, Ira et al. 2005, and Korec 2005), it is possible to assess the socio-economic and cultural-historical changes that determined the differentiation of cultural landscape

based on several factors. Depending on the character of a territory (landscape) the importance of individual factors varies according to their effect on the formation of the cultural landscape.

Factor of the positional potential

The territory of the Slovak Republic is quite differentiated in terms of the positional potential. The concept of the primary or the positional potential of a territory (Lukniš 1985) means the potential given by the position and the potential determined by the natural situation (natural potential). In the broader context it is important to take into account the positional potential in the international relations (the state boundary as a barrier in the past or the larger area for potential cross-border cooperation, for example, within the space/territory under the Schengen arrangements).

Factor of historical changes

The factor of historical changes in relation to the formation of cultural landscape is of irreplaceable importance. Each historical period leaves its specific imprint on the landscape; hence the present cultural landscape is the manifestation of society's historical development. Historical events have modelled the changes in the settlement structure, the overall appearance and nature of cultural landscape and the way it was treated in individual stages of development. Phenomena in the cultural landscape developed as part of the living necessities of humans in historical periods (stages of development) and are the results of continuous human action in the natural landscape.

Factor of the character of settlement

The urban or rural character of settlements (including their varied forms) also significantly influences the development of cultural landscape in each study area. Regarding their significance in the course of history, there is a higher concentration of cultural landscape monuments and historical assets in towns. Urban structures not only fulfil the function of territorial administrative centres but also of centres of innovation. They are characterized by a diversified economic base with the corresponding proportions of the tertiary and quaternary sectors. However, the high concentration of human activities in a small area causes great pressure on the elements of historical cultural landscape often resulting in irreversible damage – abandonment, destruction and disappearance of many structures under the pressure of new constructions in attractive parts of urban settlements. Different and fluctuating development goes on in rural settlements. Suburbanization in the hinterland of towns and cities brings important changes in the way of use of cultural landscape.

Factor of settlement hierarchy

Socio-economic transformation (in the post-communist countries including Slovakia) wiped out the past networks and relationships between settlements that were organized by the State. They were partially replaced by market-driven interactions. Towns and villages became competitors in search of quality human resources and funds, particularly foreign investments and the supporting EU

projects. After the period of important tension among settlements, some consolidation came after the 1990s and the municipalities started to cooperate striving for the win-win outcomes. This has often had a positive impact on cultural landscapes.

Factor of territorial-administrative division

Any territorial-administrative division is spatially efficient if the territorial units agree as much as possible with the functional or nodal regions, which can be identified on a corresponding organizational level. The real gravity or the attraction zone existing between municipalities and different types of centre is another level. It manifests itself in interactions between municipalities and centres. Assessment of such links can be accomplished in various ways one of them being the concept of functional urban regions based on the principle of daily urban systems. Commuting is one suitable database as a synthetic indicator representing a compound of intraregional links based on the daily cycles of population and it reflects the principle of spatial efficiency. Functional urban regions provide the spatial basis for the analysis of population and other human-geographical phenomena (Bezák 2000).

Factor of specific features in the demographic dynamics and structures

The study of demographic characteristics in the light of history is quite justified for the analysis of the specific features in the demographic structure and development in the context of formation of cultural landscape. It was possible to trace some data into deep history (population number, basic characteristics of some population structures) while many, corresponding to shorter intervals (detailed study of population dynamics – natural and migration movements, directions of migration and commuting) have been extracted from statistical records.

Factor of cultural regional specificities

The cultural-historical potential of particular regions is related to the category of cultural specificities. It is a set of known (but also so far unknown) used or deficiently used cultural artefacts, objects or facilities representing a certain developmental reserve, often a local or regional specificity hence the potential advantage in competition. The concept of cultural-historical potential may be interpreted as a meaningful and usable part of the cultural heritage. The immovable heritage in the cultural landscape in the territory of Slovakia and its spatial differentiation was formed as a result of the political developments in the Kingdom of Hungary, Austro-Hungarian Empire, the First Czechoslovak Republic, the Slovak State and the post-war socialist Czechoslovakia, as well as depending on the economy, rate of urbanization, industrialization and effects of the social situation/microclimate of individual microregions.

