

Segments of the ancient cultural landscape in the “Hungarian corner” of Moravia: A valuable pre-industrial heritage

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Abstract

After a brief historical overview, the paper discusses two basic types of natural and cultural heritage in the territory of the “Hungarian corner” of Moravia. For 300 years, this area called a *Campus Lucsko* in the southeast of today’s republic was disputed territory between the Czech and Hungarian states. Settlement therefore proceeded slowly in waves depending on the political situation. The present international border was established around the year 1333. Numerous documents of the ancient landscape, probably of medieval origin, have been preserved in the current landscape. They are the ground plans of the cores of municipalities, whether they were founded by Czech or Hungarian landlords on one hand, and the remains of ancient land distribution in the form of narrow strips of agricultural land on the other hand. Other areas succumbed to land consolidation during land reforms in the 20th century. While the ground plans of the village cores are only subject to minor changes, the small-scale use of land is still threatened by further merging. The ground plans of the municipalities and land division at the present time (in colour orthophoto maps) were visually compared with the situation documented by the stable cadastre maps from the 1820s–1830s (see *Figure 3*). Only identical areas in both sources represent urban and rural segments of the pre-industrial landscape, whose roots go back to the dated Medieval Ages. They are documented on selected representative examples well-preserved ground plans of village cores, probably of integrated Hungarian and Czech origin. Similarly, well-preserved examples of the ancient division of agricultural land in flat and dissected terrain both with poly-functional and mono-functional land use are demonstrated. The best-preserved remnants of the ancient pre-industrial landscape are equal in value to protected areas of nature and cultural monuments. Their number and quality these remnants are threatened by economic pressure.

Keywords: disputed territory, Bohemian Kingdom, Hungarian Kingdom, historical heritage, village ground plans, segments of pre-industrial cultural landscape

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Introduction

The landscape changes in front of our eyes not only from year to year but also between seasons as the crops in the fields change. The main driver of change (in addition to nature and its seasonal influences) is a human economic interest. It is a confirmed assumption that in many cases they lead, among other things, to the loss of *genius loci*, and create typical uniform landscape. Due to the rapid changes in the landscape, there is a growing

interest in preserving at least a sample of typical cultural landscapes of the past as an important natural and cultural heritage, especially in the current period of rapid forms of urbanization, globalization and an increasing number of calamitous natural phenomena. Nevertheless, relatively small areas of the landscape of Moravia (eastern part of the Czech Republic) have been preserved where economic and social pressures do not seem to have worked, or where forms of coexistence between landscape and humans have been found.

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Traditions in management that are not very effective from today's point of view survive here to varying degrees and with varying manifestations. This special heritage of the past is made up of the areas where small land division and similar land use have been preserved as in the past. However, it cannot be forgotten that in the past there were also large aristocratic and ecclesiastical estates where large homogeneous areas were farmed, similarly to after the socialist collectivization of agriculture in the former Czechoslovakia. Nowadays, postmodern human society is focusing on natural and cultural or historical heritage and the issue of its preservation. Not only protected nature areas and historical monuments, including settlement cores but additionally industrial heritage is also becoming a focus of interest. Still the preserved common (not artificial leisure parks) cultural landscapes from the time before the industrial revolution remain somewhat on the sidelines. The aim of the contribution is to point out the historical heritage in the territory where the Czech and Hungarian power and colonization efforts were intertwined. A number of relevant testimonies have been preserved in the landscape to this day without entering the public's consciousness.

The concept of ancient cultural landscapes

The ancient cultural landscape genetically predates the emergence of a traditional civil society based on civil rights and freedoms guaranteed by the constitution on the one hand, and a society realizing mass production of goods with using machines powered by energies also produced by machines on the other hand. It was formed before the era of industrial society, which revolutionized the character of developed countries.

UNESCO considers remnants of ancient landscapes to be valuable natural and cultural heritage (e.g. MITCHELL, N. *et al.* 2009) and defines (ancient) cultural landscapes as “*the combined works of nature and people reflecting the long and intimate relationship between people and*

their natural environment”. The term ‘cultural landscape’, thus, encompasses the diversity of manifestations of interaction between humanity and its natural environment (UNESCO 2007). An ancient cultural landscape in the conditions of the Czech Republic or even Europe can be considered as an area whose cultural parameters were established in the period preceding the advent of industrial society.

Thus, the ancient cultural landscape may have been created during the transition from feudal to bourgeois society. In Europe and other continents or countries this transition took place at different times. The main wave of the Industrial Revolution and the industrial society that followed it came in the second half of the 19th century in the Czech lands. Thus, the cultural landscapes in the Czech lands that were created before 1850 and still retain their key characteristics can be considered ancient landscapes. In the peripheral areas of the contemporary Czech Republic, settlement took place in the form of colonization. These took place in several waves with the most extensive one in the 13th and 14th centuries. Extensive changes in property ownership were caused by the defeat of the Czech estate uprising in 1618–1620 and after the 30 Years' War when foreign military nobility acquired around half of the Czech lands. Nevertheless, it can be assumed that changes in ownership and in some places depopulation did not fundamentally change the character of the division of the territory into individual plots. One of the last territories of medieval colonization was the area of the Lucké Pole (*Campus Lucsko*) on the border of the Czech state and Hungary due to its long-unresolved nationality.

Historical sources and analysis outcomes

Lucké pole – disputed territory

The south-eastern edge of Moravia within the Czech state on the border with the Kingdom of Hungary between the Morava and Olšava rivers in the west and north on the one hand

and the international border with Slovakia (formerly known as Upper Hungary) in the south and east still bears traces of ancient affiliation from the Lucké pole (*Campus Lucsko*) on the other hand. This region, originally extending to the Váh (*Vagus*) river near Trenčín, the ridge of the Little Carpathians and the Danube river (Figure 1), represented a buffer area (VÁLEK, D. 2009) between the Czech and Hungarian states (called “confinium” on the Hungarian side), was a “terra nullius” (no man’s land) for more than 200 years to varying degrees. This territory, with a maximum area of around 4,148 km², served to prevent border disputes in the absence of a precisely defined border. Both sides monitored the territory in a certain way and, thus, had time to prepare inland for a possible attack, which usually deterred the attacker from further

progress. In addition, it was not possible to replenish supplies here.

