

THE HISTORICAL DEVELOPMENT OF RURAL FIELD ROADS ON THE TERRITORY OF UPPER GERMAN-LANGUAGE ENCLAVE NEAR VYŠKOV IN THE CZECH REPUBLIC

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<https://doi.org/10.11118/978-80-7701-025-2/0277>

Abstract

The network of rural roads underwent radical changes during the 20th century. In particular, there has been a deterioration in the permeability of the landscape caused by transfers of property rights following the displacement of the indigenous population and the emergence of large blocks of land without an originally structured network of rural roads and countryside pathways.

In the example of the model territory of the Upper German-language enclave near Vyřkov in the Czech Republic, we analyse the historical development and spatial distribution of the rural road and road network from the early 19th century to the present and its influence on the recreational and tourist potential of the territory in both the past and today.

Key words: rural roads network, historical maps, landscape permeability

Introduction

Anthropogenic processes act on the landscape in addition to natural ones. One of the most prominent processes in recent times was land consolidation, which was intended to clarify the complicated topic of land ownership on the territory of displaced municipalities (implementation took place between 2005-2012). The article presents an analysis of the development and spatial distribution of the network of rural roads and roads in the model territory and evaluates the tourist potential of the territory based on the newly proposed rural roads network within the -land consolidation.

The first graphic mention of the road network in Vyřkov area can be found in Muller's map of Morava from 1716 illustrating the existence of the medieval road Vyřkov - Slavkov, which after the construction of the imperial road Brno - Vyřkov - Olomouc in 1741 remained hidden in a network of rural roads (Burian, 1975). It is still commemorated by small sacral building monuments - the statue of St. John of Nepomuk (Rostenice), Baroque sculpture of the Holy Trinity, God's torment, crosses.

The territory has been colonized by the German-speaking population since the 12th-13th centuries and lived there for 800 years until being displaced in 1945. The population was Catholic, during the liturgical year they went on pilgrimages, most often to Nemany on the Lutrřtek hill (the well and chapel of Our Lady of Seven Pains, built in 1867-77), but there were no exceptions when the whole procession went to Křtiny or to the Holy Hostyn (Hanecek, 2011) Other pilgrimage routes passed through the area e.g. Brno - Lutrřtek - Velehrad/Hostyn. Today, Cyril-Methodist trail - eskomoravsk, Palavsk, Via Czechia - is a testament to the pilgrimage tradition, which passes between Lutrřtek and Letonice. Rural roads are not only "utility roads" but can also serve as recreational or long-distance routes in the territory for which our predecessors used them.

Thanks to the island development of the enclave, the area experienced a rediscovery by German-speaking tourists and a related tourism boom between 1920-1940. (Jahrbuch der Landeshauptstadt Brunn 1941/42) Tourists came here to admire exotic folk traditions, language, customs and culture, including architecture (Hana-type mud houses - a front entrance with mushroom entry hole, thatched roof, ornamental plasters) - today the village monument zone of the municipalities of Rostenice, Zvonovice, Lysovice, the heritage-protected house No. 12 in Kuerov They were provided with the tourist infrastructure in the form of accommodation and transport at the time (opening of the railway line Brno - Vyřkov-Přerov 1869).

The population worked mostly in agriculture. Imperial prints of stable cadastre from 1825 they show even more flat ploughs, through which the radial network of roads connects individual municipalities with more possibilities. However, towards the end of the 19th century and the beginning of the 20th century there is an intensification and rationalisation of agriculture, the network of main roads is watered down, we reach small blocks of land from the ploughs

