



Regiony intenzivně přeměněných krajin Regions with Profoundly Changed Landscape

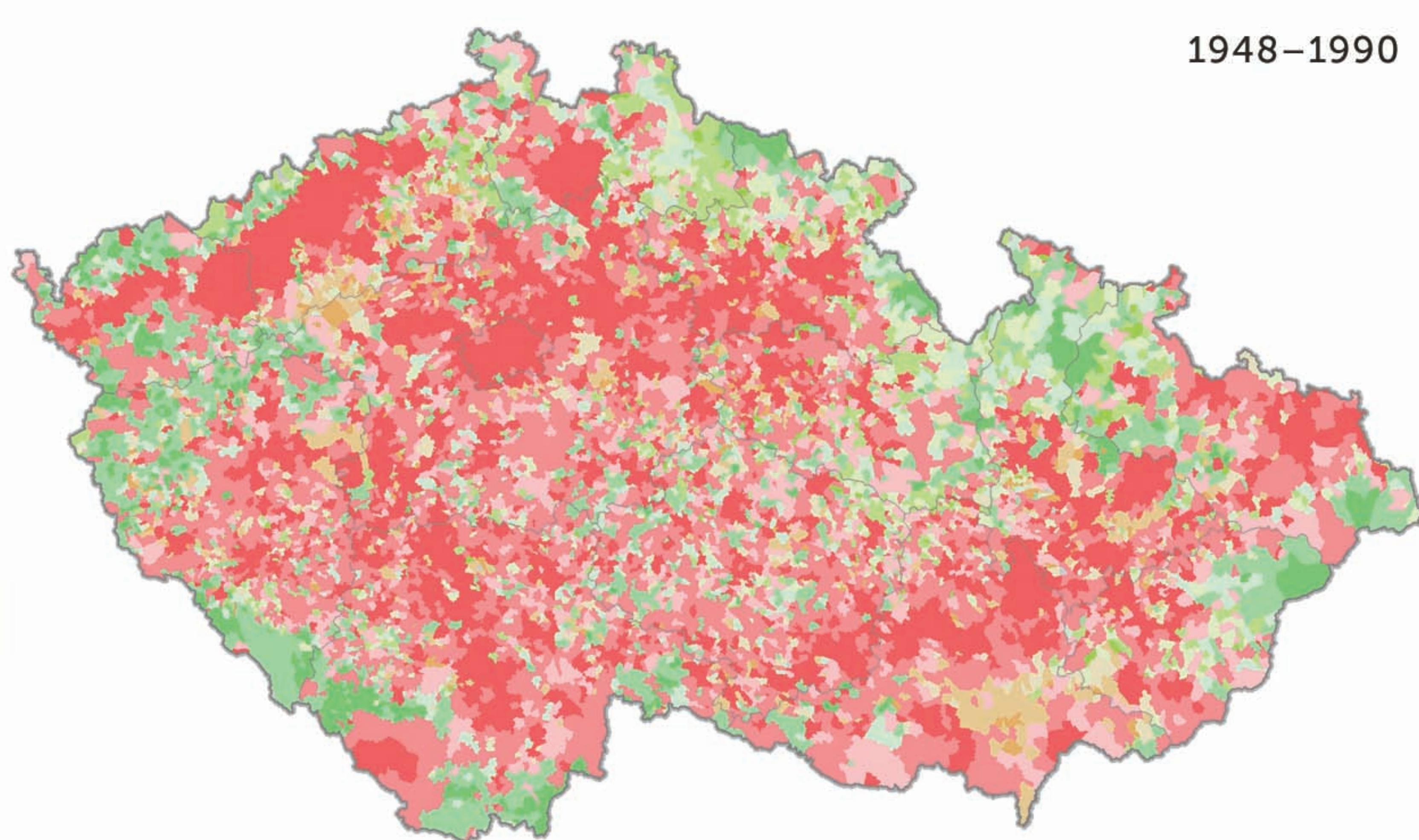
Pavel Chromý, Ivan Bičík, Leoš Jeleček, Lucie Kupková, Přemysl Štych, Jana Winklerová

A polarized space with opposite poles, cores, and peripheries is the result of the long-term, uneven development of the society within that environment. Under the influence of many factors and applied natural and social driving forces (historical, political, geopolitical, economic, technological and others) the asymmetrical settlement structure was formed primarily in the industrial era beginning in the 19th century, which resulted in the creation of core, semi-peripheral, peripheral, and marginal regions.