In the 8th–10th centuries the core of the territory of the Great Moravian Empire was located here. Both successor states showed interest in this disputed territory, which led several times to conflicts. The strategies for controlling the disputed territory differed for both states. The Hungarian rulers built advanced fortified positions (castles) in the disputed territory and later colonized the surrounding territory. The Czech rulers first secured fords across the border rivers of the disputed territory, and from them colonization progressed into the interior of the “confinium”. The greater part of the “confinium” was deliberately uninhabited, or even deliberately ravaged and abandoned (“Gyepűelve” in Hungarian).

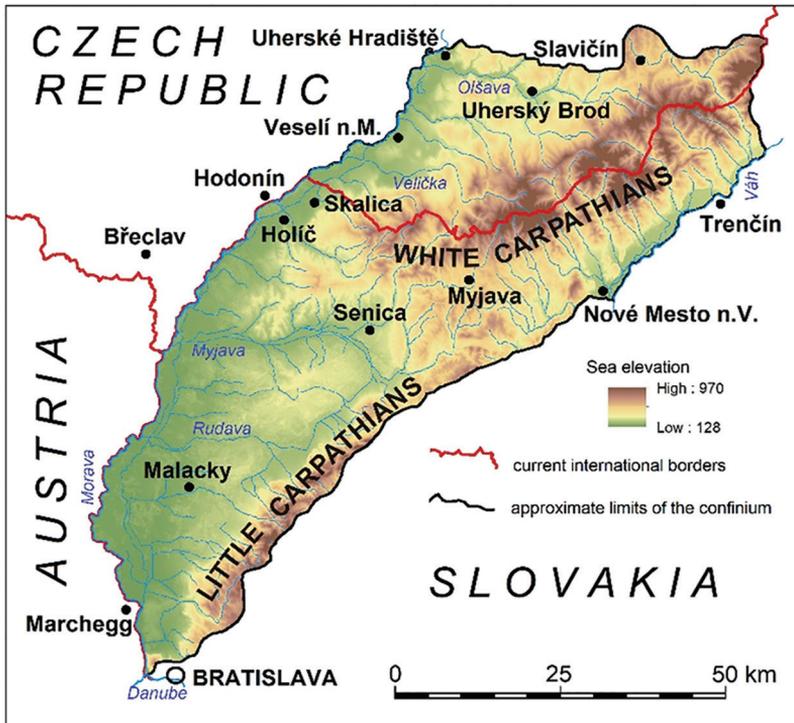


Fig. 1. Historical disputed territory between the Czech and Hungarian states at the beginning of the 11th century. All geographical names are in their current form. Sources: Authors' own elaboration, colour hypsometry, water-courses and state borders according to Arc CR 500.

From the Czech side, castles gradually arose (from north to south) along the western bank of the Morava river in Spytihněv, Stěnice (later the town of Uherský Ostroh, Eng. trans. Hungarian Promontory, Magyarársvár in Hungarian), Bzenec (1015), Hodonín and Břeclav from the first half of the 11th century during the reign of Prince Břetislav I. Later in the 13th century the northern bank of the Olšava river was similarly fortified by the royal towns of Uherské Hradiště (1253, Eng. transl. Hungarian Fortress, Magyarhradis in Hungarian) and Uherský Brod (1272, Eng. transl. Hungarian Ford, Magyarbród in Hungarian) and the Brumov Castle (1225), although a customs house was located on the site of the later Uherský Brod from the year 1030.

On the Hungarian side, the consolidation of the possession of part of the “confinium” was carried out by building outposts along the *Via exploratorum* from Považie (the Váh River Valley) over the ridge of the White Carpathians to the Olšava valley and the “Bohemian Trail” from Trnava to the Chvojnice River Valley. Hungarians entered

the “confinium” and conquered the localities of today’s Bánov and Slavičín at the end of the 11th century. The predecessors of today’s Czech Uherský Brod (probably in 1049) and Bánov (1091) were founded in the wider area of the “*Via exploratorum*”. However, this territory have been in the hands of the Czech monarch since 1139 at the latest. Along the longer “Czech trade route” the advanced castle Holíč is mentioned in the middle of the 12th century and the Skalica castle in 1209. The nearby Šaštín castle, then probably on the Hungarian-Austrian border, is first mentioned in 1018. At that time, the next and probably the last significant Hungarian points beyond the Little Carpathians were probably Senica (mentioned in 1217) and Sobotíšte. The pressure to control the largest possible parts of the “confinium” continued on the side of both kingdoms. Temporarily held and permanent occupations gradually reduced the extent of “no man’s land”. From approximately the middle of the 13th century, the division of the “confinium” took place practically without any remainder, in the form of “pushing interests” from both sides (Figure 2).

