HISTORICAL GEOGRAPHY IN THE 21ST CENTURY

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Introduction

Historical geography (HG) as part of the spectrum of auxiliary historic disciplines plays an indispensable role in the study of state, changes, and development of a specific region in the past, along with causes of such changes, their consequences, and related laws**.** It reconstructs the already-extinct medieval and modern-age landscape (region), considering the mutual relationship between man and nature.[1]

The European Landscape Convention (2000)[2] calls for a broader view on the specific area – landscape in question. Through its natural (geoecological) parameters (limits), landscape influences the activities and behavior of human individuals/society within a given time and space. Historic and geographical aspects suggest the need to know which human activities have always been present in the landscape and how they were, and still are, impacting the studied structure. It is only natural that such perceived analysis of historic (or prehistoric) landscape calls not only for the application of the „classic" methods (e.g. historic, cartographic methods), but also for approaches of the related subjects. Besides the already mentioned strategies, the author makes use of the approaches of geoecology (complex physical geography), cultural geography and landscape archaeology; as a matter of fact, their combination allows for a more complex view on the assessment of historic and geographical systems, or social and natural driving forces behind the development of the man-nature, or man-landscape (space)-culture-time interactions.[3]

Such designed platform helps to form an environmental-cultural-geographical strategy of historical geography, which, in line with Chromý[4] we refer to as post-positivistic to post-modern historic geography. This study offers a closer perspective on some dimensions of the studied discipline; it

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[1] A. R. H. Baker, "On the Significance of History for Geography: Historic Geography as Holistic (or Total) Geography", in *Klaudyán: internetový časopis pro historickou geografii a environmentální dějiny*, roč. 4 (2007), č. 1, *http://www.klaudyan.cz/dwnl/200701/01_baker.pdf* (2007-10-17), p. 8; E. Semotanová, *Historická geografie českých zemí*, 1. vyd., Praha, HiÚ AV ČR, 1998, p. 9-10.

[2] *Full text of the European Landscape Convention (ETS No. 176)*, *http://www.conventions.coe.int/ Treaty /EN/Cadre ListeTraites.htm* (2003-10-30).

[3] P. Chrastina, *Historická geografia: Multidisciplinárne prístupy a koncepcie*, Habilitačná práca, Prešov, FF PU, 2007, p. 3.

[4] P. Chromý, "Výzvy pro českou historickou geografii?", in *Historická geografie 31*, R. Šimůnek ed., Praha, HiÚ AV ČR, 2001, p. 91.

outlines selected dimensions of the multidisciplinary approaches within the context of three basic HG concepts that have profiled themselves over the last decades. Each of them allows for the formation of new opinions, methodological approaches, and relevant working strategies.

Approaches and strategies in historical geography

Historical geography as a separate interdisciplinary marginal discipline connects space (landscape) with time and natural sciences with social sciences. Over the process of development of a given discipline and solutions to specific research topics (related to the penetration of environmental paradigm into social sciences) in the 90-ties of the last century, there has been an internal diversification, accompanied with the deepening inner dualism that represents the historic or geographic "wing" of the discipline – each with its own methodological set of instruments.[5]

The present HG points to three alternative strategies, each of them typical for its specific approaches.

Traditional (positivistic) historical geography

Traditional, mostly idiographic *„positivistic" historical geography* accentuates its cognitive function. Its trans-disciplinary character is reflected in a set of the „classic" historic-geographical research methods.[6] Kučera,[7] Chromý and Jeleček[8] see this perspective dealing with man located in time space, as one that accentuates the cognitive and descriptive functions. Outcomes of basic research are mostly presented in the form of regional synthesis.[9]

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[5] Chrastina, *Historická geografia*, p. 5.

[6] Semotanová, *Historická geografie*, p. 61-63; E. Semotanová, "Historiografie, geografie a historická geografie – metodologické průsečníky na prahu třetího tisíciletí", in *Klaudyán: internetový časopis pro historickou geografii a environmentální dějiny*, roč. 1 (2000), č. 1, *http://klaudyan.psomart.cz/clanek.php?id=11* (2007-10-25), p. 1-2, mentions the following methods: historical, geographical, cartographic methods and methods of the related disciplines – e.g. climatology, hydrology, etc.

[7] Z. Kučera, "Historická geografie mezi geografií a historiografií", in *Historická geografie 34*, R. Šimůnek ed., Praha, HiÚ AV ČR, 2007, p. 11.

[8] P. Chromý, L. Jeleček, "Tři alternativní koncepce historické geografie v Česku", in *Historická geografie 34*, R. Šimůnek ed., Praha, HiÚ AV ČR, 2005, p. 338.