Factor of infrastructure development (especially transport infrastructure)

A motorway or speedway is generally considered the decisive element of transport infrastructure. What is referred to as the “big” transport infrastructure shapes the economic development of the given region. The individual elements

of transport infrastructure do exert some positive effect while the combination of several elements yields an enhanced synergic effect (Korec 2005). The economic growth in the last decade brought about the need to build modern logistical centres. The vicinity of international markets, available transport infrastructure, and strong economic hinterland contributed to the dynamic expansion of this industry. It provides important poles for the development of suburban areas and represents a major intervention into the functional and aesthetic character of the cultural landscape.

Factor of cultural infrastructure, everyday culture and traditions

The existence of cultural infrastructure is the important premise for cultural activities, conservation of local culture and local traditions and reproduction of culture (Heřmanová and Chromý et al. 2009). It includes public libraries, bookshops, cinemas, museums of different natures, commercial/private galleries, cultural centres, observatories and planetariums, open-air museums, archaeological parks, botanical and zoological gardens, arboretums, instruction paths, theatres, folk or artistic ensembles and so on. Life style and everyday culture of the population in municipalities are subject to factors forming the outer framework of their lives: transition of the society including democratization and individualization, wider personal freedoms, the information society and autonomous development of culture and arts.

CLASSIFICATION OF CULTURAL LANDSCAPE

Classification of cultural landscape is more demanding than that of natural landscape, which is classified according to relatively stable properties of its components. However, the cultural landscape is a place of intersection of natural landscape and centuries of human impact, the rate and character of which changed over time depending on the technological and economic possibilities of the society dwelling in the particular territory. Hence, the choice of the fundamental traits and the definition of classification criteria when delimiting the cultural landscape types as objectively as possible are of vital importance.

Classification of both the natural and cultural landscape in Slovakia has always been connected with the geographical and landscape-ecological research and was presented in national cartographic works like the *Atlas SSR* (Mazúr, ed. 1980) and *Landscape Atlas of the Slovak Republic* (Miklós and Hrnčiarová, eds. 2002). Drawing on the national and international experience, a new project aiming at the landscape typology of Slovakia was also proposed (Kozová et al. 2008), taking into account the existence of cultural landscape. One of the most frequently quoted landscape classifications containing three basic categories is that of the UNESCO (1992):

- 1) Cultural landscapes that have been clearly designed, and created by man
- 2) Organically evolved cultural landscapes
- 3) Associative cultural landscapes, in which there are religious, artistic or cultural associations with the environmental elements.

Regarding the classification of the cultural landscape, identification of territories with conserved traditional way of use is important not only from the eco-

logical but also from the cultural, historical, aesthetic and landscaping points of view. The value of these localities resides in the low level of intensification, high landscape diversity, conserved traditions in folk, technical and other structures, original wooden dwellings (possibly all kinds of dwellings), and the conserved traditional farming with forests and folk architecture (Otáhel et al. 2008). The definition reveals that the authors bore in mind some form of historical cultural landscape. As is obvious from the classification of the current landscape (Mazúr and Kripel 1980 and Otáhel 1983) and preparation of the typology of Slovak landscapes (Kozová et al. 2008), traits determining the character of cultural landscape must be taken into account. Natural conditions as the basis of cultural landscape are differentiated by basic morphological properties. The impact of settlement and land use is reflected in land cover as the physical status of landscape but the basic features of cultural landscape are determined by the functions and purpose of landscape. Cultural-historical phenomena, historical landscape structure, objects that form the “genius loci” or the spirit of landscape modify the character of landscape and details of cultural landscape. Along with the overall physiognomy they create the picture of the landscape as the perceived identity of the territory in question.

A draft of typological classification of cultural landscape, one of the possible approaches to the classification of cultural landscape based on the existing classifications (first of all that of UNESCO 1992), has been prepared. Its aim is to make possible the classification of any element (point, line or area) in cultural landscape (on a map) into some type in terms of function/purpose and time.

The classification criterion for the first level of functional/purpose-bound typology is productivity or non-productivity of cultural landscape. Productive cultural landscape either provides for the production of material outputs or for the satisfaction of basic needs (dwelling, transport, recreation, etc.). The non-productive cultural landscape “produces” benefits of a non-material nature (nature protection, relaxation, religious activity, mythology, etc.) or enshrines historical memory both in material and non-material form. Devastated areas form a category apart.

On the second level the criterion is presence or absence of technical (artificial) elements. While they dominate in a settlement/technicized type of cultural landscape or they are present in large amounts and in fact determine the functional and visual nature of the given cultural landscape type, agricultural/silvicultural types of cultural landscape lack or contain a minimum of such elements (perhaps with the exception of viticultural landscape). Regarding non-productive cultural landscape, synonyms of the terms material/non-material are used which should emphasize the secondary importance of technical (artificial) elements in this category.