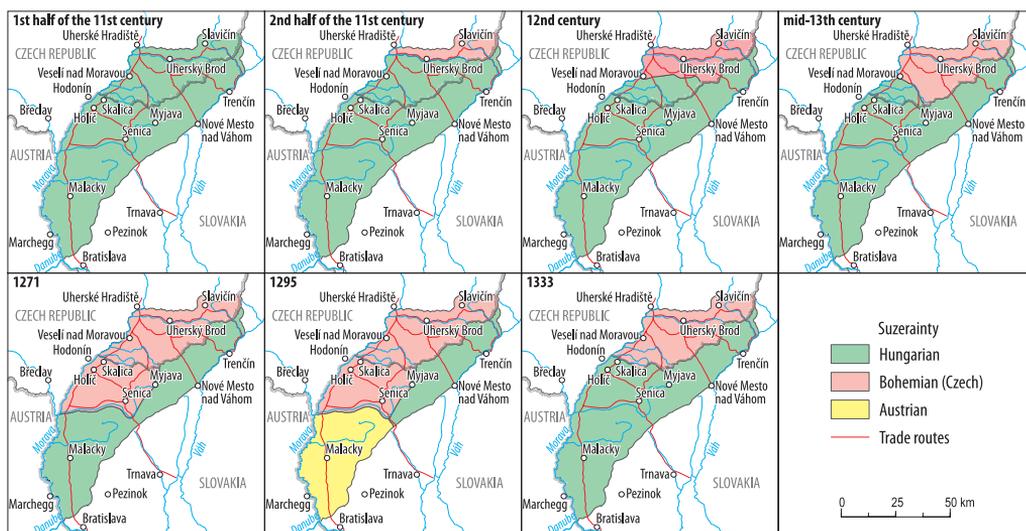


Fig. 2. Changes of suzerainty over the “confinium” in the course of time with approximate borders. All geographical names are given in current wording. Source: Authors’ own processing.

The definitive agreement on the division of this territory was reached between the Bohemian King John of Luxemburg and the Hungarian King Charles Robert of Anjou only after the death of Matthew Csák (1321), the Hungarian magnate who controlled the Vagus Region and the other part of Upper Hungary. Matthew Csák (Matúš Čák Trenčiansky in Slovak) caused considerable problems both on the Moravian and Hungarian sides of the border with his opposition to the centralization efforts of both monarchs (ZSOLDOS, A. 2013). Only then, with partial corrections, did the international border stabilize in approximately its current form around 1331–1333 (see *Figure 2*).

However, the actual colonization of the perimeter of the almost uninhabited territory began much earlier on both sides. Czech monarchs founded numerous castles and fortified settlements along the Morava and Olšava rivers starting at the beginning of the millennium. The royal towns of Uherské Hradiště (1253), Uherský Brod (1272) and Uherský Ostroh (1275) and some other smaller towns were mostly established later, on the site of older settlements. The actual colonization of the interior of the *Campus Lucsko* field began around 1250, when the border at the eastern edge of the “confinium” moved to the highest range of the White Carpathians. The starting points of this colonization were mostly located on the edge (on the Morava and Olšava rivers) of the region and some within the perimeter. Only a very small number of settlements existing before the division of the *Campus Lucsko* (perhaps Hluk, Velká and Blatnice pod Sv. Antonínkem) could function as a focus of colonization from within. The systematic settlement of the divided territory of the former “confinium” could, thus, fully develop only during the reign of the first Luxembourgers on the Czech throne. At that time, there was probably a characteristic, and in some places still visible, division of the land into typical narrow “colonization” belts, usually running perpendicular to the axis of the long valley villages. The Czech part of the former “confinium” is part of the ethnographic region of Slovácko. Its foothill part is called

“Dolňácko” (Lower Land) and the mountain part is called “Hornácko” (Upper Land).

Research methods and data

Historical landscape heritage of the “Hungarian corner” of Moravia in the contemporary landscape can be identified in two forms: 1) the historical cores of settlements, and 2) the remains of an ancient organization of agricultural land. These are the results of ancient human activity, which most likely originated here already in the High Middle Ages and which have been preserved in the present landscape in a minimally altered form to this day. The research was based on the hypothesis that stable cadastre maps document the results of the development of municipalities and the surrounding cultural landscape from the Middle Ages to the emergence of industrial society in the Czech lands traditionally dated after 1850.

As expected, both these types historical cultural heritage are presented in old maps and current cartographic documents. The searching for segments of the pre-industrial landscape was carried out according to a certified methodology (*Figure 3*) applicable elsewhere (KOLEJKA, J. *et al.* 2018).

Relatively reliable cartographic documents about the ground plan of the settlement cores and land division can be found in Habsburg military maps and especially in the stable cadastre in Moravia from the 1820s–1830s. The actual procedure of inventory of remnants (segments) of the ancient pre-industrial cultural landscape was carried out on-screen comparing visually landscape appearance in the recent colour orthophoto map (publicly available at Mapy.cz) with publicly available old maps of the stable cadastre (in the administration of the Moravian Land Archive – www.mza.cz) cadastre after the cadastre both offline and on-line. In total, it was necessary to “visit” electronically 108 cadastral areas of the historic land of “confinium” in the territory of Czech Republic. The original intention to use image analysis procedures to search for a characteristic land use mosaic in the current ortho-

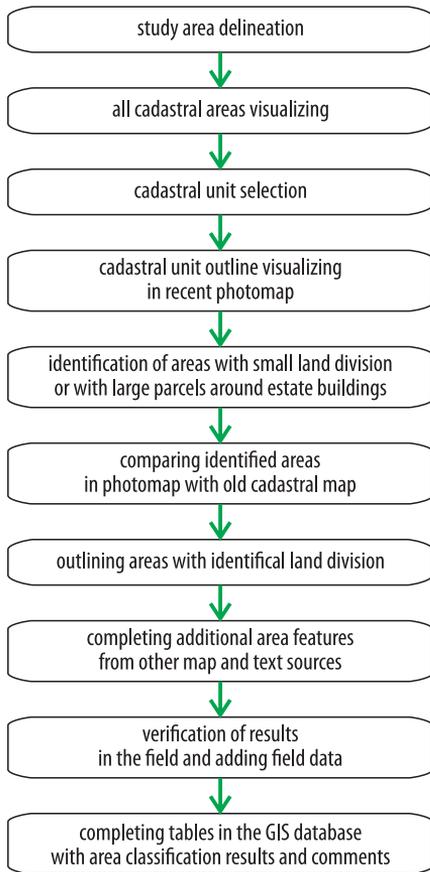


Fig. 3. Inventory flow chart of remnants of the ancient cultural landscape. *Source:* Authors' own processing.

photo map failed due to the extreme variety of patterns sought as mentioned in the introduction: small land division, remnants of landlord estates and town/village cores. Subsequently, the knowledge obtained about the segment of the old landscape was verified in the field.