[9] Examples include the work of P. Chrastina ("Minerálne vody JZ časti katastra Trenčianskych Mitíc v kontexte historických zmien", in *Geografie IX*, J. Mečiar ed., Brno, PdF MU, 1997, p. 88-92), J. Martinka ("Z historickej geografie oblasti Tribeča", in *Geografický časopis*, roč. 6 (1954), č. 1-2, p. 5-41), P. Michal (*Ipeľská kotlina: Príroda a človek*, 1. vyd., Banská Bystrica, FPV, 2003), F. Musil ("K problematice vývoje středověkých komunikací v Poorlicku v době předhusitské", in *Historická geografie 30*, E. Semotanová ed., Praha, HiÚ AV ČR, 1999, p. 135-153), E. Semotanová (*Historická geografie českých zemí*, p. 181-205), J. Žudel ("V plyv ekonomickej činnosti Fuggerovcov na životné prostredie v oblasti červenokamenského panstva v rokoch 1535-1583", in *Geografický časopis*, roč. 26 (1974), č. 2, p. 163-174; "Slovakia´s Settlement

Post-positivistic historical geography

Wiedermann[10] believes that exploration in a number of scientific disciplines has gone beyond its own scope and studies its object of interest in a more complex way. Inter-disciplinary methodology has been typically used within HG since as late as the mid 90s of the 20th century, when its *environmental strategy* begins to emerge.[11]

Onset and golden age of environmentalism as well as the significance of more "flexible" studies of the relationship of man and nature (landscape) in the international arena dates back to the 80s of the last century.[12] Jeleček[13] attributes the causes responsible for the existence and development of environmental and cultural aspects in historic and geographical explorations to the overall public need for research and problem solving approaches stemming from the ecological crisis phenomenon.

Multidisciplinary HG environmental strategy has been closely connected with solving social and environmental issues (within the feedback interactions); Chromý and Jeleček[14] believe that such formulated studies have the objective to interpret changes to spatial organization of society and to formulate answers of casual characteristics (cause - effect).

Suitable instruments of relational analysis between human-geographical and geological (natural) environmental strategy systems within historic geography include the *historic land use*[15] as one of the intensive research forms.[16] It is a relatively recent discipline that builds on the correct analysis of old maps

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towards the End of the Middle Ages", in *Geografický časopis*, roč. 40 (1988), č. 1-2, p. 112-119) and others.

[10] E. Wiedermann, *Archeoenvironmentálne štúdie prehistorickej krajiny*, 1. vyd., Nitra, FF UKF, 2003, p. 7.

[11] See example: I. G. Simmons, A. M. Mannion (eds.), *The Changing Nature of the People-Environment Relationship: Evidence form a Variety of Archives*, 1. vyd., Praha, PřiF UK, M. Holeček, 1995; I. Bičík et al. (eds.), *Land use/Land cover Changes in the Period of Globalization: Proceedings of the IGU-LUCC International Conference, Prague 2001*, Praha, Přif UK, 2002; L. Jeleček et al. (eds.), *Dealing with Diversity – Proceedings (2nd International Conference of the European Society for Environmental History)*, Praha, PřiF UK, 2003.

[12] Chromý, Výzvy pro českou historickou geografii?, p. 91.

[13] L. Jeleček, "Nová historiografie? Environmentální dějiny v USA: vývoj, metodologie, výsledky", in *Český časopis historický*, roč. 92 (1994), č. 3, p. 510.

[14] Chromý, Jeleček, Tři alternativní koncepce historické geografie v Česku, p. 340, 342-343.

[15] Current historical land use deals also with the analysis of pre-historical systems. On the other hand, study of the primieval/ancient land calls for the implementation of other approaches, e.g. landscape archaeology. We therefore suggest to use the term "*prehistoric land use*".

[16] L. Jeleček, "Environmentalizace vědy, geografie a historické geografie: environmentální dějiny a výzkum změn land use Česka v 19. a 20. století", in *Klaudyán: internetový časopis pro historickou geografii a environmentální dějiny*, roč. 4 (2007), č. 1, *http://www.klaudyan.cz/dwnl/200701/03 jelecek.pdf* (2007-10-17), p. 21.

(Maps 1, 2) and aerial pictures of identical territory to provide a prognosis of landscape development or assessment of long-range changes in the use of land.

Historic, as well as pre-historic land use builds on the premise that soil[17] is one of the fundamental components of natural (as well as living) environment and at the same time represents a means of production – the natural substructure of agriculture. Temporal changes to land structure within a specific territory are therefore an important indicator of the economic and environmental potential of the studied area amidst the changing conditions of human society.