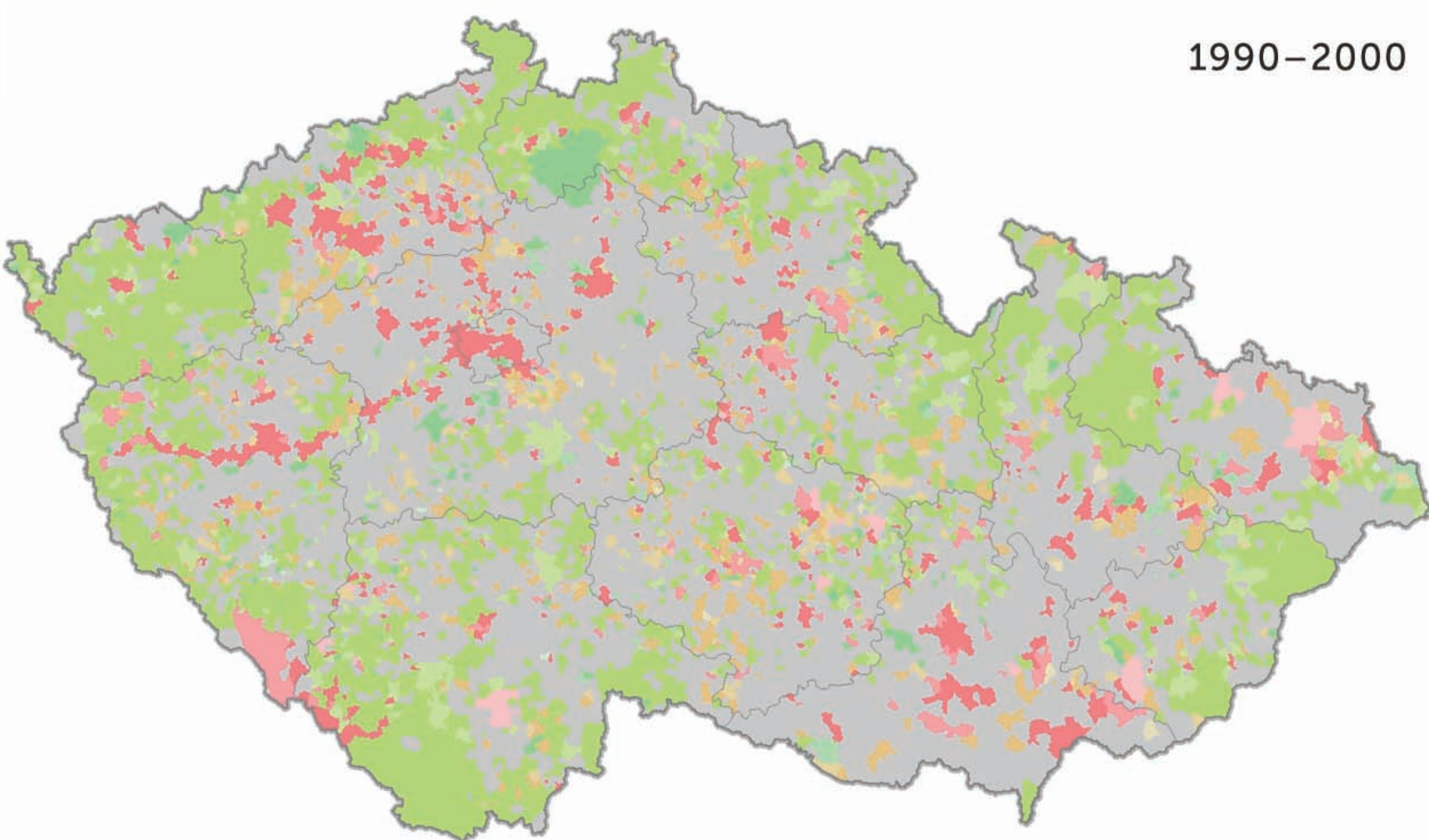
Peripheral regions are territories that are insufficiently integrated into the regional system – into the dominant structures, processes, and systems of the location and time in question. At the regional level, the classic periphery is a territory outside of an economically intensively exploited areas that is characterized by a high percentage of rural settlement, a low population density, high unemployment, together with high employment in the primary economic areas (especially agricultural primary production and forestry) and the overall lower standard of living of its inhabitants. While we can designate peripheries as areas "on the border", geometrically distant from centers, marginal areas are territories that are completely outside of the regional system (for instance, military training areas). The polarization of the space, however, is the result of not only general developmental processes (industrialization, urbanization, etc.), but also specific – limited by time and space – processes (for instance, the expulsion of the German population and the insufficiently resettled borderlands).