Historical heritage as research results

Preserved ancient settlement cores

The research led to the identification of the cores of municipalities (towns and villages) where it is highly probable that only minor

changes influenced them in later periods. They did not arise until 700 to 800 years after the existence and demise of the “confinium” on the border of the medieval Czech and Hungarian states. Certain support can be found in the probable historical development of the “confinium” territory.

The river bed of Olšava at the northern edge of the “confinium” can be considered the oldest more or less documented border in the current territory of the formerly disputed region. The ground plan of the village of Nezdence in the Olšava valley is remarkable: perhaps in the 17th century it still had a “Hungarian” part on the southern bank at the bend of the river and a “Moravian” one on the opposite bank. Unlike the later planned colonization settlements, it still had a chaotic layout and land division at the time of the cadastral mapping in 1828 (Figure 4). The ground plan of the

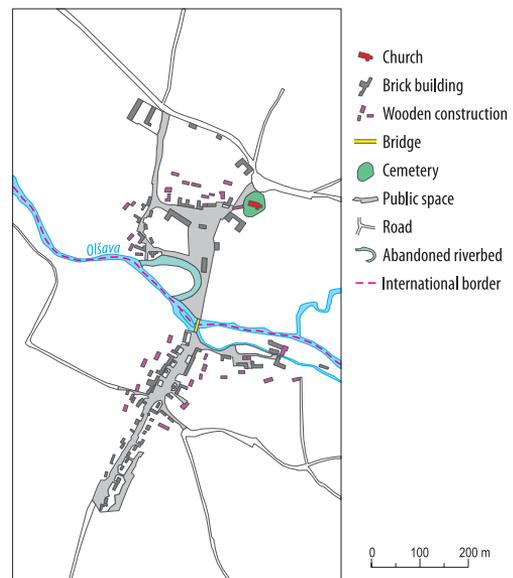


Fig. 4. The street and road network and the distribution of buildings in the village of Nezdence on the river Olšava (according to the imperial imprint of the cadastral map from 1828) shows two urbanization cores, each on one side of the river forming the border between the territories with Czech and Hungarian sovereignty around the 11th century in the former “confinium”. *Source:* Authors' own processing.

village with two “centres” has been preserved to this day. Both were probably separated by the border between the two states in the 11th century and connected by a ford or a bridge over the river. Each village centre was a node of a specific road network.

In the middle of the 13th century, the border probably ran more to the south on the river Velička. A different development on the sides of the border can be inferred from the “double centre” of the village of Velká nad Veličkou (Figure 5). This village was established in a relatively deep river valley, which opens to the north into slightly undulating terrain. In 1827, the two “centres” were connected by a ford in the places where the bridge is today. Also, each of these cen-

tres was served by a local road network. The village is the metropolis of the “Hornácko” sub-region in the ethnographic region of Slovácko.

The ground plan of the municipality of Blatnice pod Svatým Antonínkem (Figure 6) has an atypical appearance compared to other municipalities in the region of the “Hungarian corner” of Moravia (according to the stable cadastre map from 1827). It is located at the mouth of the Svodnice creek from the hilly terrain to the plain. Apparently, it was founded at the intersection of two important trade routes. According to some authors, the patronage of the municipal church of St. Andrew indirectly testifies to the Hungarian foundation of the village (MUDRIK, M. 2020). This means that the village was in the Hungarian sphere of influence in the 12th century (MITÁČEK, J. 2016).

The originally Romanesque church of St. Andrew was rebuilt, but the first written mention of the village dates back to 1371 (SEDLÁŘ, J. 1999). According to the stable cadastre map, the land was divided into very small and very narrow parcels. To the west and to the south of the inner village, they are arranged parallel to the longer axis of the village and do not connect to the much wider gardens behind the individual houses, even if the terrain allows it. To the north of the village there are plots of land with vineyards perpendicularly arranged to the extended axis of the village, which is also unusual here (compared to the opposite side of the road). To the northeast of the village’s core, the division of land already has a typical character of colonization villages, and the plots in the form of narrow strips run up along the slope. However, they do not connect to the gardens behind the houses, but run up from wine cellars at the foot of the slope. The distribution of land in the south of the village closer to the building is made perpendicular to the longer axis of the village. It is immediately followed by strips of vineyards parallel to the longer axis of the village, but following the slope. Another peculiarity is the ancient parallel street to the northeast of the main street (axis) of the village.

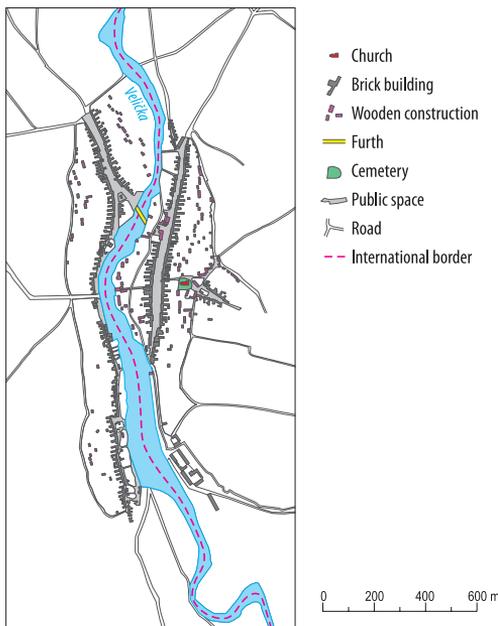


Fig. 5. The street and road network and the distribution of buildings in the village of Velká nad Veličkou on the river Velička (according to the imperial imprint of the cadastral map from 1827) shows two urbanization cores, each on one side of the river probably forming the border between the territories with the Czech and Hungarian sovereignty within the former “confinium” around the middle of the 13th century.

Source: Authors’ own processing.