Notwithstanding the limited possibilities to identify the so-called *driving forces* behind landscape changes, this method supports the application of terrain mapping or the forms of *landscape use* or *land use* (Map 3). Another historical land use methodology includes *Corine Land Cover* (CLC) classification (Maps 4 and 5).

A relatively unified view on land use development over specific time horizons is possible through the *multi-temporal analysis*;[18] it represents the study of land use category or CLC dynamics within the computerized environment of geographical information systems (Maps 4, 5). His assessment builds on monitoring the landscape relations of specific areas over a given time period (as determined by date/year of creation of a specific map or aerial picture) and a subsequent statistical processing through numerical and graphical analysis (Table and Chart 1).

Post-positivistic to post-modern historical geography

Third and the most recently developed strategy is the strategy of HG as *post-positivistic to post-modern discipline that overextends into cultural geography.*[19] Besides looking for the underlying principles and development mechanisms that have not been revealed by extensive research (through traditional approaches), it also differentiates between indispensable and random causes for change. Study of the interaction of man – landscape – time (and culture – adds the author) emphasizes the analysis of development of cultural landscape use and of the socio-economic systems. At studying the materialistic and dialectical relations in space, inter-disciplinary approaches are applied. However, methods of intensive research (including the pre-historic/historic land use) dominate.

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[17] As understood within the dimension of agricultural land (fields, permanent grasslands, and permanent cultures), since, e.g. pastures were significant in mainly extensive economies of the Eneolite.

[18] More for example in J. Feranec, "Prístupy k analýze viac časových údajov diaľkového prieskumu Zeme", in *Geografický časopis*, roč. 48 (1996), č. 1, p. 3-11; J. Oťaheľ, J. Feranec, "Výskum zmien krajinnej pokrývky pre poznanie vývoja krajiny", in *Geographia Slovaca 10* (1995), p. 187-190.

[19] Chromý, Jeleček, Tři alternativní koncepce historické geografie v Česku, p. 342.

CORINE categories Land Cover	code	1782/84		1863		1941	
		ha	%	ha	%	ha	%
Non-continuous residential buildings	112	8,2	0,5	10,4	0,7	37,2	2,5
Road and railway network and adjacent areas	122	7,1	0,5	6,6	0,4	22,7	1,5
Non-irrigated arable land	211	84,0	5,6	220,3	14,6	571,3	37,9
Vineyards	221	0,0	0,0	0,0	0,0	7,5	0,5
Orchards and plantations	222	19,7	1,3	14,0	0,9	54,3	3,6
Grassland (meadows and pastures)	231	265,0	17,6	209,3	13,9	171,0	11,3
Broad-leaf forests	311	1 125,0	74,6	884,4	58,6	518,0	34,3
Enclosed low dense underbrush	322	0,0	0,0	163,5	10,8	127,0	8,4
Total		**1 509,0**	**100,0**	**1 509,0**	**100,0**	**1 509,0**	**100,0**

Table 1. Trend in CORINE Land Cover categories
of the Borumlak – Varzaľ territory[20]

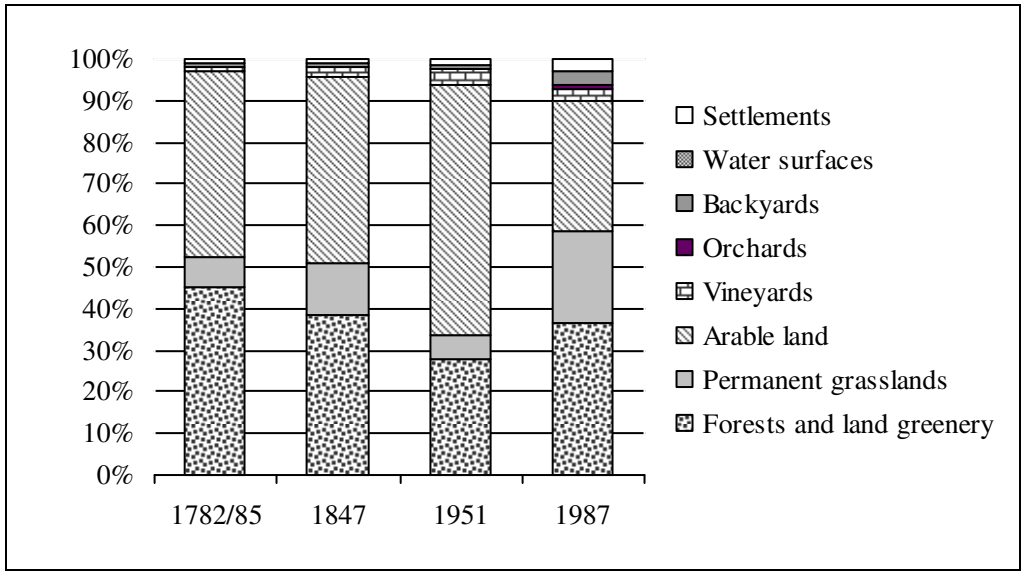

Chart 1. Trend in land use categories in 1782/85 - 1987
(territories of Cáfar – Čerňa, and Jáščˇ)[21]

[20] Source: P. Chrastina, K. Křováková, V. Brůna, "Zmeny krajiny v rumunskom Bihore (na príklade slovenskej enklávy Borumlak a Varzaľ)", in *Historická geografie 34 – Materiály*, R. Šimůnek ed., Praha, HiÚ AV ČR, 2007, p. 390.