The process of a space's polarization is among others reflected in the level of intensity of the changes in the prevailing regional functions. Thus, it can also be observed through the evaluation of the changes in the usage of the landscape. Long-term change in land use is primarily evaluated together with historical statistics. Comparing the land use data at various regional levels and various timelines allows one to understand the character of the changes in the landscape and the prevailing trends in the changes in the interaction between society and nature. One can also use old maps and old aerial photographs to research the transformation of the landscape (land cover), or to identify stable components of the landscape, and interpret the landscape's memory in individual regions and locations.

The main processes in the changes of the landscape in Czechia, 1948–2000
Source: LUCC Czechia Database; Semotanová, Cajtham et al. 2014.



1948–1990



1990–2000

Between 1948–1990, land use changed rather significantly, the consequences of which were only partially ameliorated by positive ecological developments during the period of post-totalitarian transformation (1990–2000).

In Czechia, vast areas were affected by the process of urbanization in terms of developing the structure of the area during the Communist totalitarian regime. Large metropolitan areas and areas with significant mining and industrial functions were formed. Forestation and grassing over predominated in the peripheries, especially the borderlands, areas ill suited for agriculture, areas affected by the expulsion of the Czech German population, and near the so-called Iron Curtain.

The main landscape changes that occurred after the fall of the Communist regime were grassing over (increasing the size of meadows and pastures) and urbanization (especially the influence of suburbanization processes in core areas – large metropolises' hinterland).

PROCESS	INTENSITY
	high medium low
forestation	[color swatches]
grassing over	[color swatches]
ploughing	[color swatches]
urbanization	[color swatches]
change in less than 1% of the territorial surface;	[grey square]

- Bičík, I., Kupková, L., Jeleček, L., Kabrda, J., Štych, P., Janoušek, Z., Winklerová, J. (2015): Land Use Changes in the Czech Republic 1845–2010. Socio-Economic Driving Forces. Heidelberg.
- Bičík, I., Kupková, L., Najman, J. (2013): Land cover changes along the Iron Curtain 1990–2006. Geografie, 118, 2, pp. 95–115.
- Jepsen, M. R. et al. (2015): Transitions in European land-management regimes between 1800 and 2010. Land Use Policy, 49, pp. 53–64.

Polarizovaný prostor s proti sobě stojícími póly, jádry a periferiemi, je výsledkem dlouhodobého nerovnoměrného vývoje společnosti v prostředí. Vlivem mnoha faktorů a uplatňujících se přírodních a společenských hybných sil (historické, politické, geopolitické, hospodářské, technologické a další) se zejména v industriální etapě vývoje společnosti od 19. století zformovalo asymetrické uspořádání sídelní struktury, jehož důsledek byl vznik jádrových, semiperiferních, periferních a marginálních regionů.