The criterion on the third level is the classification by geomorphology (lowland, mountainous, etc.), which also predetermines the functional and purpose-bound properties of the type. The criterion of a particular functional use of cultural level is applied to the fourth level (in some cases also the fifth level).

Classification of some cultural landscapes is not always straightforward and is subjective to some extent. A typical example is the recreation landscape here classified as productive but it also may fulfil the criterion of a non-productive cultural landscape type.

Parallel to the functional and purpose-bound criterion, the time criterion was also applied. It assigns cultural landscape a certain position on the time axis. A regime of (permanent, intermittent and none) supply of anthropogenic energy was introduced. More information about this typology is provided in a paper by Hanušin et al. (2013 a).

IDENTIFICATION OF HISTORICAL CULTURAL LANDSCAPE DEMONSTRATED IN SELECTED MUNICIPALITIES

One of the areas within the territory of Slovakia where the characteristics of cultural landscape, its structure and dynamics of changes can be best studied is the hinterland of the Slovak capital, Bratislava situated in the south-western part of the country. The area is unique by its original settlement structure, traditions, varied ethnic composition in the past, vine growing and certain specific features of the natural landscape. Numerous geographical and landscape-ecological studies dedicated to the theme of cultural landscape exist about this region (e.g. Lukniš 1977, Oľahel' 1983, Žudel 1991, Oľahel' et al. 1993, Hrnčiarová et al. 2006, Feranec et al. 2009, Moyzeová and Izakovičová 2010, Krivosudský 2011, Štefunková et al. 2011 and Hanušin et al. 2013a).

Identification of HCL areas in the four selected municipalities of Budmerice, Modra, Pezinok and Svätý Jur is presented based on the theory explained in the previous part.

All of them with the exception of Budmerice possess the status of town. The choice respected their history (primarily its economic aspects), significance and hierarchical position in the regional settlement structure presuming the existence of varied and extensive HCL areas. The common denominator is the centuries old tradition of vine-growing and the associated large vineyards (except for Budmerice) part of which can be identified as historical viticultural landscape. Methodology applied to identification of the HCL respected the typological classification of cultural landscape while the HCL meant the part of cultural landscape where function, structure and perception characteristics have remained essentially unchanged for approximately the last 60 years (from 1948-1950, which was when collectivization of farmland started until now namely 2012). Meanwhile, there are even older (in terms of HCL) and more valuable areas in the study area represented by the mosaics of natural vegetation, grassland and/or vineyards located mostly in higher or more exposed places on the contact with the forest landscape. They are mostly isolated and do not occupy continuous or larger areas. They are referred to as historical structures of farming landscape. HCL now mostly exists in small isolated fragments, mostly unkempt and neglected in various stages of extinction. It is improbable that they will become a decisive and determining type of land use from the point of view of the region. However, the idea of revitalized and renewed remnants of HCL as integral and functional parts of the cadastral territory of municipalities or their broader hinterland is more promising.

