



## SMALL SACRAL ARCHITECTURE AND TREES AS MONUMENTS IN DIVERSE CULTURAL LANDSCAPES OF SLOVAKIA

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This paper elaborates on small sacral architecture in cultural landscapes of Slovakia. It provides a definition and characterisation of small sacral architecture, its origin and history. It highlights trees as complementary natural monuments of small sacral architecture and elaborates on their species diversity and symbolic meaning. Based on the state of the art of current research into small sacral architecture in Central Europe, the aim, goals and objectives of the paper are defined. The main object of research is represented by elements of small sacral architecture with the occurrence of mature and/or old tree(s). 38 elements of small sacral architecture with 82 trees serve as research samples collected in 28 different municipalities in 4 self-governing regions throughout Slovakia, from the West to the East. The most frequent tree species are horse chestnuts (*Aesculus hippocastanum* L.), small-leaved lindens (*Tilia cordata* Mill.) and large-leaved lindens (*Tilia platyphyllos* Scop.). Trees occur most frequently as groups of 2 trees, as single trees, as groups of 3 or 4 trees and rather rarely as groups of 5 trees surrounding an element of small sacral architecture.

**Keywords:** cultural landscapes, landscape architecture, monuments, small sacral architecture, trees

### 1 Introduction

#### 1.1 Small sacral architecture in cultural landscapes

Elements of small sacral architecture in the form of roadside shrines, crosses, sculptures of saints or chapels are integral components of our cultural landscapes and can be defined as elements of visual design in the landscape (Bell, 2005). Schneeweis (1987) refers to them as Jewels of the Danubian Sacral Landscape. They have a significant spiritual value (Matáková, 2012) and Christian legacy (Kopeček et al., 2015). Burggraaff and Kleefeld (1998) classify these field memorials as point elements in cultural landscapes of religious and cult character, which are witnesses of our varied and rich past and distinctive accents in impressive landscape sceneries (Kitlitschka, 1987), where they represent the traditional rural vernacular architecture and crafts (Štěpánková and Feriancová, 2011). They are present along old roads, junctions, streets, squares, and elevated locations or within reverential green spaces (Halajová, 2010; Halajová et al., 2016). They serve as landmarks, as well as places of contemplation and memory and symbolise the essence, the human dimension, and the local and regional identity of the landscape. Salašová and Štefunková (2009) characterise small sacral architecture as aesthetically

impressive elements in landscape structures and as memorials of local history, art and religion, which impact the perceived landscape. Small sacral architecture spreads the spiritual message of churches and chapels into open landscapes, thereby forming a continuous spiritual legacy and identity of local cultural landscapes (Kopeček et al., 2015).

#### 1.2 Origin and history of small sacral architecture

History of small sacral architecture objects is always anchored in their location (Hájek and Bukačová, 2004) and their abundant representation is closely related to the rise of the Catholic faith in the period of counter-reformation (late medieval period) and subsequently to the jubilee of John Nepomuk in the 18th century (Liszka, 2007). Small sacral architecture reached its greatest expansion in the Baroque period, when spirituality was an important element of everyday life. It was used as an element of spiritual conceptions in landscape design. Shrines were built along roads in agricultural landscapes as prayer and repentance spots in impressive landscape sceneries. They were used as stations for rituals and harvest processions. Crosses and sculptures of saints are to be understood as memorials manifesting the faith and diligence of our ancestors (Löw and Míchal, 2003).