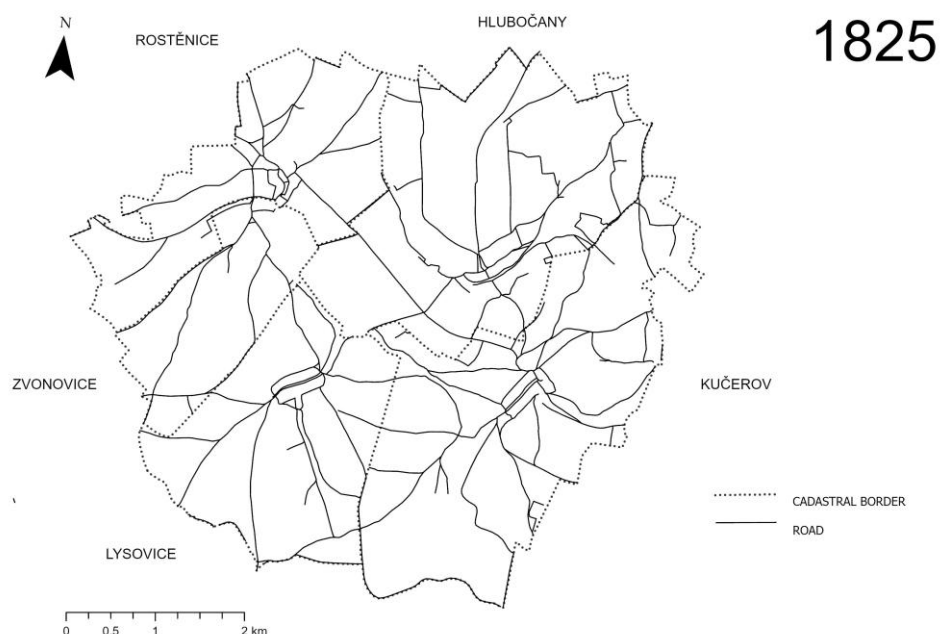
Railway transport inside the territory was provided by the narrow railway Vyřkov - Kozlany used between 1906-1961, used for the collection of sugar beet into the sugar factory of Ing. Gustav Skutetzky in Vyřkov and also for passenger transport. It had several collection stations along the route and was designed with low slope. Only part of the brick bridge at Kaenec pond in Vyřkov and the metal hydrant in the grove at Kuerov have been preserved from the railway. The cultivation of sugar

beet is also reminiscent of another technical monument in the municipality of Lysovice built before the Second World War, namely the now defunct concrete silage towers for beet cuttings and beet leaves. From 2019 a cycle path C25 is being created on the body of the former narrow railway and is expected to be extended further. Today it is implemented about 9.5 km in the municipality of Hlubočany, Kozlany and Vyškov and is included in the Concept of development of cycling of the South-Moravian Region until 2030. This will be followed by links to other key trails: from Bohdalice north to Ivanovice trail (green branch) and from Kozlany south to Bučovice to international route Eurovelo 11 (red branch).

Materials and methods

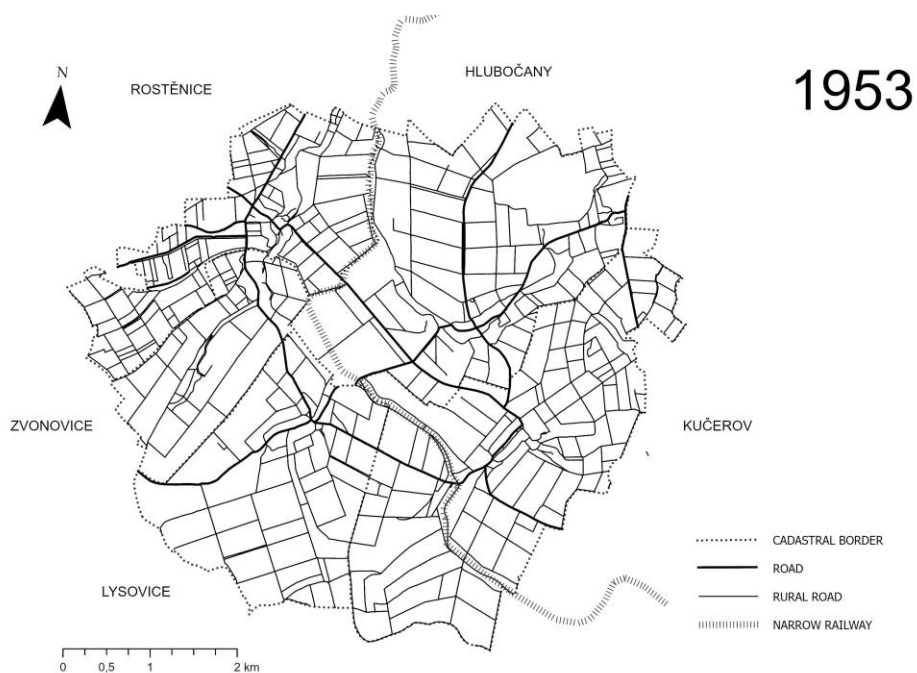
The area of the Upper German-language enclave near Vyškov is located on the western edge of the Litenčické hills in the South Moravian Region. The model territory contains a total of 5 cadastral territories (Hlubočany, Kučerov, Lysovice, Rostěnice, Zvonovice) with a total area of 29.62 km².

