

The typology of countryside architectural forms in South-Moravia, a region of Czechia

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ABSTRACT

This article focuses on the typology of countryside architectural forms in the region of South-Moravia in southeastern Czechia and on the expression of village identity through architecture in case study villages. Original folk architecture has been altered by new types of constructions built in rural areas since the 1950s, followed by a more recent wave of new architectural forms that have developed since the 1990s. The number of architectural types in case study villages was predominantly calculated using the panoramic sceneries on mapy.cz. The coefficients of countryside identity were allocated to architectural types based on basic folk house features. The value of countryside identity is higher in smaller villages except for suburbanized settlements of the regional capital of Brno.

KEYWORDS

folk architecture; identity of the countryside; aesthetic value; recreational potential; attractiveness; Moravia

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1. Introduction

Rural sustainability is generally understood as the maintenance of environmental, economic and social conditions for the preservation of rural settlements, often seen from the agricultural viewpoint (Bosshard 2000). However, the sustainability of the countryside could be seen as a distinctive space in the processes of globalization (Gallent, Shucksmith, and Tewdwr-Jones 2003). It is a matter of how much the countryside remains rural, keeping its essential attributes. Maintaining at least some aspects of the rural lifestyle is crucial. This includes work, leisure, community life and other aspects including the preservation of rural architecture and construction style.

Urban architecture is traditionally a branch on the boundary between technology and art – later completed with social, environmental, economic and other aspects. Historical urban architecture in European culture is usually structured in time periods reflecting individual cultural styles. On the other hand, rural constructions develop on a different basis. They have always been focused on practical use, developing step-by-step based on trial and error. The material of the buildings corresponded to the local raw materials, the way of their construction relates to the climatic conditions and the way of use. Folk constructions differ more regionally than by cultural styles. Consequently, rural buildings could be considered a part of regional identity in the process of globalization.

Where the elements of folk architecture have been preserved, they become part of the cultural heritage and, in the future, goals of cultural tourism. There are 61 village conservation areas and 211 village monument zones in Czechia. The South-Bohemian village of Holašovice has become a part of the UNESCO World Heritage.

However, preserving the original folk buildings is becoming an increasing problem, as it is increasingly in conflict with the requirements of modern (i.e. urban) way of life. The original character of villages is changing through suburbanization and other urban processes in rural areas and urban-rural divisions are being blurred (Stringer 2017). Individual houses and purpose-built buildings are adapted to modern requirements. Paradoxically, increasing wealth of the population leads to the gradual disappearance of rural architecture and thus the identity of both the region and perhaps the countryside itself.

The paper aims at an analysis of a representation of remaining folk architecture and typology of new rural architecture types of houses, and a discussion of relations between folk architecture, regional identity and cultural tourism. The study should bring a proposal of a methodology for assessing the degree of preservation of rural architecture, which may be applicable in other areas.

2. Theory: Folk architecture and the identity of the countryside

In connection with the promotion of human rights, individual identity is increasingly asserted. However, A. Paasi (2003) draws attention to the new content of regional identity. Marek (2020) specifies that crucial to the existence of region are the subjective images that can be identified with perceptual regions. Regional identity becomes an inseparable part of geographical research (Chromý 2003) and plays an important role in the socialization of regions, and thus also comes into the perspective of regional planning (Raagmaa 2002) and it could also be applied in the administrative division of the state (Melnychuk and Gnatiuk 2018) – if there is political will to do so.

However, this contribution is not about the identity of individual regions, but about the identity of the countryside. This is also related to one view of the immaterial definition of the countryside (Halfacree 2008) as a space where people feel they are in the countryside. It is obvious that individual human settlements remain in their places, but their character changes under the influence of urbanization. Urban conveniences are penetrating the rural area (and partly also vice versa) and with them, the way of life and the urban structure of the villages are changing. There is a risk that the countryside ceases to be the countryside and turns into a difficult-to-define urbanized rural space. Moreover, rural areas are sometimes related to national or regional identity (Woods 2001) whereas cities are more symbols of globalization. That is why we asked ourselves the question of the relationship between the identity of the countryside and the representation of individual types of buildings in the urban structure of villages.