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### 1.3 Trees as complementary natural monuments of small sacral architecture

Trees, thanks to their longevity and impressive spatial features, have always been perceived, adored and worshipped by people as natural monuments in cultural landscapes (Lipský, 2015; Rózová et al., 2015). They have served as natural landmarks and orientation elements in designed landscapes and have become important features of historical landscape structures (Supuka et al., 2015). Trees were often planted as complementary compositional elements next to small sacral monuments, where they serve as monumental, protective, orientation, compositional, landscaping, symbolic, aesthetic and environmental elements (Matáková, 2011). Typically, small sacral monuments are accompanied by a single tree or a group of 2, 3, 4 or 5 trees (Assmann, 1979). The most common tree species planted next to elements of small sacral architecture were according to Mareček (2005) lindens (*Tilia* sp.), oaks (*Quercus* sp.), maples (*Acer* sp.) and ashes (*Fraxinus* sp.). Verešová and Supuka (2012) also identified the occurrence of fruit trees, such as pears (*Pyrus* sp.), mulberries (*Morus* sp.), cherries and plums (*Prunus* sp.). Gradually, also foreign woody plant species have been incorporated into our environments and in the course of time they have become typical elements of our cultural landscapes – e.g. horse chestnut (*Aesculus hippocastanum* L.), black locust (*Robinia pseudoacacia* L.), mulberry (*Morus* sp.), lilac (*Syringa vulgaris* L.) or box tree (*Buxus sempervirens* L.). Horse chestnut, for instance, was introduced to Central European landscapes in the baroque period as one of the first exotic species (Löv and Michal, 2003). This might explain its frequent occurrence at elements of small sacral architecture as identified by Tóth (2016, 2017).

### 1.4 State of the art in small sacral architecture research in Central Europe

Small sacral architecture has been extensively studied for decades in Austria (Schneeweis, 1987; Burggraaff and Kleefeld, 1998; Kitlitschka, 1987; Assmann, 1979). In the Czech Republic, there have been several studies on small sacral architecture, especially regarding their importance in landscape monument zones (Kuča, 2015) as physical manifestations of Christian liturgy (Kopeček et al., 2015). In Slovakia, the current state of the art is geographically limited. Matáková (2011) mapped and comprehensively evaluated elements of small sacral architecture in the area of Horná Nitra. Liszka (2007) conducted a complex survey in southern Slovakia, while the Dolné Považie Region has been partially mapped by Tóth (2016, 2017). However, there is the

need for a more complex research in several cultural geographical regions of Slovakia, which will take into account the architectural and landscape features of small sacral architecture.

### 1.5 Aim, goal and objectives

The aim of this paper is to forward research into small sacral architecture in Slovakia and to contribute to the current state of the art from the perspective of landscape architecture. The goal of this paper is to elaborate on the species diversity and compositional characteristics of mature and old trees as accompanying elements of small sacral architecture. The objectives are:

1. to collect random research samples from different locations/municipalities throughout Slovakia;
2. to identify the type of small sacral architecture, where the occurrence of mature and/or old trees has been documented;
3. to identify the species of tree(s) in a compositional unit with an element of small sacral architecture;
4. to define the number of trees in the compositional unit and to characterise their spatial composition and organisation in relation to the respective element of small sacral architecture.

## 2 Material and Methods

The object of research is represented by elements of small sacral architecture along roads in built-up and open-landscapes, with the occurrence of mature and/or old tree(s). The research samples – 38 elements of small sacral architecture with 82 trees in total – have been collected in 28 municipalities located in 4 different self-governing regions of Slovakia – Nitra, Prešov, Banská Bystrica and Košice.

Most of the samples have been collected in the Nitra Region within institutional research from 2010 to 2017. An additional sampling has been done by Tóth in 2017, during a circular study tour from Western to Eastern, through Southern and Northern Slovakia, in the Banská Bystrica, Košice and Prešov Regions.

For each sample, the location (municipality and region), the typology of small sacral architecture and the tree species were identified as key characteristics.