Historical maps, ortho photomaps and vector data have been used as a basis for the study and have been evaluated using ArcGIS Pro software. Three time periods were used to compare the development and distribution of the network of rural roads (1825 - historical maps of the imperial prints of the stable cadastre, 1953 - historical aerial photographs, 2020 - contemporary orthophoto)



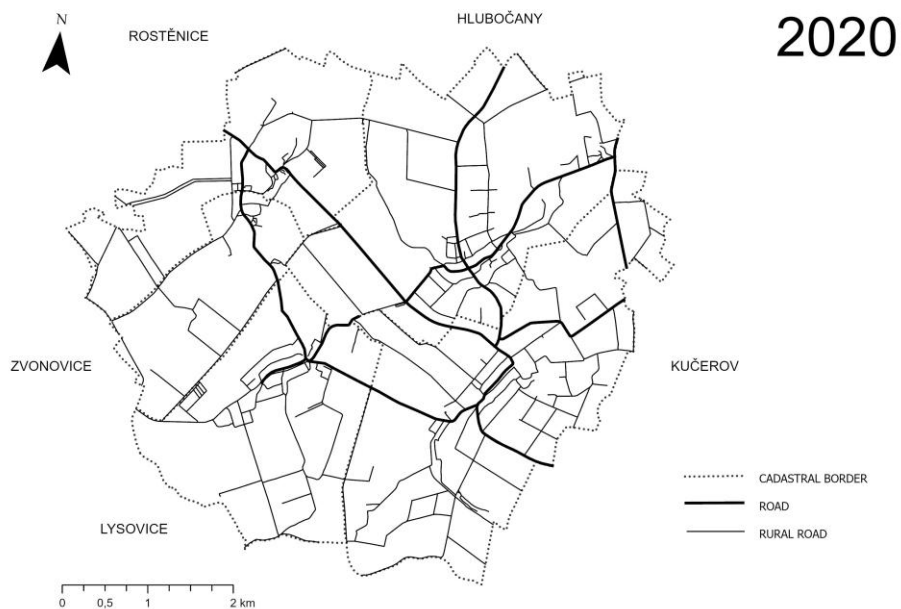
Tab. 1: Development of rural roads in individual time periods
cadastral territory – area (ha) - length of rural roads (m) – density (m/ha)

	area (ha)	1825	m/ha	1953	m/ha	2020	m/ha
Hlubočany	807	-	-	48 145	59,659	24 021	29,766
Kučerov	876	-	-	67 898	77,509	35 019	39,976
Lysovice	529	-	-	31 455	59,461	17 879	33,798
Rostěnice	467	-	-	48 227	103,269	13 982	39,940
Zvonovice	283	-	-	22 523	79,587	9 688	34,232
	2 962	-	-	218 248	73,683	76 568	25,850



Tab. 2: development of roads in individual time periods
cadastral territory – area (ha) - length of roads (m) - density (m/ha)

	area (ha)	1825	m/ha	1953	m/ha	2020	m/ha
Hlubočany	807	30 035	37,218	9 476	11,742	8 752	10,845
Kučerov	876	35 687	40,739	5 643	6,442	7 496	8,557
Lysovice	529	20 125	37,338	4 578	8,654	3 153	5,960
Rostěnice	467	17 511	37,497	5 865	12,559	2 357	5,047
Zvonovice	283	9 628	32,961	1 193	4,216	1 192	4,212
celkem	2 962	112 986	38,145	26 755	9,125	22 950	7,748



Tab. 3: development of rural roads + roads in individual time periods
cadastral territory – area (ha) - length of roads (m) - density (m/ha)

	area (ha)	1825	m/ha	1953	m/ha	2020	m/ha
Hlubočany	807	30 035	37,218	57 621	71,402	32 773	40,611
Kučerov	876	35 687	40,739	73 541	83,951	42 515	48,533
Lysovice	529	20 125	37,338	36 033	68,115	21 032	39,758
Rostěnice	467	17 511	37,497	54 092	115,829	16 339	34,987
Zvonovice	283	9 628	32,961	23 716	83,802	10 880	38,445
celkem	2 962	112 986	38,145	245 003	82,715	123 539	41,708

Rural road density equation $H=D/S$ (H-density m/ha, D-length m, S-area (ha))

Results

Based on the analysis of spatial data (vectorisation of rural roads and roads), it was found that the most rural roads (218 248 m) were in our surveyed territories in 1953, as opposed to 2020, when they were found to be down by almost 65% (76 568 m), despite partial implementation of complex land consolidation. In 1825, we identified only the carriage ways - the main roads through the territory of the radially arranged, but not the rural roads, which are difficult to discern on the scale of this map and we therefore assigned them to Tab. 2 - comparison of road lengths. Roads alone decreased by 14.2% between 1953-2020. In 1825, the carriage ways probably included both roads and rural roads, otherwise there would have been a road drop of more than 76% between 1825-1953. That is why, in Tab. 3, we give the total length of the sum of all the rural roads and roads combined, which gives the best idea of the density of the communication network in the area studied. Whereas in 1825 there were a total of 112 986 m of carriage ways (apparently without more detailed recorded rural roads and footpaths), in 1953 – 245 003 m of rural roads + roads and in 2020 – 123 539 m of rural roads + roads. This is a decrease of 49.6% between 1953-2020. The Imperial road in 1825 is not found in these 5 cadastre (it was located in the neighbouring municipality of Rostěnice, in the municipality of Luleč).