The identity of the countryside consists of a number of different factors. It can be a rural landscape (Scazzosi 2018), rural habits, customs, and traditions (Kwiatkowski et al. 2018), the design of rural settlements (Soukup and Sýkora 2020). These aspects form a complex and can be considered part of cultural heritage which can be used as a tourist attraction (Silva and Leal 2015).

One of the most important tangible factors of the identity of the countryside is the architecture that creates the overall image of the village. In addition to the dominant elements – churches, monasteries, fortresses, chateaux, folk architecture forms villages. Folk architecture has evolved for hundreds of years with respect to local specifics. Silva (2010) speaks about the folk architecture heritagization.

Traditional folk architecture is usually presented as an attraction for tourists (Copeřchi-Kopecký 2018), often concentrated in open-air museums or ethnic theme parks. However, folk buildings and architecture can also be important for their inhabitants, as they are part of the identity of their village and region and create a sense of home. In EU, vernacular architecture

belongs to intangible traits of heritage (Aytuğ and Mikaeili 2016; Namičev, Vuksanović-Macura, and Petrevska 2018).

Folk architecture is significantly threatened by modernization trends. Today's rural residents require the same conveniences as urban residents – all technical networks, garages, satellite receivers, large windows, modern materials. These requirements are often in conflict with the traditional buildings. Therefore, sophisticated protection, high level of understanding between property owners, architects, cultural heritage institutions and local authorities is needed (Alcindor and Coq-Huelva 2019). However, this protection is limited by financial resources and bargaining power. The matter is a subject of intensive discussion (Ilies et al. 2018; Sala, Trombadore, and Fantacci 2019). Šťastná, Vaishar, and Pakozdiová (2015) even state that the use of folk architecture and traditional way of life for the development of tourism in the Romanian Banat has led to improvement of the situation of local people who used the funds to enhance their homes. However, this means the disappearance of the main motivation for tourism.

Folk architecture corresponds to the centuries-old experience of the locals. It uses local materials and is adapted to climatic and meteorological conditions (e.g. Philokyrou et al. 2017 or Lopez-Besora, Coch, and Pardal 2019). Its sensitive revitalization may even bring economic benefits in certain regions (Stival et al. 2020). Olukoya and Atanda (2020) studied various aspects of the sustainability of traditional architecture in the example of Cyprus. They concluded that the investigated vernacular architecture ranked lowly in physical resilience, accessibility and satisfaction but demonstrated sufficient lessons in the context of health and safety; participation and control, social equity; social cohesion; and cultural value.

Several authors have dealt with the issue of traditional folk architecture in Czechia since the 1970s. Among the most beneficial ones are Mencl (1980), who outlined the main areas of folk architecture and the characteristics of stylistic types throughout Czechoslovakia, Frolec (1974), who focused on folk architecture in Moravia and Silesia, Škabrada (1999), who also deals with the development of a traditional folk house, its construction and urban structure of settlements. Langer (2005) also devoted himself to open-air museums throughout Europe and thus placed the Czech and Slovak folk architecture in the European context.

Fewer authors deal with the evaluation and permanent documentation of contemporary architectural works in the countryside. In the second half of the last century, new residential units began to be built in villages, which were more similar to urban than rural development. After 1990, suburbanization started to develop.

In 1990s, several architects and urban planners reflected on the questions of the village's appearance,

identity of the countryside, an image of the village and its landscape and assessed great changes that villages have undergone since the middle of the century. In this period, Knopp (1994) and Škabrada (1999) formulated ten basic urban and architectural principles in the village:

- 1) Rectangular floor plan of houses.
- 2) Location of the house on the plot – either perpendicular to the street or longitudinally, but always following the street line and usually directly connecting to the neighbouring house.
- 3) Saddle roof with a slope of about 45°.
- 4) Three-part floor plan of buildings, manifesting itself from the outside.
- 5) Binding situation of the entrance to the hall, the middle part of the floor plan, not the entrance through the gable wall.
- 6) Accessibility of the ground floor without the use of stairs.
- 7) The base of the roof was identical to the level of ceiling of the adjacent lower floor.
- 8) Threshold along the side of the house with the entrance protected by the overhanging roof resulting in an asymmetrical shield.
- 9) Chimney at the wall opposite the entrance.
- 10) Addition of the second wing of the house – narrower parts are added at the rear longitudinal wall.