[21] Source: P. Chrastina, M. Boltižiar, "Kultúrna krajina SV okraja Bakoňského lesa v Maďarsku (súčasnosť v kontexte minulosti)", in *Historická geografie - Supplementum I*, R. Šimůnek ed., Praha, HiÚ AV ČR, 2006, p. 181.

Such understanding of historical geography strategy does not look for generalizations, but for further hidden considerations (e.g. traces of extinct architectures, work migrations, epidemics, wars, etc.) which could influence future development of the studied territory. Adequate result comes as a consequence of detailed heuristics of historic and geographical sources, along with a precise terrain survey that includes e.g. landscape-archaeological and culture-anthropological approaches (surface collection of shreds and osteological material – Figure 1, extracting samples of building material, soil probes, and landscape photography – Figures 2 through 5, interviews with informants, etc.).

The mentioned suggests that the environmental-cultural-geographical HG strategy is typical for a broad set of alternative approaches that bring it closer to the newly-emerging historiographic paradigm – environmental history[22].

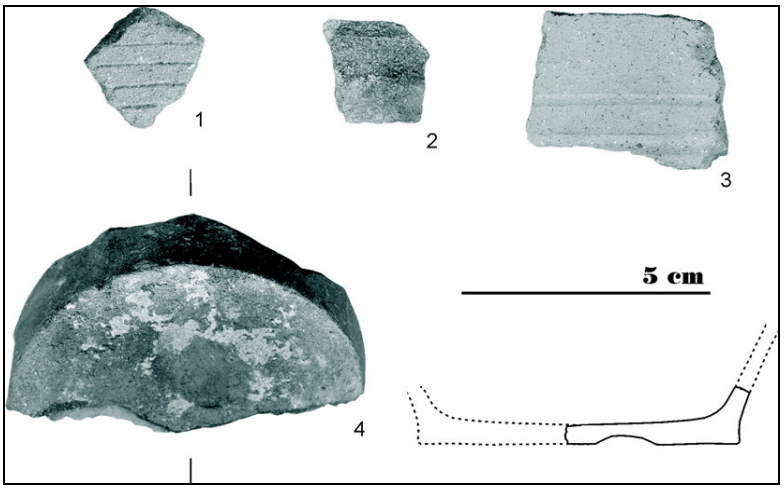

Fig. 1. Findings of ceramics from the 15th through 16th centuries (territory of Butín)[23]

[22] L. Jeleček, "Environmentalizace historické geografie, historiografie a historický land use", in *Historická geografie 30*, E. Semotanová ed., Praha, HiÚ AV ČR, 1999, p. 64; L. Jeleček, "České environmentální dějiny do r. 2000", in *Klaudyán: internetový časopis pro historickou geografii a environmentální dějiny*, roč. 1 (2000), č. 3, *http://klaudyan.psomart.cz/clanek.php?id=20* (2007-10-20), p. 4.

[23] Source: P. Chrastina, M. Boltižiar, "Rumunský Banát – časopriestorové priesečníky (na príklade slovenskej enklávy Butín)", in *Historická geografie 35*, R. Šimůnek ed., Praha, HiÚ AV ČR, 2008, in print.

Fig. 2. Northern part of the Trenčín basin around 1933[24]

Fig. 3. Northern part of the Trenčín basin in 2003[25]

Fig. 4. Photography of Kereš inundation from winter 1941/42[26]

Fig. 5. Torso of medieval village mound (Cáfár)[27]

The author uses a number of methods, e.g. the framework *culture-ecological landscape characteristics*. It builds on the methodology of cultural geography.[28] The method represents a phenomenon of natural environment potential to understand the physical and spiritual dimensions of human reactions at its exploitation. Man had only empirical knowledge of the landscape elements (geological substrate, gradient and exposition of slopes in the territory, CLC character, etc.) and has accommodated himself to them through differentiated land use (forests, non-forest trees and brush vegetation,