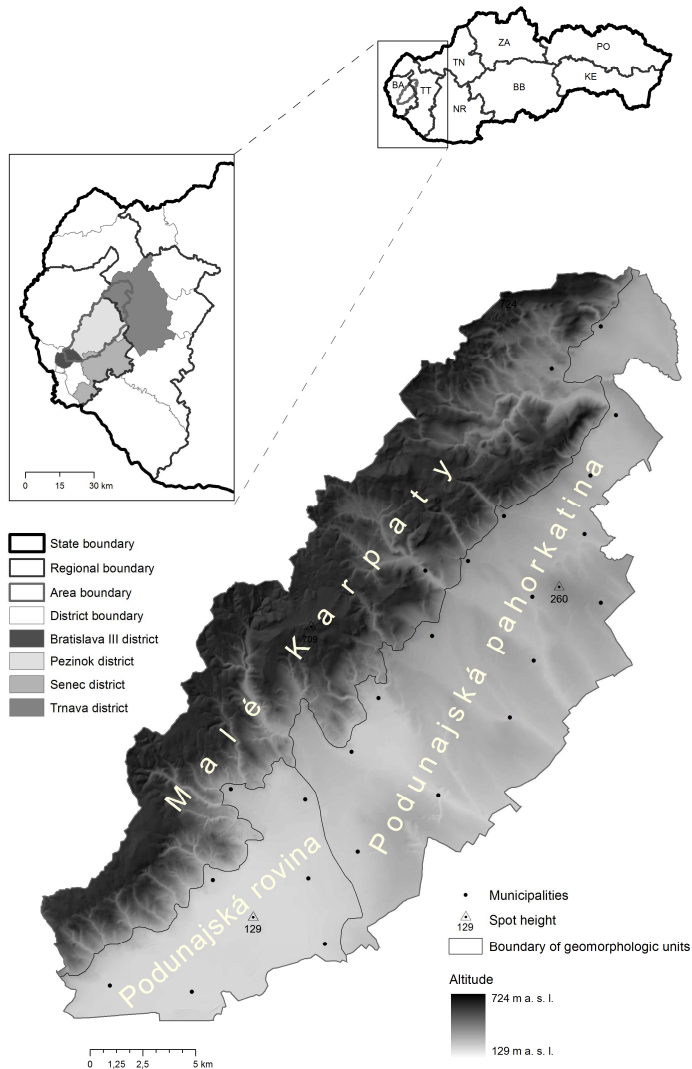


Fig. 1. The study area

Budmerice (area: 3,008 hectares, 2,429 inhabitants in 2014)

In spite of the fact that the cadastral territory of this municipality is situated in the monotonous scarcely diversified Podunajská Lowland, a relatively broad range of HCL was identified there.

The historical part of the village with the preserved ground plan of the original fabric of buildings along the local stream with a church, chapels and typical folk buildings in the oldest part of the village is of considerable importance. A remarkable element of HCL is the poplar tree alley on the north-western edge

leading to the entrance to the manor house which requires protection as a typical element of HCL. An interesting remnant of the originally small area of industrial/producing HCL is the mill Silnický mlyn. The pond Hájček is an example of the water-managing HCL continuing the tradition started by the Fugger family. The area of viticultural HCL is limited to the one located east of the village next to the road to Trnava. The most acute problem of the village – not only from the point of view of HCL – is the future of the manor house and the appearance and use of the adjacent park.

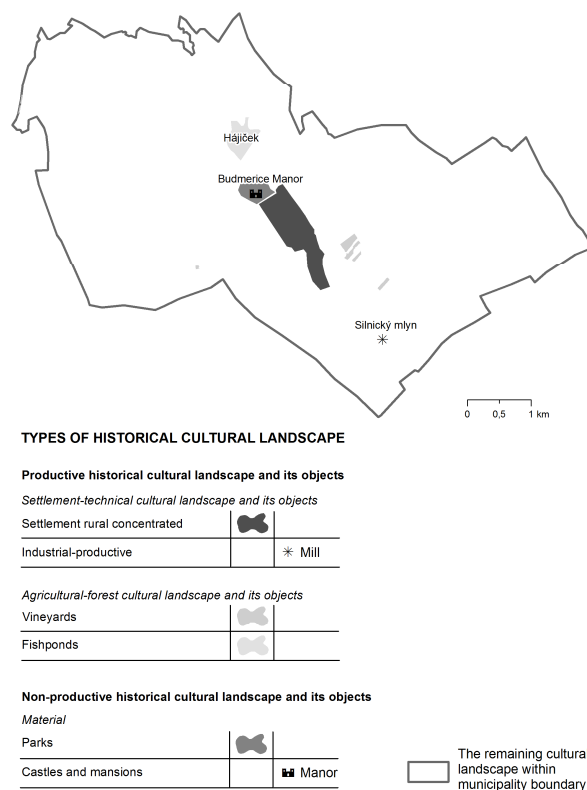


Fig. 2. Budmerice – types of historical cultural landscape

Modra (area: 4,962 hectares, 8,785 inhabitants in 2014)

Twelve areas of HCL were identified in the cadastral territory. The historical part of the urban area of Modra with numerous religious and secular monuments, the reconstructed building of the former Majolica (today a hotel) and part of the town fortifications are the most important. The characteristic town silhouette with several church towers visible from all sides is valuable and deserves protection. This type of HCL is in comparatively good condition with perception problems connected with the high-rise buildings in the southern part of the town. The municipal part Kráľová in an isolated position north-east of the

town is a rural settlement and concentrated HCL with interesting historic urban fabric and religious monuments free from disrupting elements. The recreation HCL in the local part Harmónia has national significance because it was the first recreation centre in Slovakia. A good step would be to include the set of historical recreation buildings in a regime of protection and to secure at least a partial return to their original state and atmosphere. Eight localities were delimited in the viticultural HCL. The area of historical vineyards in the cadastral territory of this town is one of the largest in Slovakia. The most serious problem in terms of their preservation is the degradation of large areas of vineyards east of the town where there are big areas of abandoned vineyards (*pustáky*) calling for at least partial return to their original function. Special attention and increased protection should be given to historical structures of viticultural landscape in marginal fragmented areas in higher positions on the edge of the forest and other than forest landscape in the south west of the town.