Blažek (2004) describes the current works of folk constructions, tastelessness and fake searching for the future shape of the countryside, which will not lose its identity. In Moravia, Kašparová and Rozehnalová (2008) present specialized methodologies for the planned development of villages, where they deal with the spatial aesthetic aspect of the rural environment and with the preservation of the traditional image of the village.

If we start from the conceptual definition of cultural tourism as the movement of people from their place of permanent residence in order to obtain new information and experiences that satisfy their cultural needs (Richard, 2003), we can also consider folk architecture as one of the attractions of this form of tourism. In this case, the indicator of the identity of the countryside can serve as one of the measures of the attractiveness of individual settlements. Although vernacular architecture is mainly offered in open-air museums set up for that purpose, living villages that have at least partially retained their original rural character can represent a valuable element of cultural tourism, because it offers a live experience.

3. Methodology

This study is focused on the western surroundings of Brno where there is the lowest number of village monument reserves, zones and historically valuable villages. For the case study, 8 large municipalities with

a population of about 1000 inhabitants and 17 small municipalities with a population of about 100 inhabitants were selected (Fig. 1). The division was based on the assumption that large municipalities have a different proportion of public buildings, technical buildings and probably apartment buildings in their structure. In the second half of the last century, small settlements developed only minimally, and therefore it can be assumed that they were less influenced by new and architectural elements. The selection of villages for analysis was made with regard to whether elements of vernacular architecture combined with newer types of houses occur in their urban structure.

The methodology used is related to the concept of image use in geography (Yarwood 2005). In each case study village, all family houses were assessed. This study uses web portals with aerial maps and panoramic images. The main source of data for research was portal portals.mapy.cz (©Seznam.cz, a.s., ©GEODIS BRNO, s r.o.), which has mapped not only the main roads, but also all side streets of villages. The mapping took place in 2013–2018. Partial sources of information were Google maps and Street View. The advantage of this approach is that it is possible to carry out analyzes of any settlement in this way without the need for financially, time- and labor-intensive field research. At the same time, in Czechia, in addition to a very detailed street view type display, other materials are available, such as geographical maps, historical maps, aerial photographs and aerial views, oblique images. Disadvantages include the fact that only objects that can be directly seen from the road or path are directly observable. Sometimes objects are either intentionally shadowed by tall fences or were shadowed by another object (such as a passing

truck) at the time of the image. Therefore, the analysis was supplemented by field research conducted by students as part of their seminar practices. The field survey allows to capture the overall atmosphere of the place, sounds, bustle, people's mood or intangible spirit of the place among others.

Based on findings from field research, which were confronted with the available literature, individual types of country houses were singled out. The typology was made on the basis of similar features of houses that occur repeatedly and in different villages. Types of architecture were recorded in the map base for GIS with buildings accessible from <https://services.cuzk.cz>. Based on the elementary features of folk architecture such as rectangular floor plan, entrance orientation, number of storeys and others, each type of rural architecture has a “coefficient of identity of the countryside” (Fig. 2).

The valuable folk architecture has the highest coefficient of identity of the countryside (1). The devalued folk architecture and the new architecture in the style of folk architecture are evaluated by lower coefficients (0.8). Two-storey houses are rated with a coefficient of 0.6. Catalogue family houses are rated with a medium coefficient (0.5). Bungalows, as they do not have the next floor and often are not so visible from public spaces are rated with a higher coefficient of 0.7. Cottages and summerhouses are rated also with a higher coefficient of 0.7 whereas they are also often invisible from public spaces and situated mainly on the outskirts of the villages, even though their architecture is sometimes wild.

On the other hand, the lowest coefficient is for apartment buildings (0.1), large and high-reaching buildings often with flat roofs which would be more