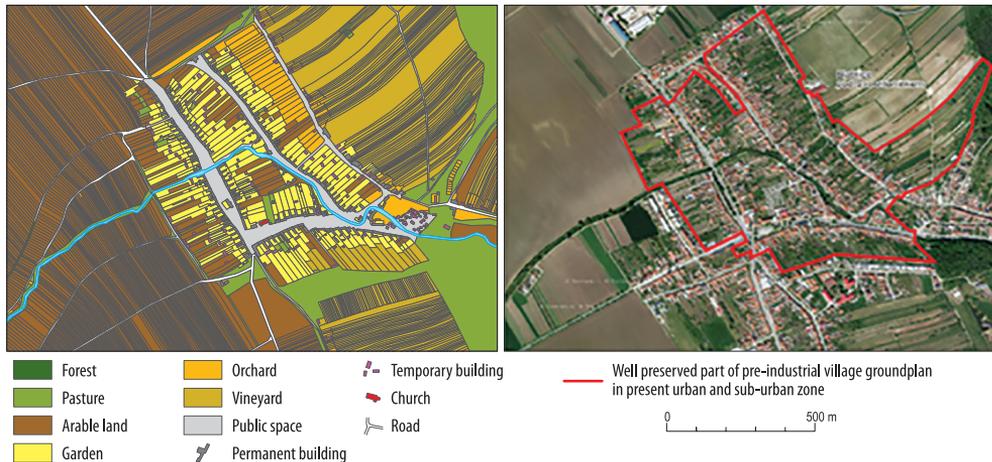


Fig. 6. The traditional wine-growing village of Blatnice pod Svatým Antonínkem was probably founded by Hungarians before the year 1200. It has preserved most of its medieval layout, what is unusual in Moravia. Land use in 1827 according to the imperial imprint of the cadastral map (left), the preserved part of the medieval ground plan of the village drawn in the current orthophoto 2018 (right). *Sources:* Authors' own processing of the cadastral map at www.mza.cz and orthophoto at Mapy.cz.

The ground plan of the core of the Hluk municipality and the division of agricultural land around it have a typical medieval colonization character. The historical core of the market town (since 1525), and standard town (since 1970) is located on a gentle slope above the Okluka river, sloping to the south, in the space of an inconspicuous corridor connecting the rolling landscapes to the east and west of the municipality through the significantly deep and narrow valley. The buildings were laid out along the widened main east–west road. Church property (according to the stable cadastral map from 1827) adjoins the centre of the settlement from the north (St. Lawrence), and the landlord's castle from the south (Figure 7). Hluk was perhaps one of the Czech colonization strongholds in the “confinium”.

The core of the village Suchov (Figure 8) in the sub-region “Hornácko” (documented in the stable cadastre map from 1827) was formed on the watershed ridge between two streams along the road leading from the foothills to the White Carpathians. The village is first mentioned in 1500. The village bears the typical signs of medieval colonization.

These are seen in the street-like character of the village centre at the line of extension of the through north–south road. The core is by a continuous development, which is followed by the regular division of the garden area at the back of the houses with approximately the same width as the street in front of the houses. Approximately perpendicular to the axis of the village, not only the division of the garden area takes place, but also parallel strips of arable land, regardless of the character of the terrain across the neighbouring valleys and ridges up to the border of the cadastre or the forest. South-west of the upper end of the village stood the Kanšperk castle, mentioned in 1360.

Remains of the ancient division of agricultural land

The remains of an ancient agricultural landscape represent an interesting type of landscape heritage here. In the territory of the Czech Republic, areas with a land use structure that has been preserved with minimal

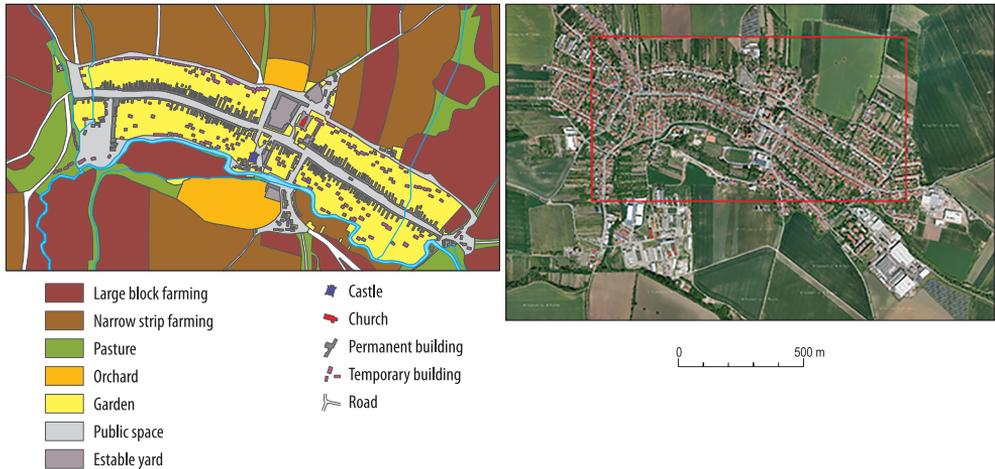


Fig. 7. The town of Hluk preserves well the medieval ground plan of the colonization village distributed along the main road with branching roads at both ends of the original development while the buildings of secular and religious administration are its centre. A simplified version of the land use in 1827 according to the cadastral map (left), the same territory on the recent 2018 colour orthophoto (right) shows the territorial growth of the city along all roads leaving the ancient core. Sources: Authors' own processing of the cadastral map at www.mza.cz and orthophoto at Mapy.cz



Fig. 8. The colonization village of Suchov was established at the foot of the White Carpathians along a long-distance trade road. While the ground plan of the medieval core (according to the cadastral map from 1827 on the left) practically did not change, the medieval division of land almost completely disappeared after the consolidation of land during the socialist collectivization of agriculture (according to the current 2018 orthophoto on the right). The development was supplemented by a large building of the agricultural cooperative (east of the centre of the village), and the former division of the land is now only indicated by strips of bushes on parts of the former edges. Sources: Authors' own processing of the cadastral map at www.mza.cz and orthophoto at Mapy.cz

changes since the compilation of the oldest available reliable cartographic documentation – detailed maps of the stable cadastre from 1820–1830 – can be considered such areas.