Pezinok (area: 7,276 hectares, 24,070 inhabitants in 2014)

From the point of view of HCL, Pezinok is one of the most interesting and valuable localities. Its significance exceeds the boundaries of the Region of Bratislava. Sixteen areas of HCL were identified in the cadastral territory.

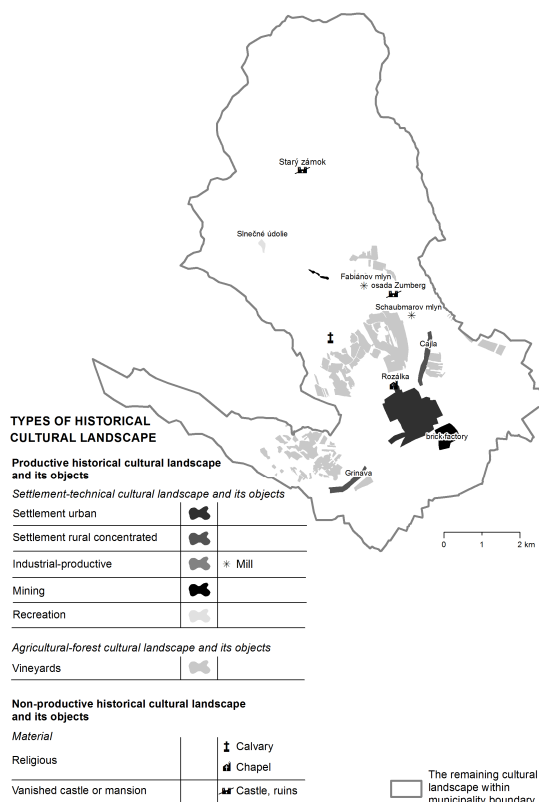


Fig. 3. Pezinok – types of historical cultural landscape

Apart from the historical centre of Pezinok, the local parts Grinava and Cajla with numerous religious and secular monuments, characteristic building ground plan and historical vineyards are also important. From the 16th century, the compact medieval town core was surrounded by fortifications parts of which still exist in the south and north. The set of historic monuments of the urban HCL consists of four churches, several manor houses, valuable burgher houses, a Classicist building of the former horse railway and remnants of the Haban yard. The main road communication crossing the centre of Pezinok is a negative element in this part of the settlement. A specific feature of Pezinok is the areas of mining HCL, now very dilapidated. The area of the former antimony mines offers the option to conserve or reconstruct the industrial heritage of the HCL for instance by establishing there a museum of mining technology. In the south-eastern part of the town is one of the oldest industrial areas of the town: a brick-yard with probably the largest clay pit in this country in terms of the volumes of extracted material, which makes it a rare structure of mining HCL. A way of future use preserving its original function and scope is recommended.

The cadastral territory of Pezinok contains seven recreation localities and the majority of them are in the Little Carpathian Mts. The site of the former spa on the foothills of the mountains is now occupied by the precincts of the Psychiatric Clinic of Philipp Pinel. The area of viticultural HCL in the vicinity of the town is one of the biggest in Slovakia. As in the other vine-growing municipalities near Bratislava, the most serious problem in terms of conservation of viticultural HCL is the pressure to build on the plots of historic vineyards on one side and their degradation by overgrowing on the other. The viticultural HCL in the cadastral territory of Pezinok is considerably diversified. Seven localities were identified here. In the N, NW and W the immediate hinterland of Pezinok has extensive, little inclined areas of vineyards (localities Stará hora and Kalvária), exposed to high potential pressure from developers. North-west of Pezinok amidst fields is the structure of religious HCL. St Rosalia's Chapel also called *Rozálka* has stood here since the 18th century. Not far away is the area of Kalvária. Both monuments are in unsatisfactory condition. The most important structure of HCL is the Castle of Pezinok situated in the northern part of the town centre.