[24] Source: P. Chrastina, *Vývoj využívania krajiny Trenčianskej kotliny a jej horskej obruby*, 1. vyd., Nitra, FF UKF, 2009, p. 186, in print.
[25] Source: P. Chrastina, *Vývoj využívania krajiny Trenčianskej kotliny a jej horskej obruby*, 1. vyd., Nitra, FF UKF, 2009, p. 186, in print.
[26] Source: P. Chrastina, M. Boltižiar, "Zmeny krajiny slovenskej enklávy Veľký Bánhedeš", in *Slovenčina v menšinovom prostredí*, A. Ján-Tóth, A. Uhrinová-Hornoková eds., Békešská Čaba, VÚS, 2008; Chrastina, Boltižiar, Kultúrna krajina SV okraja Bakoňského lesa v Maďarsku, p. 181.
[27] Source: Chrastina, Boltižiar, Kultúrna krajina SV okraja Bakoňského lesa v Maďarsku, p. 407.
[28] H. J. de Blij, A. B. Murphy, *Human Geography: Culture, Society, and Space*, 6. vyd., New York, John Wiley & Sons, 1999, p. 21.

arable land, vineyards, etc.) that implies a spectrum of landscape/land use categories or Corine Land Cover categories (Maps 3 through 5).

Spatially integrated model of *geological and ecological (natural landscape) types* (GT) and *subtypes* (GsT) (Map 6), may be used in a more-detailed study of relationships between the landscape potential (characteristics of local landscape) and land use. GT/GsT (and their characteristics) actually determines the spatial organization of land use categories as indicators of the anthropogenic changes to landscape or landscape use. Understanding the specifics of a given relationship (mainly the vertical dependencies in landscape) may be possible through examples of geotops[29] on the cross-section of tessera – representative surface of a specific GT/GsT (Figure 6). Typology is used at its construction,[30] which is constructed by superposition (overlapping) of analytical maps of the geo-ecological (complex physical geographical) land structure.

Portfolio of cultural geography also includes the assessment of *diffusion processes*,[31] that have contributed to the cultural landscape creation of the studied territory (Map 7). Suitable objects for the study of the qualitative aspect of diffusion include, for example, historic landscape structures (torsos of abandoned vineyards, roads, solitary trees, etc.), or architecture.

Theoretical and methodological observations of Žigrai and Chrastina,[32] as well as the application of the landscape-archaeological method on the territory of the Trenčín basin and its mountain border[33] suggest that human activities in the pre-historic times were much more limited by the natural

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[29] Geotope forms the basis, the smallest complex physical geographical unit, which is essentially homogeneous, including a relatively identical rock, relief, microclimate (or topoclimate) identical hydrological conditions, soil, and originally, or potentially, one phytocenosis (phytocenoses), binding the corresponding fauna.

[30] Ľ. Mičian, "Obsah, forma a základní postupy regionalizace: Fyzickogeografická regionalizace", in S. Horník et al., *Fyzická geografie II*, Praha, SPN, 1986, p. 301-303; J. Minár, Ľ. Mičian, "Tradičná regionalizácia a regionálna taxonómia v geoekologickom mapovaní", in *Geografické spektrum 3/2001: Geoekologický (komplexný fyzickogeografický) výskum a mapovanie vo veľkých mierkach*, Bratislava, Geo-grafika, 2001, p. 34-37.

[31] de Blij, Murphy, *Human Geography*, p. 24-27, study of spreading of thoughts and ideas, innovations, and technologies in space.

[32] F. Žigrai, P. Chrastina, "Landschaftsarchäologie als eine Kontaktwissenschaftsdisziplin zwischen Geographie und Archäologie (Einige metawissenschaftliche und theoretisch-metodische Bemerkungen), in *Anodos*, *Supplementum 2*: *Probleme und Perspektiven der Klassischen und Provinzialrömischen Archäologie*, M. Novotná et al. eds., Trnava, FHV TU, 2002, p. 41-51.

[33] P. Chrastina, *Vývoj krajiny Trenčianskej kotliny a jej horskej obruby*. Dizertačná práca, Prešov, FHaPV PU, 2004, p. 116-126; P. Chrastina, "Vývoj krajiny ako fenomén environmentálnych dejín (na príklade Trenčianskej kotliny a jej horskej obruby)", in *Historická geografie 33*, R. Šimůnek ed., Praha, HiÚ AV ČR, 2004, p. 12; Chrastina, *Vývoj využívania krajiny Trenčianskej kotliny a jej horskej obruby*, in print.

environment parameters than they are today. Natural barriers or properties of the geological structure components of local landscape were impacting the location of archaeological structures. Spatial dispersion of settlements and graveyards within the local landscape represented by the GT/GsT group in its reduced form, reflects the properties and character of the geoecological relations within a given area, which at the same time represent limits to the territory's anthropogenic exploitation over a given time period (Map 6, Chart 2).