The spatial layout of the network of roads varies from radial (1825) with a direct connection of municipalities and a greater number of roads between municipalities (flat ploughs) - through the thickening of networks of rural roads (1953) around more rationally arranged soil blocks creating a small landscape mosaic and the rationalisation (decline) of main roads, to an almost orthogonal raster of line structures formed by the dilution of a large number of rural roads thanks to large-scale farming (2020).

The narrow-railway traversing the area studied in 1953 measures 7.01 km (it reaches a length of 12.68 km on the Section Vyškov-Kozlany in 1953), of which today it is renewed as a cycleway less than 3.5 km in Kozlany, 2.5 km in Hlubočany, in Vyškov 3.5 km.

Discussion

The 1825 line landscape structures formed the basis for the skeleton of the road network, fragments of which we still find in this area today (direct axes of roads with two-sided alleys - baroque impact of landscape). At this time, there is a different hierarchy of paths from footpaths to simple carriage ways along the road (2008 Sádlo). On an 1825 map, there are more direct connections between municipalities than can be seen in the 20th-century maps. e.g. Lysovice - Dražovice, Lysovice - Podbřežice, Kučerov - Lysovice, Hlubočany - Lysovice, Kučerov - Bohdalice, Zvonovice - Dražovice (remnant of the medieval road Slavkov – Vyškov). The largest network density of rural roads and roads, 82.715 m/ha, reaches the area in 1953 - the landscape is permeable. There are a number of links between individual municipalities, fields and landscape features. Thanks to recent land consolidations, the steep drop in density of the rural road and road network between 1953 and 2020 is not so marked, but it still amounts to around 50% (41.708 m/ha). 80 years after the displacement of the indigenous population, the network of rural roads and roads has achieved considerable regression. The geometry of roads has changed - from the radial to today's almost orthogonal network, which does not benefit the permeability of the landscape, the preservation of the memory of the landscape, let alone the tourist attraction. The unique neighbourhood of 3 rural monument zones still lies fallow for tourists, as it is connected to the outside world at virtually only one point. For cyclotourism, it is of great importance to complete the planned cycle path Vyškov - Kozlany, the larger part of which is already intermittently finished and especially its connection to long-distance routes. This will bring new impetus to the area and may start to develop its tourism potential again.

Conclusion

The network of rural roads and roads, like the landscape, is constantly changing. If there are major historical changes, such as the displacement of the indigenous population, this will gradually be reflected in the landscape, its travel network, its permeability through the countryside and ultimately in its tourist attractions.

References

- Burian, Václav. Středověká silnice mezi Vyškovem a Slavkovem. In: 80 let muzejní práce na Vyškovsku 1893-1973. Red. JORDÁN František. Muzejní spolek v Brně, Muzeum Vyškovska ve Vyškově, 1975, p. 105-109
- Hanáček, Martin. Příspěvek k historii německého jazykového ostrůvku na Vyškovsku v letech 1860 – 1946 a jeho didaktické využití, Masarykova univerzita, Brno. 2011
- Sádlo, Jiří, Pokorný, Petr, Hájek, Pavel, Dreslerová, Dagmar, Cílek, Václav. Krajina a revoluce. Vyd. Malá Skála. Praha. 2008
- Die deutsche Volksinsel bei Wischau v Jahrbuch der Landeshauptstadt Brunn 1941/42, p. 103, 106, 131, 156
- Poutní místa brněnské diecéze. Vyd. Biskupství brněnské 2016, p. 42
- <https://www.procyklo-vyskov.cz> 2025
- www.wischau.de 2025

Acknowledgement

Publication of the article was made possible thanks to ÚTOK LDF Mendel University in Brno.

Souhrn

Síť polních cest a silnic prošla během 20. století radikálními změnami. Došlo především ke zhoršení prostupnosti krajiny způsobené převody vlastnických práv v důsledku vysídlení původního obyvatelstva a vzniku velkých bloků půdy bez původně strukturované sítě polních cest a silnic. Na příkladu modelového území horního německého jazykového ostrůvku u Vyškova v České republice analyzujeme historický vývoj a prostorové rozložení sítě venkovských cest a silnic od počátku 19. století až po současnost a jejich vliv na rekreační a turistický potenciál území jak v minulosti, tak i dnes.

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