## 3 Results and Discussion

The field research has revealed that the most frequently occurring tree species at elements of small sacral architecture in Nitra Region (Western Slovakia) is horse chestnut – *Aesculus hippocastanum* L. (13 documented



■ **Figure 1:** Examples of small sacral architecture with one mature and/or old trees

Source: Photos by Tóth

Description: (left) a roadside cross in Tvrdosovce (Western Slovakia) with 1 horse chestnut; (middle) a roadside cross in Spišské Podhradie with 1 small-leaved linden; (right) a roadside cross in Osturňa (Eastern Slovakia) with 1 European ash



■ **Figure 2:** Examples of small sacral architecture with two mature and/or old trees

Source: Photos by Tóth (left and right) and Supuka (middle)

Description: (left) a roadside cross in Mojzesovo (Western Slovakia) with 2 horse chestnuts; (middle) a roadside shrine in Čajkov (Western Slovakia) with 2 horse chestnuts; (right) a roadside chapel in Ždiar (Eastern Slovakia) with 2 small-leaved lindens

objects / 27 trees in total). In Banská Bystrica, Košice and Prešov Regions (Central and Eastern Slovakia), linden trees – *Tilia cordata* Mill. (8/17) and *Tilia platyphyllos* Scop. (7/16) prevail. However, the species diversity turned out to be relatively rich, as we have identified a wide range of other tree species occurring at objects of small sacral architecture, such as *Acer platanoides* L. (Apl); *Acer pseudoplatanus* L. (Aps); *Betula pendula* Roth

(Bp); *Cerasus avium* (L.) Moench (Ca); *Fraxinus excelsior* L. (Fe); *Juglans regia* L. (Jr); *Larix decidua* Mill. (Ld); *Morus alba* L. (Ma); *Pyrus pyraeaster* (L.) Burgsd. (Pp) and *Robinia pseudoacacia* L. (Rp), see Table 1.

Regarding the compositional characteristics, the most frequently occurring number of trees at an element of small sacral architecture is 2 (19 out of 38 documented elements, 50.00 per cent), followed by 1 (10; 26.32 per

**Table 1** Tree species observed at elements of small sacral architecture in different municipalities, from Western to Eastern Slovakia

Region	Municipality	SSA	Ah	Apl	Aps	Bp	Ca	Fe	Jr	Ld	Ma	Pp	Rp	Tc	Tp	
Nitra (NR)	Čajkov	cr					1				1					
		sh	1									1				
		sh	2													
		sh													3	
	Dolné Obdokovce	cr	1													
	Mojzesovo	cr	2													
	Nitrianske Hrnčiarovce	sc					1									
	Nové Zámky	cr	2													
	Palárikovo	cr	3													
		cr	4													
		cr														2
	Pohranice	sc	3													
	Rastislavice	cr	1													
	Rybník	cr	1													
		sh					1							1		
	Selice	cr	1													
Tvrdošovce	cr	1														
	cr							1								
	sh	5														
Žitavce	cr								2							
Banská Bystrica (BB)	Čierny Balog	cr													3	
	Lúčky	cr													2	
	Polomka	cr												1		
	Valkovňa	cr													4	
Košice (KE)	Harichovce	cr												2		
Prešov (PO)	Bertotovce	sh												5		
	Lenartov	cr												2		
	Mokroluh	cr												2		
	Nemešany	cr													2	
	Nižné Ružbachy	cr			2											
	Osturňa	cr						1								
	Spišská Belá	sh		1										3		
	Spišské Podhradie	cr												1		
	Široké	cr												1	1	
	Toporec	cr													2	
Ždiar	ch													2		
	cr									2						
	cr									2						
<b>Total number of trees</b>			27	1	2	1	2	2	2	4	1	1	1	20	18	
<b>Frequency</b>			13	1	1	1	2	2	1	2	1	1	1	9	8	

Source: authors' field research (2010 – 2017)

SSA type: cross (cr); chapel (ch), sculpture of a saint (sc), shrine (sh); Species: *Aesculus hippocastanum* L. (Ah); *Acer platanoides* L. (Apl); *Acer pseudoplatanus* L. (Aps); *Betula pendula* Roth (Bp); *Cerasus avium* (L.) Moench (Ca); *Fraxinus excelsior* L. (Fe); *Juglans regia* L. (Jr); *Larix decidua* Mill. (Ld); *Morus alba* L. (Ma); *Pyrus pyraeaster* (L.) Burgsd. (Pp); *Robinia pseudoacacia* L. (Rp); *Tilia cordata* Mill. (Tc); *Tilia platyphyllos* Scop. (Tp).