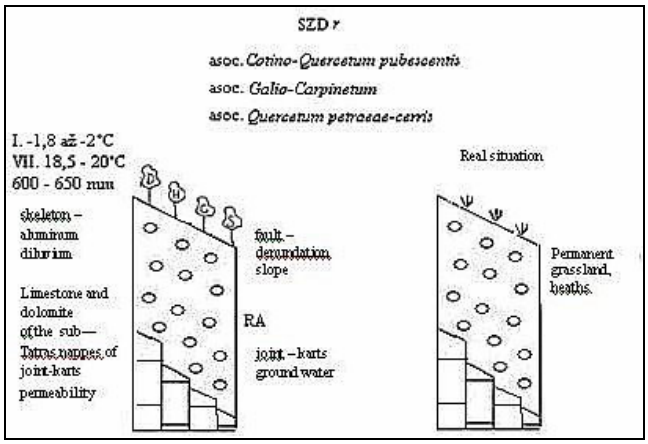


Fig. 6. Vertical section of tessera within the GsT fault-denudation slopes with rendzinas[34]

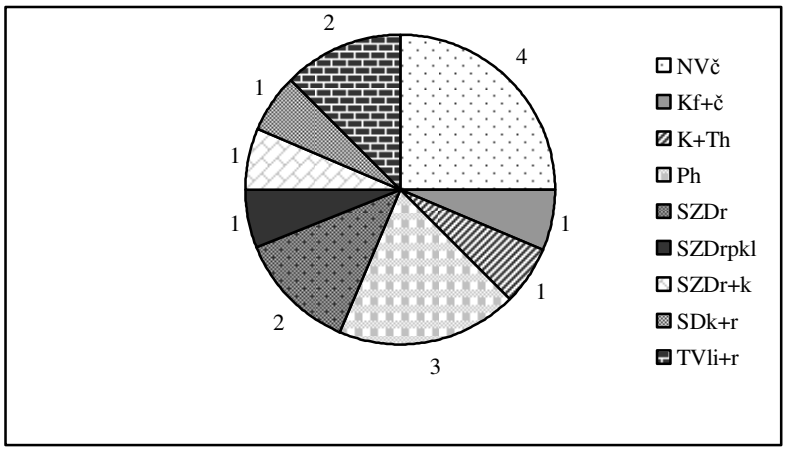


Chart 2 Number of archaeological sites from the iron age, within the GsT (studied territory of the Trenčín basin and borders of the adjacent mountain ranges)[35]

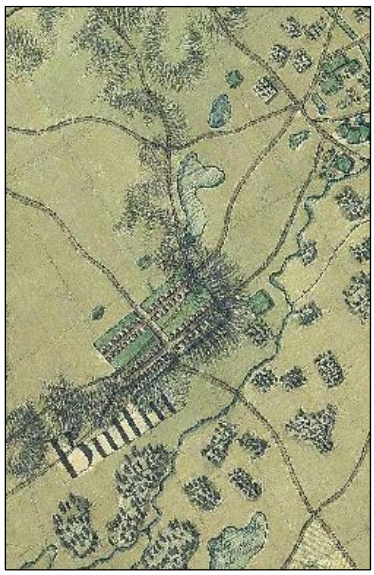
[34] Source: Chrastina, *Vývoj využívania krajiny Trenčianskej kotliny a jej horskej obruby*, p. 136, in print.

Conclusion

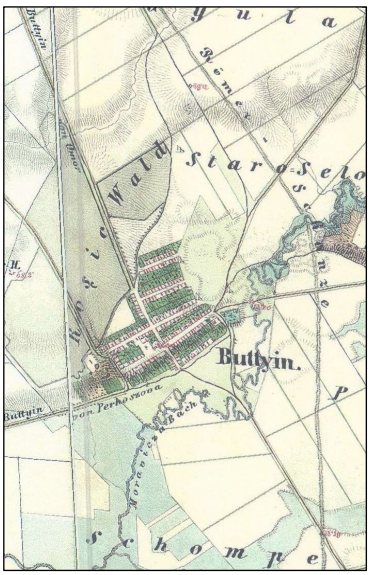
Purpose of this article was to outline current approaches and strategies in historical geography. Complex analysis of historic (pre-historic) landscape requires, besides the application of the "classic" methods, inputs from the related disciplines. The author has drawn on these disciplines when approaching the areas of landscape archaeology and cultural geography. Their combination within the environmental-cultural-geographical strategy of historical geography allows for a more homogeneous view on the assessment of historic and geographical systems or social and natural driving forces behind the development of the *man – nature (space) – culture – time* interaction.