A small land holding serves as an indicator of the ancient landscape in the conditions of the Czech Republic. This is because of a series of land reforms and political upheavals, the most significant of which were related to the collapse of the Austro–Hungarian Monarchy and the subsequent land reforms, but especially to the socialist collectivization of agriculture after the WW2. Before 1850 there was also large-scale use of land on noble, church and city estates. However, a number of small land holdings arose from the redistribution of abolished large estates. The proof of the antiquity of the cultural landscape can be its reliable documentation in the period before 1850

only. The predominant type of rare segments of the ancient cultural landscape in the former “confinium” are areas with a small division of land, in contrast to the large-scale land use of the current cultural landscape (*Photo 1*).

Cultural landscapes have been categorized within the UNESCO World Heritage framework by origin, development and association with diverse events (according to IFLA 2017, modified).

1. Conceived cultural landscape. It includes garden and park landscapes constructed for aesthetic reasons.

2. Organically evolved landscape. It developed in connection with and in response to the natural environment. Two subcategories can be distinguished:

a) Relict or fossil landscapes where the evolutionary process ended sometime in the past.



Photo 1. Large-scale modern agriculture characterizes the current cultural landscape of the “Hungarian corner” around the town of Hluk (Photo by KOLEJKA, J. 2019).

b) Continuing landscapes are landscapes in which the development process is still ongoing.

3. Associative cultural landscape is a type that is related to cultural traditions. An associative cultural landscape is a physical place where the intangible aspects of cultural heritage are embodied.

Among the organically developed relict landscapes, ancient cultural landscapes represent the remains of perhaps larger territories in their surroundings, which, however, have succumbed to the processes of innovation and lost their original character. An overview of historical cultural landscapes is available in the Czech Republic (KUČA, K. *et al.* 2020). However, only a small number of them show a land use structure comparable to the pre-industrial period. For the historical territory of Moravia, their inventory was carried out in the years 2016–2020 as part of the NAKI Program project of the Ministry of Culture of the Czech Republic under the title “Inventory of the pre-industrial landscape of Moravia and ensuring public awareness of its existence as cultural heritage” at the Institute of Geonics of the Academy of Sciences of the Czech Republic in Ostrava.

A considerable attention is paid to the ancient landscape in the contemporary scientific community from a number of points of view. The history of interest in the medieval landscape dates back to the middle of the 19th century, especially in the Anglo-Saxon world (RIPPON, S. 2018). Aspects of the reconstruction of such a landscape to a specific period, questions of its functioning (WHITE, D. and GRAEME, J. 2012), the state of property conditions (HULL, D. 2001), dramatic stages of change and their causes (HOUFKOVÁ, P. *et al.* 2015) or their current role (HRONČEK, P. *et al.* 2022) prevail. Attention is paid to selected types of objects (primarily sacral, feudal settlements), the character of settlements and communications, usually at the local level (e.g. STAMPER, P. *et al.* 2018). Somewhat aside of interest is the covering search for the residuals of the ancient landscape in the current landscape.

An example of a successful inventory of pre-industrial landscape segments of all sizes

is the region of the Flemish Community in Belgium, where a sample inventory and classification of the identified areas was carried out, as well as the incorporation of findings into regional legislation and spatial planning practice (VAN EETWELDE, V. and ANTROP, M. 2005). The Belgian inventory process was based on the comparison of high-quality old maps from the end of the 18th century and contemporary aerial photographs with subsequent verification of selected areas in the field, following evaluation and recommendations. The Walloon Community of Belgium carried out a similar inventory on part of its territory. The remains of the old landscape were mapped in Saxony (THIEM, K. and BASTIAN, O. 2014).

There is a sample record of examples of “historical landscape structures” (SLÁMOVÁ, M. and JANČURA, P. 2012) and “historical structures of the traditional agricultural landscape” in Slovakia (ŠPULEROVÁ, J. *et al.* 2016). In Slovakia, a nationwide inventory of the remains of the ancient landscape is also underway at the local level (see HREŠKO, J. and PETLUŠ, P. 2015), with special attention paid to mountain areas (HREŠKO, J. *et al.* 2015).

Interest in the inventory of old landscape residues can be observed in the regions of Brittany in France (“bocage” type records), Alentejo in Portugal (forest-agricultural complex), Great Britain (BUNCE, R.G.H. *et al.* 1996; HULL, D. 2001; *et al.*), the Netherlands (MÜCHER, C.A. *et al.* 2003), and Ireland (SIMMS, A. 2004). The European Convention on Landscapes also encourages member countries to pay attention to “ordinary” landscapes. The underappreciated remnants of old land use structures can be such a type of landscape (Council of Europe 2000). A number of researchers mainly express concern about the future of the remains of the ancient cultural landscape.

Within the framework of the above-mentioned project, the research team identified 31 areas with preserved pre-industrial landscape structure (Figure 9) on the territory of the former “confinium”, comparing the current orthophoto map with the old maps of