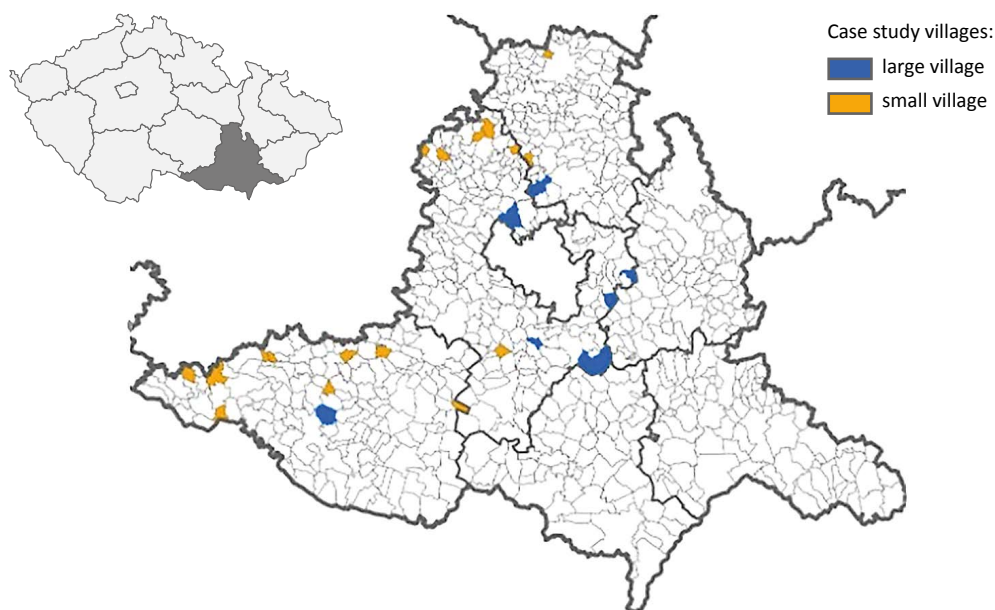


Fig. 1 Case study of small and large villages in three districts of the South Moravia region. Source: © ArcČR ARCDATA PRAHA, ZÚ, ČSÚ, 2016, own elaboration.











Folk architecture devalued	Folk architecture valuable	Two-storey houses with saddle or hip roof	“Cube” houses	Apartment houses
				
– coefficient: 0.8 – until 1950s – rectangular floor plan – saddle roof – 1 (2) storey	– coefficient: 1.0 – until 1950s – rectangular floor plan – saddle roof – 1 (2) storey	– coefficient: 0.6 – 1960s, 1970s – square or rectangular floor plan – saddle or hip roof – 2 storeys	– coefficient: 0.2 – 1960s, 1970s (present) – square floor plan – flat roof – 2 storeys	– coefficient: 0.1 – 1970s, 1980s (present) – rectangular floor plan, large – saddle or a flat roof – 2–3 storeys
Catalogue houses	Bungalows	McMansion	New houses in the manner of folk	Individual architecture
				
– coefficient: 0.5 – 1990s–present – irregular floor plan – complex hip roof with dormers – 2 storeys	– coefficient: 0.7 – 1990s–present – square floor plan – tent or hip roof – 1 storey	– coefficient: 0.2 – 1990s–2000s – irregular floor plan – complex roof – 2–3 storeys	– coefficient: 0.8 – 2000s–present – rectangular floor plan – saddle roof – 2 storeys	– coefficient: 0.2 – 2000s–present – irregular floor plan – complex roof – 1–3 storeys

Fig. 2 Main types of rural architecture in the case study villages, their basic characters and coefficients of identity of the countryside. Source: own research.

suitable more for towns than rural areas. Similarly, as the apartment buildings, also the cube houses and houses of the “Šumperák” type are those which have no common feature with the traditional folk house, their coefficient of identity of the countryside is also low (0.2). Distinctive architecture as the artistic expression of individual architects with totally new shapes has also a very low coefficient of rural identity (0.2). McMansion is rated for its excessive pomp as 0.2 too.

Outside the residential buildings, there are some civic and technical buildings in the countryside. The highest coefficient is given to profane and sacral buildings (1) which are also a part of the cultural heritage and a source of cultural tourism in the place, too. A higher coefficient is also given to civic buildings (0.8) as they are often treated in the local folk style, but some stores and municipal offices come from the period of socialism. They are located in the centre of the village and have flat roofs which put overall emphasis on the functionality rather than on the visual appearance of these buildings. Agricultural and technical buildings are rated with a low coefficient of 0.1. They are often large untreated buildings on the edge of municipalities owned by companies. In larger villages, about 4% of buildings are garages which are also rated with a coefficient of 0.1.