Štúdia je súčasťou riešenia projektov
č. 1/0759/08 (Synergia krajiny a využitie stredodunajskej zeme od dávnoveku),
č. 1/0026/08 (Vývoj využitia krajiny a jeho vzťah ku zložkám krajinnoekologického komplexu), podporovaných grantovou agentúrou VEGA

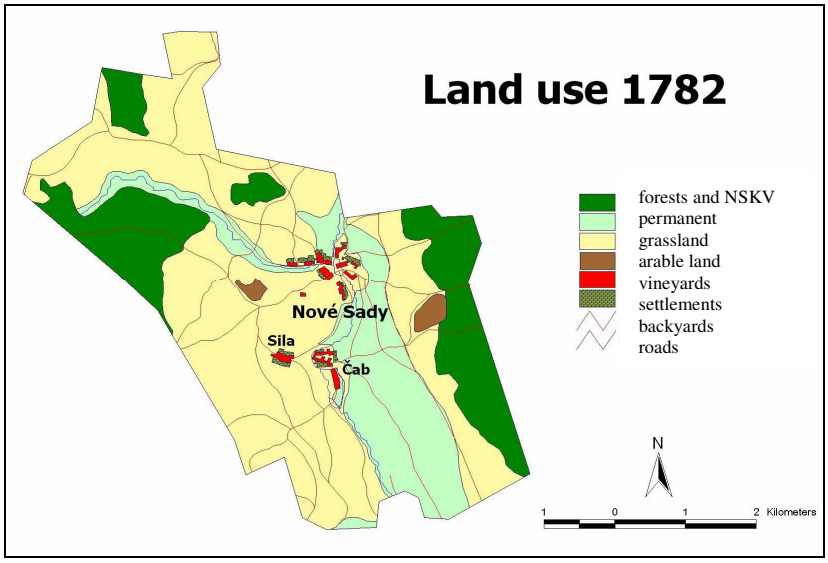
[35] Source: Chrastina, Vývoj krajiny ako fenomén environmentálnych dejín, p. 13.



Map 1. Area of Butín in 1769/72[36]

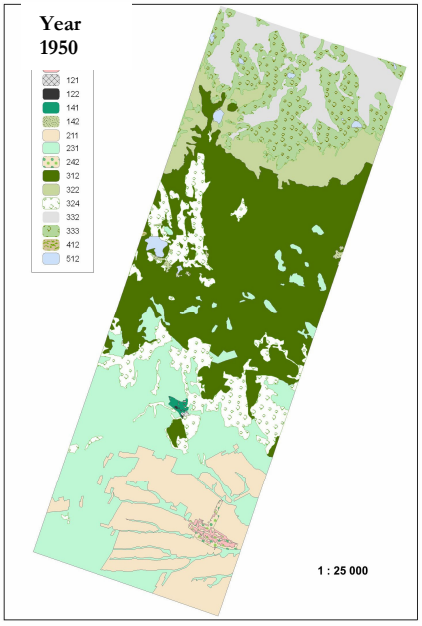


Map 2. Area of Butín in 1865[37]

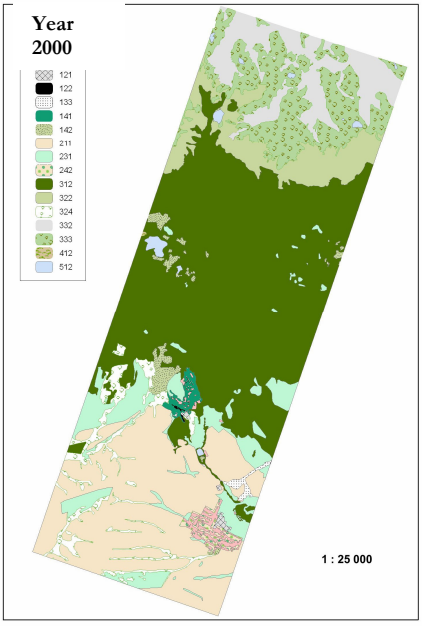


Map 3. Land use of the Nové Sady area in 1782[38]

[36] Source: Chrastina, Boltižiar, Rumunský Banát, in print.
[37] Source: Chrastina, Boltižiar, Rumunský Banát, in print.