Periferní regiony jsou území nedostatečně integrovaná do regionálního systému – do v daném místě a čase dominujících struktur, procesů a systémů. Klasická periferie je v úrovni regionů území ležícím mimo ekonomicky intenzivně využívané oblasti, které se vyznačuje vysokým podílem venkovského osídlení, nízkou hustotou zalidnění, vysokou nezaměstnaností a zároveň vysokou zaměstnaností v primárních odvětvích hospodářství (zejména v zemědělském průvýrobě a v lesnictví) a celkově nižší životní úrovni obyvatelstva. Zatímco za periferní můžeme označit oblasti ležící "na okraji", geometricky vzdálené od center, marginální oblasti jsou území, která jsou z regionálního systému zcela vyloučená (např. území vojenských újezdů). Polarizace prostoru je však důsledek působení nejen obecných vývojových procesů (industrializace, urbanizace ad.), ale i specifických – časově i prostorově omezených – procesů (např. odsun Němců a nedostatečné dosídlení pohraničí).

Proces polarizace prostoru se mj. odráží v míře intenzity změn ve využívajících funkci regionů, tze jej tak sledovat např. na bázi hodnocení změny ve využití ploch. Dlouhodobé změny ve využití ploch se hodnotí převážně s využitím pramenů historické statistiky. Komparace dat o využití ploch v různých měřítkových úrovniach a v různých časových horizontech umožňuje pochopit povahu změn krajiny a převažující trendy změn interakce společnost–příroda. K výzkumu proměn krajiny (krajinného pokryvu), případně identifikaci stabilních prvků v krajině a k interpretaci paměti krajiny v jednotlivých regionech a lokalitách, lze využít staré mapy, staré letecké snímky apod.

Changes in the structure of the landscape in the Czech-Austrian borderland: Case study area Košťákov, Kleintaxen

The territory on the border with Austria was primarily populated by Czech Germans until 1945. The division of the territory between two independent states, the displacement of the population, insufficient resettlement and the subsequent erection of the so-called Iron Curtain led to drastic changes in the usage of the landscape. The territory was on the periphery not only in Czechia, but also in Austria. This deepened the long-term economic problems of a weakened region that had suffered from depopulation since the end of the 19th century. The physical liquidation of settlements and the effects of socialist agricultural mass production can be seen on maps (not just the land use change, but also in the structure of the plots). The region's landscape character has significantly changed in the last 70 years.

Upper figure: 3D model of the case study area in 1840.
Kleintaxen is found in the lower part of the picture,
Košťákov in the upper part.