The value of identity of the countryside index of the village is calculated as:

$$RI = \frac{A_1 \times c_1 + A_2 \times c_2 + \dots + A_n \times c_n}{B}$$

where:

RI = value of identity of the countryside index of the village

- A₁ = total buildings of architecture type 1 in the village
- c₁ = coefficient given to architecture type 1
- A₂ = total buildings of architecture type 2 in the village
- c₂ = coefficient given to architecture type 2
- ...
- ...
- A_n = total buildings of architecture type n in the village
- C_n = coefficient given to architecture type n
- B = total identified buildings in the village

Using the formula for calculating rural architecture identity of villages is a pilot attempt to express identity of the countryside in a quantitative way. There are some factors which are not included in the formula and which can also affect the overall impression of the village and its rural identity. Some of them are landscape features and landscaping of public spaces, front gardens and also the residents’ own gardens. For example, large public spaces and the village greenery with tall trees can mask aesthetic shortcomings of buildings under the condition that domestic trees are used. Mareček (2005) suggests to cover unsuitable types of cube-shaped houses in rows by planting broad-crowned trees in front gardens or closing the visual axis of the street with conspicuous, handsome objects. Furthermore, the appearance of the village centre and its main busiest streets has the greatest impact on the overall impression of the village compared with areas on the outskirts. The distance of buildings from the village centre and main roads is not taken into account in the formula.

The discussion summarizes the possibility of using the formula in practice as well as the limitations of the formula and possible further research to specify a formula for calculating the identity of the countryside.

4. Analytical results

4.1 Valuable and devalued folk architecture

In this research, folk architecture is considered something that preserves the historical development of the village and has basic features such as a rectangular floor plan, single-storey structure, traditional orientation of the entrance to the house and others. In this research, however, we distinguish between the devalued and valuable folk architecture. Valuable folk architecture has also preserved other typical features such as the decoration of windows, doors, gates, the typical division of windows and other details that make this architecture aesthetically pleasing and therefore valuable. Devalued architecture often has modern windows with large undivided glass sheets, it does not have typical decorations around windows, doors, or it has a completely new decoration, a new facade, or possibly bright colours. It is often also a time-degraded architecture that needs to be repaired. Many of buildings in the Moravian villages (up to 35%) still retain their original location along the street line. However, the façade or exterior is changing, the floors are being adjusted, which makes this architecture less valuable in terms of preserving its typical character even in smaller decorative elements. Valuable folk architecture can be seen particularly in smaller villages (2%).

4.2 Two-storey houses, houses with wall gabled dormer and wall hipped dormer

Frequent type of houses represented mainly in larger villages (about 23%) are two-storey houses. Two-storey houses with wall gabled dormer were popular mainly in the 1960s and 1970s. The dormer is most often located in the middle of the front part of the house and accommodates one window. The house has two other windows on the ground floor, sometimes more. The entrance to the house is from the side and it is often advanced. The wall gabled dormer can also protrude from the facade and form a risalit, or the entire dormer is not placed symmetrically in the middle of the front of the house, but is located on the edge of the house.

Another type of two-storey house are house with the wall hipped dormer. This dormer is usually placed symmetrically in the middle of the front of the house and accommodates one full window. The other two windows are located on the ground floor. Variations of this type of house have the dormer located on the right or left. The house is also entered from the side. The hipped dormer allows to insertion a triangular element above the window, either in the form of another smaller window or in the form of a triangular decoration in the plaster of the house. Another variation is the advance of this dormer from the front facade in the form of a risalit. The hipped dormer does not have to be connected to the wall, it can also form

a small protrusion from the roof of the house with a smaller window. The popularity of two-storey houses probably has not disappeared even today, as the elements of wall gabled dormer or wall hipped dormer placed symmetrically in the middle of the house front are still found in many new buildings.

4.3 Two-storey houses with the flat roof, Šumperák

Houses with a flat roof have been appearing since the 1970s. It was a very fundamental change influenced by functionalism. This type of house is very often a two-storey building with a square floor plan, so that it resembles a cube. It often has large windows, especially in the front side. These were the first types of houses with balconies in villages. A typical example is a cube with four large windows in the front, or a cube with balconies on both floors, while under the balcony there is a garage. Sometimes these houses were built in rows.