Map 4. Land Cover of the Vysoké Tatry Mts. transect in 1949[39]

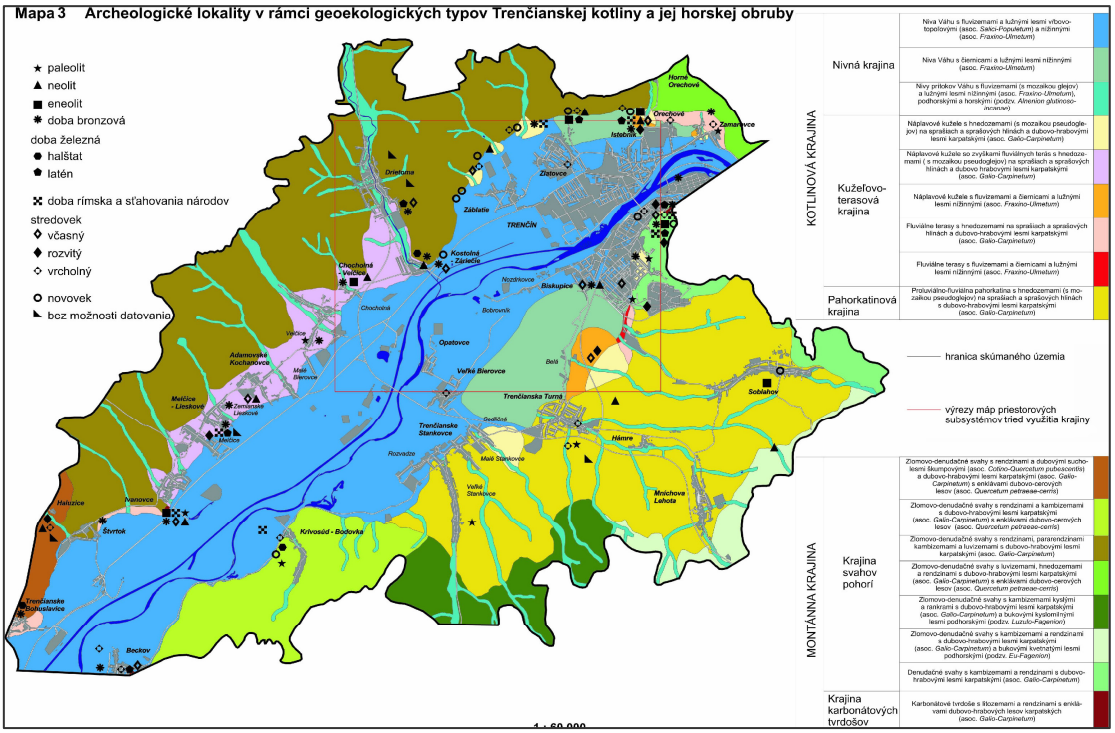


Map 5. Land Cover of the Vysoké Tatry Mts. transect in 2000[40]

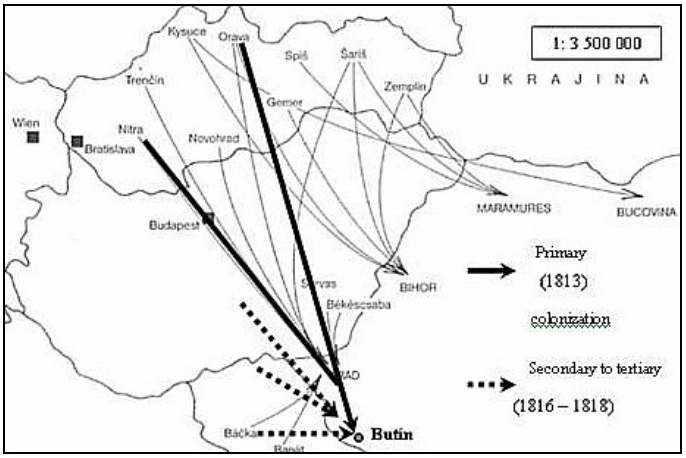
[38] Source: P. Chrastina, M. Boltižiar, "Nové Sady: Historický Land use rurálneho sídla v nížinnej poľnohospodárskej krajine západného Slovenska", in *Studia Historica Nitriensia 13*, E. Wiedermann ed., Nitra, FF UKF, 2006, p. 197.

[39] Source: V. Brůna et al., *Historicalká struktura krajiny jako podklad pro revitalizaci krajiny Vysokých Tater postižených kalamitou: Úvodní studie – Analýza potenciálu historicalkých a současných kartografických pramenů pro tvorbu rekonstrukční mapy krajinného pokryvu ve vybraném modelovém území NP Vysoké Tatry*, Ústí n/L., FŽP, Most: Laboratoř geoinformatiky FŽP UJEP, p. 17.

[40] Source: Brůna et al., *Historicalká struktura*, p. 17.



Map 6. Archaeological sites within geological types/subtypes (model territory of Trenčín basin and its mountain border)[41]



Map 7. Migration as a sign of hierarchical diffusion (study area of Butín)[42]

[41] Source: Chrastina, *Vývoj krajiny Trenčianskej kotliny a jej horskej obruby*.
[42] Source: Chrastina, Boltižiar, Rumunský Banát, in print.