Svätý Jur (area: 3,987 hectares, 5,672 inhabitants in 2014)

The set of original HCL of Svätý Jur is the best preserved of all the municipalities described here. Several elements have survived for centuries. It is the most original and best preserved viticultural town in the Little Carpathian viticultural region. The set consists of valuable religious and secular buildings: three churches, a monastery, synagogue, manor house, town hall, burgher houses, curias, and vine-grower houses. A comparatively big fragment of the town fortification is also interesting. The former spa, which existed south of the town, is now closed, but represents a valuable historical structure, which deserves refurbishment and a new use. The dissected terrain along with the centuries old vine-growing tradition has led to the existence of a large and diversified viticultural HCL at Svätý Jur. Following Modra, these are the largest areas of historical vineyards with a distinct proportion of natural vegetation which is most valuable and most typical in terms of HCL values. Old vineyards with

bulky stone walls forming a system of small terraces are especially valuable. The viticultural HCL around the town's inner territory forms small or medium sized, mostly isolated and interrupted, areas fragmenting the landscape.

Svätý Jur in the past was the power and administrative centre of the region with a hill fort. It is a reason why the HCL of hill forts and lordly seats have been conserved in its territory. Earthen ramparts remain from the hill fort of Neštich and this area possesses a high potential for use as an archaeological park. The manor house and several curias are actively used but they also need efficient protection and care corresponding to their status as valuable cultural monuments. Svätý Jur boasts an exceptionally valuable religious HCL including a Gothic church with wooden belfry in Neštich.

CONCLUSION

In spite of the prevailing consensus over the definition of cultural landscape as landscape recreated by humans, the content of the term is not unanimously perceived. The diversified interpretation of its content causes misunderstanding which appears not only in the area of the basic and applied research but may also cause confusion in interpretation and implementation of legal regulations and management of the territory. In an effort to contribute to the solution of this problem, differences in interpretation of the term were identified and an attempt was made to outline the principles of typological classification of cultural landscape. It is based on the analysis of natural and socio-economic factors determining the origins and character of cultural landscape. Great importance was ascribed to the temporal aspect introducing the term historical cultural landscape. Precisely the neglect of the temporal dimension is considered one of the main sources of misunderstandings accompanying the use of the term cultural landscape. As a practical example, this theory is applied to the identification of the historical cultural landscapes of four settlements in the hinterland of Bratislava. Conservation of the remaining HCL in this territory is threatened by the increasing pressure to exploit the territory, efforts to occupy additional areas for construction of houses or infrastructure associated with the accelerated suburbanization process in the hinterland of the capital, which requires communications and communal amenities for the new concentrated settlements, shopping malls and so on. The resulting form of these and other activities will depend on the attitude of local administration in the municipalities but also on the position of the HCL phenomenon in the country's legal system.

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IDENTIFIKÁCIA HISTORICKEJ KULTÚRNEJ KRAJINY NA PRÍKLADE VYBRANÝCH OBCÍ ZÁZEMIA BRATISLAVY

Predložená štúdia je príspevkom k diskusii týkajúcej sa terminológie a teoreticko-metodologických aspektov kultúrnej krajiny v geografii. Analyzuje faktory vplývajúce na formovanie kultúrnej krajiny a identifikuje historickú kultúrnu krajinu na príklade vybraných obcí zázemia Bratislavy.

S pojmom kultúrna krajina sa v odbornej literatúre stretávame už temer poldruha storočia. Jedným z prvých, ak nie vôbec prvým dielom slovenskej vedeckej literatúry, v ktorom sa s týmto termínom stretávame, je Hromádkov Všeobecný zemepis Slovenska (Hromádka 1943). Popri geoekologickom, resp. krajinoekologickom prístupe ku kultúrnej krajine sa v ostatných rokoch na Slovensku uplatňuje aj kultúrno-geografický prístup.

Vymedzenie pojmu kultúrna krajina nie je jednoduché. Jeho obsah je značne diverzifikovaný a veľakrát protirečivý, termín sa používa častokrát voľne, čo môže viesť k nedorozumeniam a terminologickým nejasnostiam.

Spoločným menovateľom prakticky všetkých definícií kultúrnej krajiny je konštatovanie, že kultúrna krajina je produktom ľudskej činnosti, je to pôvodná prírodná krajina premenená činnosťou človeka. Kultúrna krajina vzniká pridaním externej energie vyvolanej človekom (spoločnosťou) do prírodnej krajiny, pričom jej vlastnosti sú determinované množstvom, charakterom a časovým režimom pridanej (pridávanej) energie.