A specific type of house with a flat roof, repeating in Czechia and Slovakia, is a so-called "Šumperák" house. Its design was created in the 1960s by architect Josef Vaněk for the director of hospital in the town Šumperk. The design of this two floor house is famous for the balcony, which has two oblique walls on the sides and often with five circular windows. This house is so popular that certain elements of the bent side walls with circular windows are also found in completely different houses.

4.4 Apartment houses

The construction of apartment houses in the 1970s penetrated villages, too. Even in small villages, two-storey and three-storey apartment houses can be found. Older types often have a saddle or hip roof, newer types have a flat roof, which, however, further intensifies the conflict with the traditional visual of the village house. Apartment houses are not only remnants of the last century, but they are still popular today in the countryside, often with lower garages or balconies. The roof is no longer just flat or saddle, but also of other forms.

4.5 Catalogue family houses and bungalows

In 1990s, catalogue houses offer various versions of a comfortable family house. This type of houses, occurring mainly on the edges of suburban villages, sometimes forms entire new village districts, often not fitting into the original village part with the traditional buildings. They have various types of floor plan, various types of roofs (saddle, hip, half-hip), dormers, balconies and often various polygonal protrusions of the floor plan. They are often situated in the middle of the piece of land surrounded with an architecturally designed garden. They often have a high fence separating them from the street and neighbours.

Single-storey family houses – bungalows represent a frequent category of catalogue houses. The category of catalogue houses is the most represented category of houses under construction, so today it is still one of the most popular family houses.

4.6 Villas, McMansion

While the term villa refers to a large representative family house that often reflects the architecture of profane buildings of various architectural styles, the term McMansion is pejorative designation for a combination of different building styles. McMansion evokes the appearance of luxury, where the original noble materials are replaced by more affordable replacements (plastic windows, concrete interlocking paving). However, neither Villas nor McMansion are as widespread in the vicinity of Brno. In our case study villages, there are only buildings with the hints of baroque elements – a turret with arcades, arcades in the front of the house, entrances to the house highlighted by arches and columns.

4.7 Modern country houses

In recent decades, people's awareness of identity of the countryside and elements of architecture that make the countryside harmonious, pleasant and attractive has also been growing. More architects and owners are now interested in architecture that would be a representative for some kind of modern return to the traditional folk house (Nguyen et al. 2019). However, this architecture also accepts modern housing requirements such as larger windows, glass doors, built-in garages, floors, or dormers.

Another modern trend is the return to wood as the basic material of the house. New log cabins are being built such as residential houses, wooden houses, or even houses made of straw bales as a filling material for wooden constructions. Owners are attracted by the vision of living surrounded by natural materials, as well as the idea of sustainable architecture (Ragheb, el-Shimy, and Ragheb 2016). The idea of ecology and sustainable architecture is also the driving force behind energy-passive houses (Schnieders et al. 2020).

4.8 Cottages, second houses

Czechia is specific in its high number of cottages. Cottages and second houses began to develop at the beginning of the last century, when the first tramp settlements were established. Zapletalová (2007) presents a collection of 500 photographs of Czech cottages, in which their architecture is illustrated. The architecture of the first tramp huts was simple wooden (log cabins). In the period of socialism, cottages represented an escape from the collectivism, they compensated for closed borders and the impossibility

of travelling. A large number of cottages can be found on the outskirts of smaller villages in our case study villages (7% of all buildings).

4.9 Representation of individual types of houses in the villages under research

In Moravian villages, houses of folk architecture predominate, devalued by later modifications or unsatisfactory maintenance. In small municipalities their share is 46%, in large municipalities 37%. The second most common type of residential buildings are two-storey houses of various variants, which occupy 10% in small municipalities and 23% in large municipalities. In small villages, the third most common house is a cottage (7%) and new houses in the ruralizing style. In large municipalities, the third most common type are catalogue family houses (10%) and cube houses with flat roofs.

Other types of buildings occur rather sporadically. Nevertheless, they influence the rural character of the villages either by their mass (apartment buildings) or ecstasy (villas, McMansions). Unfortunately, valuable houses of folk architecture occupy only about 2% in small municipalities and about half a percent in large municipalities.