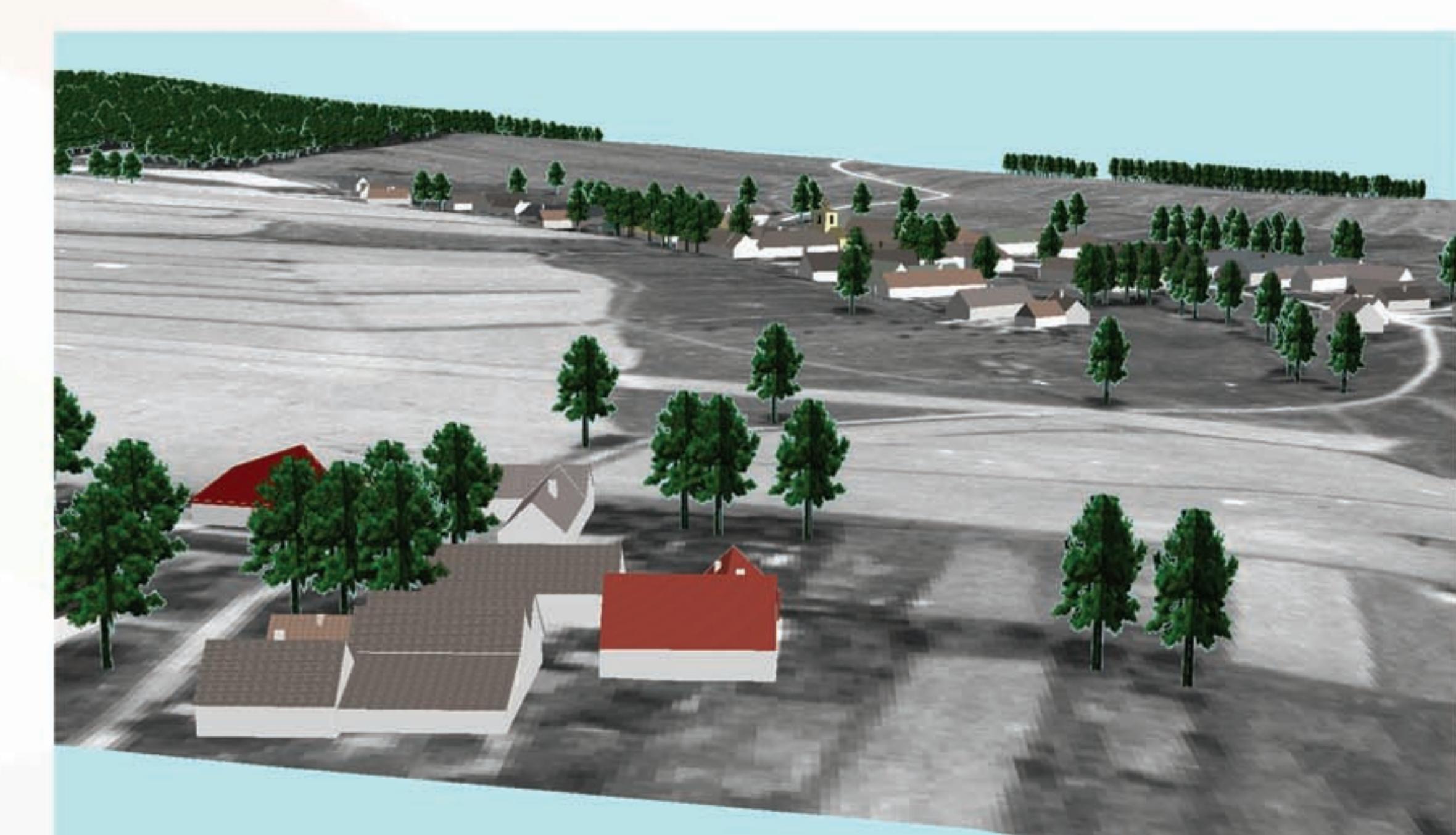
Authors: Jan Jelének, Přemysl Štych.

Middle figure: Land use in the case study area in the years 1823 and 2003

Source: Štych et al. 2012.

Lower figure: Conflict of interest in the landscape,
the proposal of recreational park in the Rajchov area

Source: Archive of MěÚ Nová Bystrice.