Za hlavný zdroj nedorozumení a rozporuplnosti v chápaní a interpretácii slovného spojenia *kultúrna krajina* je možné považovať sémantický rozpor v samotnom chápaní pojmu *kultúra*. Pre časť autorov je tak kultúrna krajina synonymom akejsi kultúrnej nadstavby: kultúrneho dedičstva premietnutého do krajiny. Diametrálne odlišné chápanie kultúrnej krajiny predstavuje prístup, pri ktorom pojem *kultúrny* vystupuje ako ekvivalent pojmu *civilizačný*, človekom pretvorený, odprírodný. Dalším problémom terminologickej interpretácie pojmu kultúrna krajina je jeho časový obsah. Človek vytvára a ďalej mení kultúrnu krajinu v čase prakticky kontinuálne. Vidíme, že chránená a hodnotná kultúrna krajina (napr. v zmysle zoznamu UNESCO) je len časovo a priestorovo úzko vymedzená časť kultúrnej krajiny ako takej, napriek tomu aj tu sa používa všeobecný termín kultúrna krajina bez bližšej špecifikácie.

Terminologické nezrovnalosti pri definovaní kultúrnej krajiny si vynútili používanie precíznejšej terminológie, ktorá jednoznačnejšie špecifikuje termín kultúrna krajina na časovej osi pomocou adjektív ako „historický“, „tradičný“, „starobylý“.

Vzhľadom na dlhodobý vývoj tvorby kultúrnej krajiny je vhodné analyzovať a priestorovo interpretovať jej stav podľa vývojových vrstiev. Pôvodnú prírodnú vrstvu ako genetickú pamäť krajiny človek premenil najviac. Môžeme ju identifikovať najmä prostredníctvom geoekologických metód, metódou rekonštrukcie vegetácie alebo mapovania potenciálnej vegetácie. Okrem fyzického (biofyzikálneho) stavu krajiny (krajinnej pokrývky) je dôležitá aj identifikácia jeho funkcií v kontexte spoločenského využívania a priestorovej organizácie kultúrnej krajiny. Dominantný charakter krajine určujú prírodné endogénne a exogénne činitele. Prírodná genéza je premietnutá v morfológicko-morfometrických a polohových podmienkach krajiny. Sociálno-ekonomické a kultúrno-historické zmeny vedú k narastajúcej typologickej a priestorovej diferenciacii kultúrnej krajiny.

Vychádzajúc z existujúcich klasifikácií kultúrnej krajiny (najmä UNESCO 1992) autori štúdie navrhli typologickú klasifikáciu kultúrnej krajiny, ktorá predstavuje jeden

z možných prístupov k vyčleňovaniu jej typov. Na prvej úrovni funkčno-účelovej typológie je klasifikačným kritériom produkčnosť/neprodukčnosť kultúrnej krajiny, na druhej je kritériom prítomnosť/nepítomnosť technických (umelých) prvkov, na tretej úrovni je kritériom zaradenie do základného geomorfologického typu (nížinný, montánný), ktoré významným spôsobom spoluurčuje charakter funkčno-účelových vlastností príslušného typu. Na štvrtej (v niektorých prípadoch aj piatej) úrovni je kritériom konkrétne funkčné využitie kultúrnej krajiny. Ako pomocné klasifikačné kritérium sme tu zaviedli režim dodávania antropogénnej energie (stály, občasný, bez dodávania, ...).

Na základe teoretických úvah obsiahnutých v predošlej časti príspevku prezentujeme identifikáciu areálov historickej kultúrnej krajiny (HKK) v štyroch vybraných obciach zázemia Bratislavy: Budmerice, Modra, Pezinok a Svätý Jur. Pri identifikácii typov HKK sme metodicky vychádzali z typologickej klasifikácie kultúrnej krajiny, pričom za HKK považujeme tú časť kultúrnej krajiny, ktorej funkcia, štruktúra a percepčné charakteristiky zostali v zásade nezmenené v období posledných približne 60 rokov (od rokov 1948-1950 po súčasnosť – rok 2012). HKK v súčasnosti existuje prevažne len v izolovaných fragmentoch s malou rozlohou, väčšinou v zanedbanom a neudržiavanom stave v rôznom štádiu zániku.

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