The most common non-residential buildings are agricultural and technical buildings, which make up 18% of buildings in small villages and 9.5% of buildings in large villages. Among them we can find objects of large-scale agricultural production, created during the period of collectivization, small industrial areas, transport and military facilities functioning sometimes as entrepreneurial zones now. Some of them represent rural brownfields. In small villages, agricultural buildings are followed by civic facilities and sacral buildings, while in large villages, civic amenities are complemented by garage areas. Although non-residential buildings form a minority, we usually find dominants among them (Tab. 1).

The overall value of identity of the countryside index of the case study villages is about 0.6. Small villages have a higher value of the identity of the countryside index. However, the difference between small and large municipalities is not so big. In small villages, agricultural and technical buildings represent a high percentage (18%) compared to large villages (8%). This fact causes a decrease of the countryside index of small villages.

5. General results and discussion

Valuable folk architecture is a significant element of cultural tourism in Czechia. Many village monument reservations and village monument zones with official protection have information boards guiding tourists from the main roads to individual attractions. The most visited open-air museum of folk architecture in

Tab. 1 The number of buildings categorized into individual types of architecture in the selected case study villages. Percentages of the architecture types in small and large villages are calculated.

Municipality	Population	Residential buildings												Civic and technical buildings				Total classified buildings	Nor identified	Total buildings	Total value for the village
		Folk architecture devalued	Folk architecture valuable	Two-storey house (gable, hip roof)	Cube house (two storey, flat roof)	„šumeraák“	Apartment house	Catalogue family house	Bungalow	Villa, McMansion	New architecture as folk	Individual architecture	Cottage	Civic amenities	Agricultural and technical buildings	Sacral and profane architecture	Garage				
Coefficient of rural identity		0.8	1	0.6	0.2	0.2	0.1	0.5	0.7	0.2	0.8	0.2	0.7	0.8	0.1	1	0.1				
Blanné	74	31		4	2				1			2		3	20			63		63	0.53
Bukovice	76	19	2	11	4			4				1	3	4	18	1	4	71		71	0.50
Němčičky	83	48	1	5	1					1	1			4	21	1		83		83	0.60
Čermákovice	90	59	4	2	1			6					6	3	18	1		100		100	0.65
Tišnovská Nová Ves	91	13	5	16			1	7	1		1	2	6	4	16	1	2	75		75	0.54
Prokopov	92	65	2	1	1			3						2	2	1		77		77	0.77
Vysočany	92	47	3	1		1	1		1			4	54	3	21	1	2	140		140	0.62
Rudlice	94	50	1	4			2		1	1				1	9	1		70	12	82	0.67
Lubě	95	33		9				1				9		1	7			60		60	0.59
Podmyče	99	13	3	8			1				15			2	30	1		73		73	0.49
Vratislávka	100	22	3	4	1		6	2	7		19			2	16	1		83		83	0.59
Přeskače	104	22	2	18								1		9	13	2		67	19	86	0.61
Chvalatice	107	90		20	8			2			1		20	4	10	1		156		156	0.68
Skrchov	111	36		16	1						4				13			70	12	82	0.62
Ochoz u T.	112	28		10					1		5		2	2	15	2		65		65	0.61
Synalov	114	53	1	11				2	1		10		13	4	9	1		105		105	0.70
Trnové Pole	115	32		4				5	1		2			1	20			65	4	69	0.55
Total number of types of architecture in very small villages		661	27	144	19	1	11	32	14	2	58	20	104	49	258	15	8	1423	47	1470	0.62
Percentage of types of architecture in very small villages		46.5	1.9	10.1	1.3	0.1	0.8	2.2	1.0	0.1	4.1	1.4	7.3	3.4	18.1	1.1	0.6				
Mor. Knínice	958	153	6	48	13	3		53	16	5	26	7	3	7	73	3	13	429	10	439	0.56
Holasice	1161	154		90	26		1	126	6			25	2	10	49	1	60	550		550	0.50
Moutnice	1170	203		160	13	1		16	3		2	2		10	43	1	5	459	2	461	0.63
Blažovice	1221	270	2	63	4	1	8	18	8	2			3	11	30	2		422	35	457	0.68
Těšany	1230	193	7	68	47		2	63	3			14		38	62	9	27	533		533	0.56
Únanov	1266	158		74	56	2	10	3	51		1	1		23	17	1	30	427	119	646	0.58
Lipůvka	1294	168		120	49	7	12	58	4	2		1	11	25	63	5		525		525	0.55
Vin. Šumice	1343	107	6	242	2		5	35	5	2	38	3		11	29			485	117	602	0.62
Total number of types of architecture in large villages		1406	21	865	210	14	38	372	96	11	67	53	19	135	366	22	135	3830	383	4213	0.58
Percentage of types of architecture in large villages		36.7	0.5	22.6	5.5	0.4	1.0	9.7	2.5	0.3	1.7	1.4	0.5	3.5	10.0	0.6	3.5				
Percentage of types of architecture in all villages		39.4	0.9	19.2	4.4	0.3	0.9	7.7	2.1	0.2	2.4	1.4	2.3	3.5	11.9	0.7	2.7				