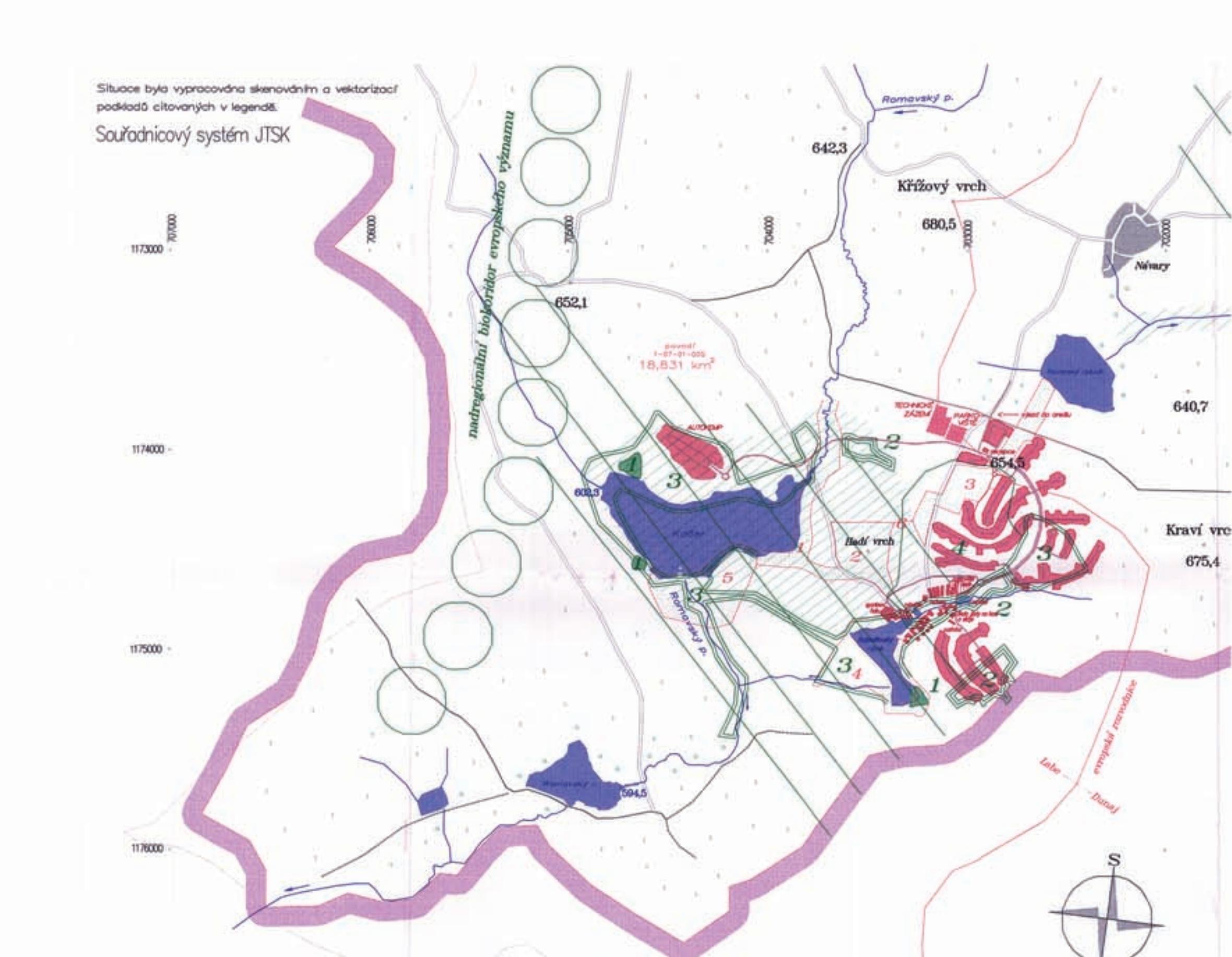
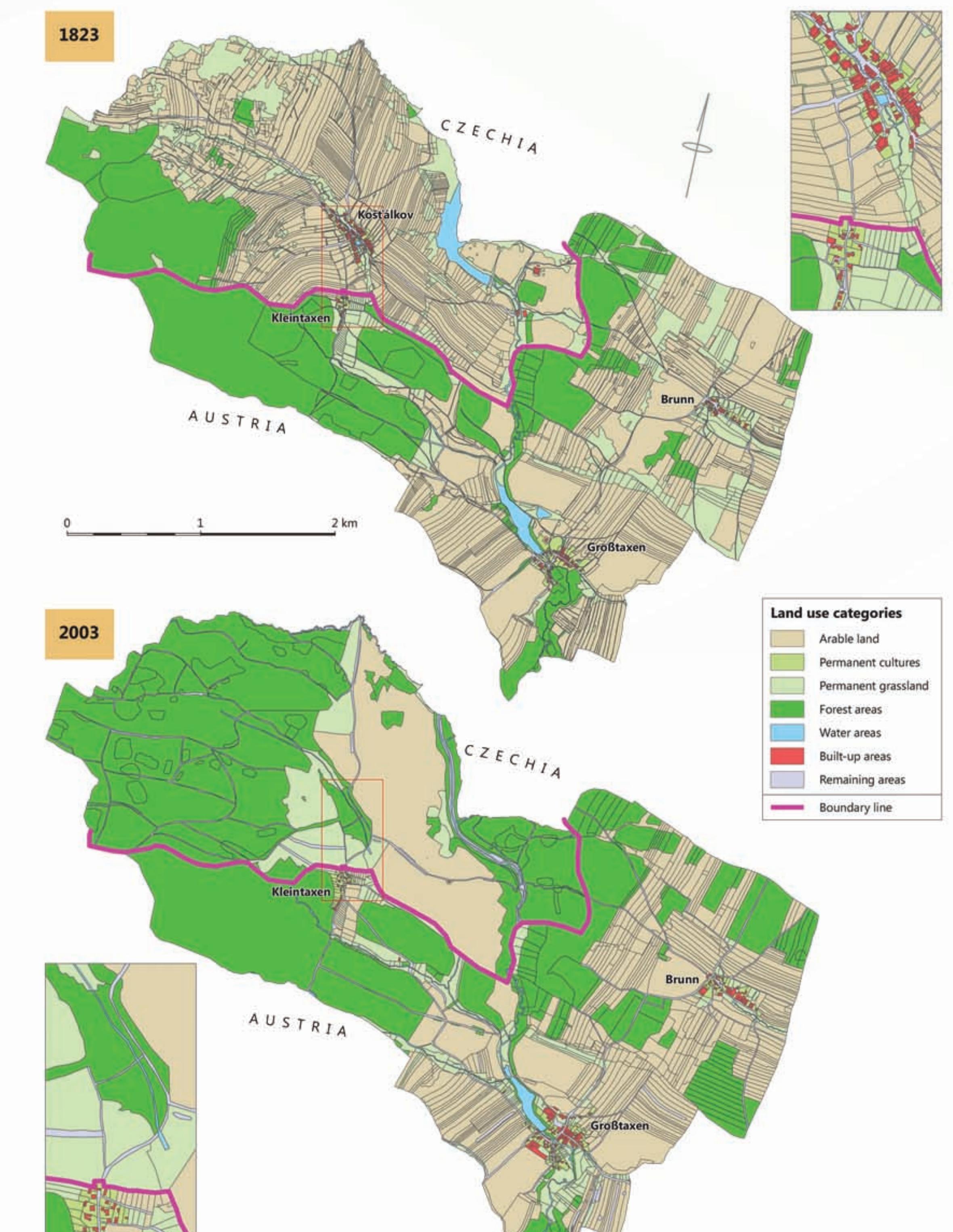
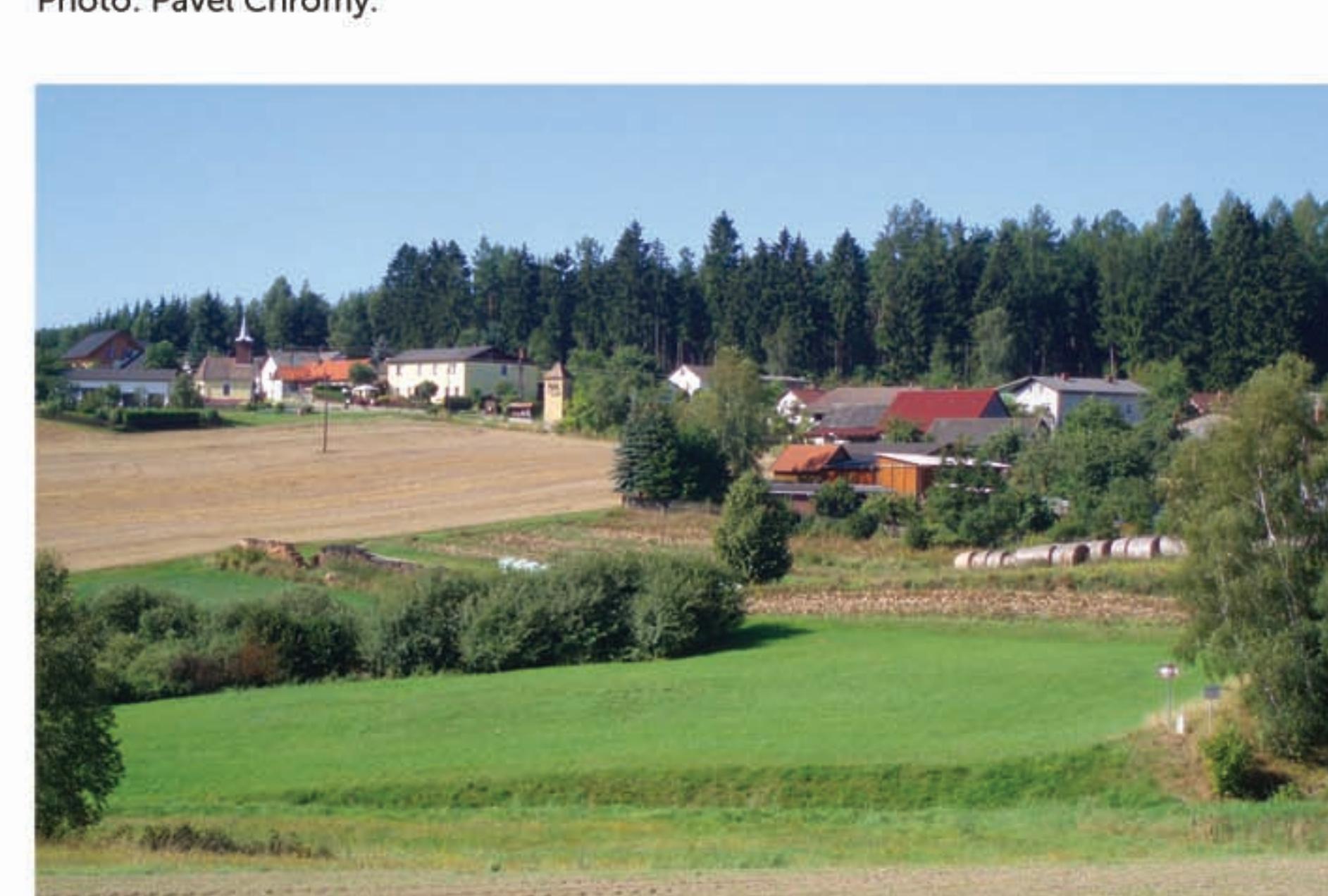
Contemporary aerial photo of the case study area
Source: http://geoportal.gov.cz.



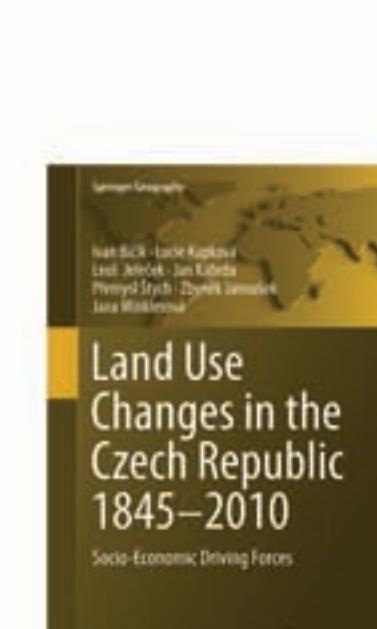
Contemporary photo of Košťákov area
Photo: Pavel Chromý.



Contemporary photo of Kleintaxen area
Photo: Pavel Chromý.



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