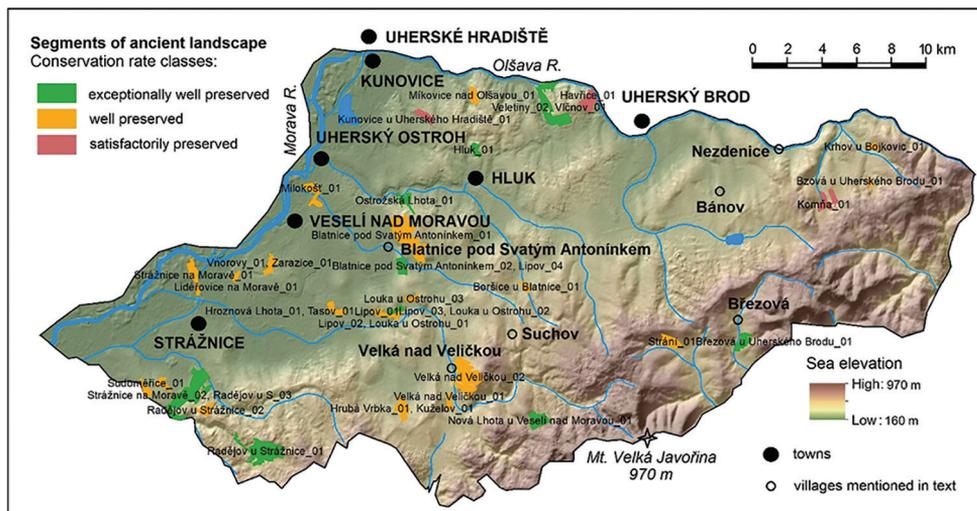


Fig. 9. “Hungarian corner” in Moravia with the remains of the ancient cultural landscape. Sources: Authors’ own processing, elevation map and rivers based on the Arc CR 500 data.

the stable cadastre. An overview of its basic features was compiled for each such segment of the ancient landscape (Table 1). An important part of the acquired information is the evaluation of the current state of each detected remnant of the old landscape, or a qualified estimate of its degree of preservation, and determination of the main forms of threat. These facts are then followed by proposals for framework management measures.

The qualitative classification of pre-industrial landscape (PreIL) segments according to their current state or degree of preservation distinguishes (Table 2):

Segments marked as ‘exceptionally well preserved’ (level 1) – they have maximally preserved original land division and also in general the representation of the original land use forms, including edges; they show some only isolated differences from the state on the imperial impressions of cadastral maps.

Segments marked as ‘well preserved’ (level 2) – have significantly preserved original land division, but the representation of original land use forms has not been preserved: there has been a change of cultures, tree over-

grown plot edges, or a change of the pattern of land use forms, but the visual landscape character has basically been preserved.

Segments marked as ‘satisfactorily preserved’ (level 3) – show mostly preserved land division (some originally separate plots are unified) and the share of original land use forms changed; non-native land use forms are introduced (orchards and vineyards on allotments, cottages, etc., threats are abundant).

The size classes of the PreIL segments (see Table 2) are determined conventionally.

The identified remnants of the ancient cultural landscape with small land parcels are a rare historical natural and cultural heritage. In the current landscape, clearly dominated by large homogeneous areas of arable land, permanent crops (vineyards and orchards, or meadows) and forest. The ancient landscape segments with the highest level of preservation can be categorised as historical and natural heritage, similarly such as the region’s architectural monuments and nature and landscape reservations. Because of a large part of the area of interest has a slightly undulating terrain, the most valuable surviving

Table 1. Basic parameters of the pre-industrial landscape (PreIL) segment Hluk

The name of the pre-industrial landscape: Hluk	Region: Slovácko	Geographic coordinates of the centre of gravity: 48°59'59.9"N 17°31'17.9"E		Number of local segments in given cadastral territory: 1		
Location in Moravia: Zlín Region, District of Uherské Hradiště, Vizovická vrchovina Upland (Hlucká pahorkatina Hillyland)						
PreIL classification criteria						
Cadastral territory: Hluk	PreIL segment code in the geo-database: Hluk_01	Total area: 28.64 ha	Size category: PreIL area	Use of plots: Narrow strips of mainly orchards with grass, less arable land leading regardless of terrain to the distant axis of the village, cottages	Degree of preservation: 1–2	Threats: Land pooling, and land abandonment
Natural characteristics						
Location in terrain	Altitude, m	Climate	Slope	Aspect	Geology	Soil
			% of total			
Two slopes undulating central part of the high escarpment away from the village	245–321	W2	90 G 10 S	50 SE 30 S 20 SW	80 flysch sandstones and clay stones 10 mixed sediments	100 modal luvisols
Recommendation: Maintain current use, especially to prevent the merging of parcels.						
Explanations: G – gentle (3–15°), S – steep (more than 15°), SE – south-east, S – south, SW – south-west						
Source: Authors' own processing.						

Table 2. Classification of segments of the pre-industrial landscape

Size classification			Quality classification		
Size, ha	Size category	Number	Preservation level	Preservation category	Number
0–50	area	17	1	exceptionally well preserved	9
51–100	district	9	2	well preserved	19
over 100	union	5	3	satisfactorily preserved	3
<i>Total</i>		<i>31</i>	<i>Total</i>		<i>31</i>

Source: Authors' own processing.

remnants of the ancient landscape are preserved more in the dissected terrain, which was not reached by the efforts to combine plots into large blocks during the socialist collectivisation of agriculture.

The state of the landscape in the 1820s is very similar to a small area (28.64 ha) north of the town of Hluk (Figure 10). As in 1827, it is now dominated by a mixture of permanent crops (orchards), arable land and pastures running in narrow strips down slopes. The site is located on the slope open to the south. However, compared to the situation at the beginning of

the 19th century, almost all the wooden huts at the foot of the slope have disappeared. Similar objects are now irregularly located at different heights in different strips of land (Photo 2).

A small area (55.11 ha) on the flat to slightly sloping valley floor south of the village of Březová demonstrates the significant predominance of arable land strips. Here the style of land arrangement is well preserved, but it is quite common for adjacent plots to be combined for common use from year to year (Figure 11). Compared to the situation in 1828, the route of the main north–south



Fig. 10. Evidence of the practical conformity of the use of the ancient landscape area north of the town of Hluk (on the left the current state of use - according to the recent orthophoto map from 2018, on the right the state in 1827 according to the imperial imprint of the cadastral map. Sources: Authors' own processing, orthophoto map – Mapy.cz, imperial imprint – www.mza.cz



Photo 2. The segment of the ancient cultural landscape north of the town of Hluk with multifunctional land use similar to the state at the time of cadastral mapping about 200 years ago (Photo by KOLEJKA, J. 2019).