Source: own research

Rožnov pod Radhoštěm is annually visited by 350,000 persons.

Every year, the Czech Republic evaluates the Village of the Year competition on the basis of criteria, including architectural and urban principles supporting traditional architecture and the traditional image of the village among others. Results of this research show that even small villages may hide a certain cultural potential. Due to their non-expansion in the last century, small villages have mostly retained their typical traditional expression. A lot of valuable folk architecture is located in these small villages even today. Creation of a brand of the most beautiful and valuable municipalities, information boards and map applications to support tourism in these municipalities could help their overall development.

Although municipalities with a high degree of preservation of traditional folk buildings are popular tourist attractions, having permanent housing in such municipalities is usually not popular. Their residents are bound by a number of restrictions. They cannot build new objects on their own land, repairs of old buildings are also tied to a number of official permits. Repair of old buildings is often costly, even more if they want to be done precisely, with original techniques and materials. Nevertheless, even today, the number of people who consciously and voluntarily choose a more modest way of life in a family house with the traditional elements of folk architecture is still rising.

The authors are aware of the subjective contribution to determining the identity of the countryside coefficients. The methodology is universal in terms of the use of data sources that are available and comparable at least throughout Europe. However, the typology and assessment of individual types of buildings would need to be modified for each region, to the extent that folk architecture buildings differ regionally according to natural conditions and historical development. Thus, specific typologies and coefficients may be valid for the territory of South Moravia (not necessarily identical to the administrative borders of the South Moravian Region), but local conditions should be taken into account when applying the methodology in different regions in Czechia or abroad.

6. Conclusions

This research focuses on the typology of architectural forms in the Moravian countryside and on the expression of identity of the countryside of case study villages. About 10 main architectural types of residential buildings were defined in the countryside, using predominately panoramic sceneries at mapy.cz. Coefficients of identity of the countryside were given to the architectural types based on agreement with the basic folk house features. A new methodology for calculating the value of identity of the countryside is

presented in this research. The value of rural identity is somewhat higher in smaller villages which are more apart from suburbanization of Brno. These villages could have a hidden tourist potential.

Rural architecture as well as the overall image of the countryside has changed very much since the 1950s. Our results show that valuable folk architecture is almost lost and its impact on rural sustainability is minimal. It fits into the outgoing vision rural idyll (Shucksmith 2018). One possible solution is to protect the remaining heritage. The protection in the open-air museums and declared monument zones does not address the issue of rural sustainability. The protection of the folk architecture of permanently inhabited buildings encounters an understandable interest of their inhabitants in modernization and is not sustainable in the long run.

A more promising option would be not to allow the construction of buildings in the rural environment that are not justified in the countryside. This principle was broken in the collectivization period. Unfortunately, the possibility of stopping this process in the 1990s was not used. The countryside was flooded with buildings that have no place here either because of their inhumane scale or foreign origin.

However, there is some hope of maintaining the sustainability of the rural character of the architecture. In the second half of the last century, this was caused by cottagers (Fialová et al. 2010), whose activities prevented the destruction of a large part of country houses and who maintain their buildings precisely to escape the city and therefore do not have such demands for modernization as the locals. Some small and very small municipalities are now experiencing migratory increases in population. It can be presupposed that it is people who prefer the rural way of life, including the character of their homes, who move to them.

It is obvious that the countryside will differentiate not only according to the distance from regional centres, according to physical-geographical characteristics, human potential and historical development, but also according to the degree of urban transformation of the housing stock. This circumstance will be important for rural planning at the level of municipalities, their associations or local action groups, as well as for the potential development of cultural tourism.

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