■ **Figure 3:** Examples of small sacral architecture with three mature and/or old trees

Source: Photos by Tóth

Description: (left, middle-left) a roadside cross in Palárikovo (Western Slovakia) with 3 horse chestnuts; (middle-right) a cross in Pohranice (Western Slovakia) with 3 horse chestnuts; (right) a cross in Čierny Balog (Central Slovakia) with 3 large-leaved lindens



■ **Figure 4:** Examples of small sacral architecture with four mature and/or old trees

Source: Photos by Tóth

Description: (left) a roadside shrine in Spišská Belá (Eastern Slovakia) with 3 small-leaved lindens and a Norway maple; (right) a roadside cross in Valkovňa (Central Slovakia) surrounded by 4 large-leaved lindens

cent), 3 (4; 10.53 per cent), 4 (3; 7.89 per cent) and 5 (2; 5.26 per cent). Thus, 2 and 1 are the most frequently occurring numbers of trees, while 4 and 5 are rather rare. We have documented a roadside cross in Palárikovo (Western Slovakia) surrounded by 4 horse chestnuts, a cross in Valkovňa (Central Slovakia) surrounded by 4 large-leaved lindens, a shrine in Spišská Belá (Eastern Slovakia) surrounded by 3 small-leaved lindens and 1 Norway maple (see Figure 4), a shrine surrounded by 5 horse chestnuts in Tvrdošovce (Western Slovakia) and a shrine surrounded by 5 small-leaved lindens in Bertotovce (Eastern Slovakia), see Table 1 and Figure 5.

Our research has confirmed the frequent occurrence of horse chestnuts (*Aesculus hippocastanum* L.) at elements of small sacral architecture in Western Slovakia as documented by Tóth and Feriancová (2015) and the occurrence of a wide range of other tree species as indicated by Mareček (2005). The most frequent occurrence of large-leaved lindens (*Tilia platyphyllos* Scop.) and small-leaved lindens (*Tilia cordata* Mill.) recorded by Kleinová (2017) in Spiš Region (part of Prešov Region) has also been confirmed by this study, as we have identified these two species as the prevailing species in Eastern Slovakia.



■ **Figure 5:** Examples of small sacral architecture with five mature and/or old trees

Source: Photos by Tóth

Description: (left) a shrine in Tvrdošovce (Western Slovakia) surrounded by 5 horse chestnuts; (right) a roadside shrine in Bertotovce (Eastern Slovakia) surrounded by 5 small-leaved lindens

## 4 Conclusions

The presented research has contributed to the state of the art in small sacral architecture in cultural landscapes by new knowledge of species diversity and spatial composition of 82 mature and/or old trees growing next to 38 elements of small sacral architecture in 28 municipalities from the West to the East of Slovakia. It has been found out that horse chestnuts (*Aesculus hippocastanum* L.), small-leaved lindens (*Tilia cordata* Mill.) and large-leaved lindens (*Tilia platyphyllos* Scop.) belong to the most frequently occurring tree species at elements of small sacral architecture. The most common spatial composition is represented by 2 trees or 1 tree at one object of small sacral architecture, 3 and 4 trees are less common and 5 trees turned out to be rather rare. The scientific significance of this new knowledge consists in the continuous database building, while the practical significance of findings can be seen in the knowledge of monuments in the cultural landscapes at the local or micro-regional level. The main message to the practice is to enhance the local knowledge and awareness of the public of these important landscape features and monuments. From the academic perspective, further research is needed, mainly in order to extend the database and the geographical coverage of research samples, in order to allow drawing of geographically and statistically more representative conclusions.

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