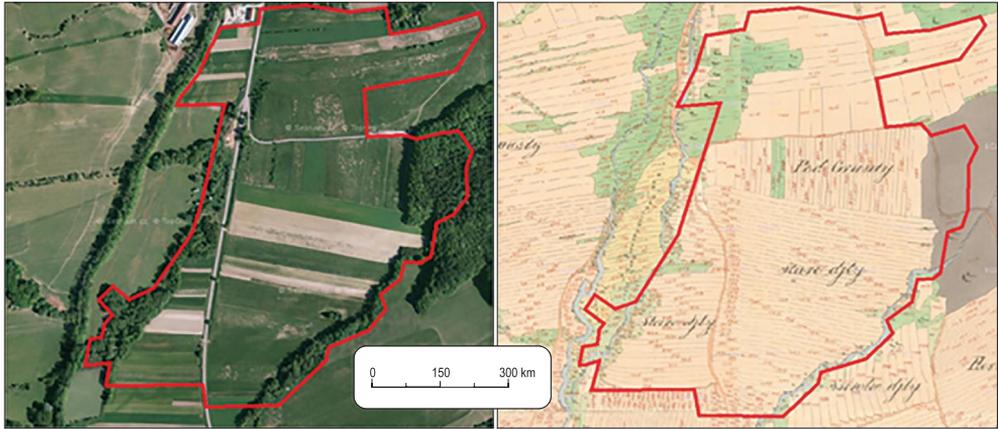


Fig. 11. Example of great similarity of current and ancient landscape use in the area south of the village of Březová (on the left the current state - according to the recent orthophotomap from 2018, on the right the state in 1828 according to the imperial imprint of the cadastral map. Sources: Authors' own processing, orthophoto map – Mapy.cz, imperial imprint – www.mza.cz

valley road has changed, some field roads have disappeared, watercourses have been straightened, and the pasture areas adjacent to the streams have become overgrown with shrubs and low trees. The overall character of this section of the cultural landscape in the White Carpathians has not changed substantially in almost 200 years (*Photo 3*).

Discussion

At the present time of very rapid economic and social changes, changes are taking place in the landscape, especially in its use. Driving forces are mainly represented by the pressure to further intensify land use on the one hand, while on the other hand, in LFA it is the abandonment of land, or the transition to extensive use. Professional groups, the territorial administration, but also the lay public pay significant attention to these often dramatic changes. Society's attention is increasingly turning to the past. Its manifestation is, among other things, UNESCO's growing efforts to ensure the protection and sustainable development of the network of world

heritage sites. As of 2020, there were a total of 114 cultural landscapes of all types (see IFLA, 2017) on the list of World Heritage Sites out of a total of 1,121 UNESCO sites (BRUMANN, CH. and GFELLER, A.E. 2022). They are usually represented by larger areas. So far, however, few countries have carried out a national or at least a regional inventory of the remains of the ancient cultural landscape (HULL, D. 2001; VAN EETWELDE, V. and ANTROP, M. 2005; THIEM, K. and BASTIAN, O. 2014) and attempted to classify them (JELEN, J. *et al.* 2021).

In the historical territory of Moravia, this process also took place in the "Hungarian corner", where, in addition, the beginning of the formation of these remains can be fairly accurately dated from the historical context thanks to the delayed stage-like colonization (settlement) of the disputed territory. This represents a significant difference compared to similar initiatives, where the establishment of old landscapes is usually not known, or it concerns a relatively recently created cultural landscape. However, only a very small part of the extraordinary extensive professional literature (usually oriented towards local issues, or protection, or individual assessment,



Photo 3. Very rare example of preserved medieval land use in the form of narrow plots of arable land in slightly sloping terrain south of the village of Březová in the White Carpathians (Photo by KOLEJKA, J. 2018).

peculiarities or history of the historical landscape) is devoted to methods of identification and classification of small remnants of the ancient cultural landscape. The contribution of this contribution, thus, consists in: 1) practical application and verification of the inventory method of the remains of the old landscape at the regional level, 2) subsequent attention paid to the area with the possibility of relatively accurate dating of the foundation of these remains, 3) development of a qualitative classification of the remains of the old landscape according to the degree of preservation, 4) presentation of procedures on the historically specific territory of the former disputed territory between the Czech and Hungarian states.

Conclusions

There is a relatively dense network of nature conservation areas, historical buildings and

areas in the Czech Republic. Segments of the ancient cultural landscape as joint products of nature and human activities are also numerous. No one among them could be included in the UNESCO categorization as “relict or fossil” organically developed landscapes due to small dimensions.

In the conventionally defined region of the “Hungarian corner” in Moravia, settlement and use of the landscape took place in a politically uncertain area in waves depending on the power situation of each period. That is why there are still evidences of the activities of both the Czech and Hungarian medieval states in the territory, which has no equivalent in the Czech Republic. Thus, to this day, forms of landscape heritage of Czech and Hungarian origin exist side by side (both in urbanized areas, or in open landscape). Many localities were practically untouched by modernization efforts in the past and represent remnants of the ancient landscape.

The identified areas of such landscape heritage have been carefully recorded, but now it is necessary to inform the professional community, the territorial administration and the general public about the results of the research in order to be able to formulate society's relationship to such places to find suitable forms of its protection in the future and also to present them as very attractive objects of tourist interest, in the given case also of international tourism. They can serve as important object of public interests or educational destination (RÁTZ, T. *et al.* 2020).

The value of the best-preserved localities is comparable to areas of preserved nature and historical cultural monuments. It should also be noted that the economic pressure on a number of identified areas in the open landscape and in developed areas is considerable. Between the years 2020–2022, two valuable sites of the ancient landscape disappeared. It is therefore appropriate to interest the local public and the authorities in spreading awareness about the value of the identified sites, and about their potential contribution to municipalities and the region. All identified locations are available on the Internet (<http://arcgis.adbros.com/project/detail/6>) at a resolution corresponding to a scale of 1:10,000 and larger, so they can be respected in planning activities at all levels.

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