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The Maros river and its potential for landscape development

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Introduction

In this paper we research how the approach of 'greenway planning' could be elaborated in the case of manorial house systems located alongside the Maros (Mures) river in Transylvania. The Maros river is part of the Danube watershed and crosses a large part of Transylvania, roughly from East to West. Certain sections of the river, spanning 876 km from its source to its mouth, can be well differentiated both from a geographic and a social aspect.

First of all we will analyse the historical role of the river in the landscape development of the area in the long run. Not only was the river the core of the watershed but it functioned also as a waterway for transport of goods and was used for energy production by means of a series of watermills. From the 16th century on a series of mansions with designed gardens have been developed, which can be considered as a new 'cultural' layer upon the landscape. We devise some cases in which contemporary use and potentials for water storage, leisure, tourism and fish ponds are being integrated into these historical settings. The results are used as a basis for development of a landscape strategy in the long run. Such an approach refers to the historical and cultural backgrounds of the land but translates them to a contemporary situation and goals in the long run; conservation by transformation. All together contributing to landscapes that provide new opportunities for healthy conditions for living and working environments for people.

Background

The defining elements of the landscape, which even today can be considered traditional in many parts of Transylvania, can be linked to the gardening, forestry, agriculture and water management activities of the period (beginning in the sixteenth century and ending in the nineteenth) being decisive in the formation of the present-day physiognomy of the Transylvanian landscape as well. These main forces – linked basically to the activity of princely and aristocratic families – deliberately and consciously transformed the varied natural environment into a cultural landscape. Although the garden should not be compared to the landscape in every case, its significance from the viewpoint of landscape is much greater than it may first appear: according to a

philosophical approach, the garden, as the earthly copy of the Garden of Eden, is “one of humanity’s best inventions and the means of making oneself feel at home in this world.” (Hankiss, 1997) Therefore, this explains the constant striving to conquer untamed nature, the foreign territories lying beyond the bounds of the garden cosmos. If “landscape design is none other than the extension of garden design, or indeed, urban planning,” (Jellicoe G. and Jellicoe S, 1998) then the significance of landscaping initiated with gardening methods becomes even more obvious. The landscape garden, despite its strongly composed nature, drew inspiration from the surrounding landscape elements that themselves owed their appearance to the decades and centuries of traditional use of landscape. (von Buttlar, 1982) The manorial center, where the only significant garden in the area could take shape, always possessed symbolic significance: it represented the cultural, economic and social center of the region. The spread of similar cultural focal points led to the increasingly vigorous shaping of the environment. If the focal points are located alongside of a green corridor – for example along a river valley – they can contribute to the development of a linear landscape system, enhancing the dynamism of the landscape defined by the river, forming a green, corridor-like network with high cultural and historical interest.

Goals and objectives

The current work focuses on some noble residence gardens of a narrower, geographically confined region along the Maros river - a region located between Szászrégen (Reghin) and Marosvásárhely (Targu Mures) -, and its objective is to present their history and their relationship with the surroundings. Based on the study of Fekete (2007), this research has been extended to a more detailed level of mansion & garden. It comprises the relations between site and river valley at large, relations between settlements and mansions, and finally the relation between the inside and outside in the architecture of the mansion. Figure 1 shows the location and the high density of the investigated residential gardens inside of the research area. The garden density can be calculated with help of Landscape-specific Historical Garden Density (LHGD), which is a numerical data referring to the number of historic gardens within a given region. If this value is converted to GD (Garden Density) value, the Transylvanian average is around 5.00; in case of other Romanian regions, like Partium and Banat, the figure is 1.66, in Oltenia 0.83, in Moldova 0.59, in Muntenia 0.17, while in Dobrogea it is 0.11. (Szabó, 2000). In the displayed area ($20 \times 60 = 1200 \text{ km}^2$), the LHGD value is 70.60, and the value of GD is around 14 accordingly.³⁶ This is a significant value,

³⁶ The value of $LHGD = T/N$ (T representing the size of the investigated area in km^2 ; N representing the number of historic gardens in the area). Because in this formula the increase of the LHGD number marks the

highlighting the cultural, economical and social importance of the studied area, and so justifying the relevancy of the present research.

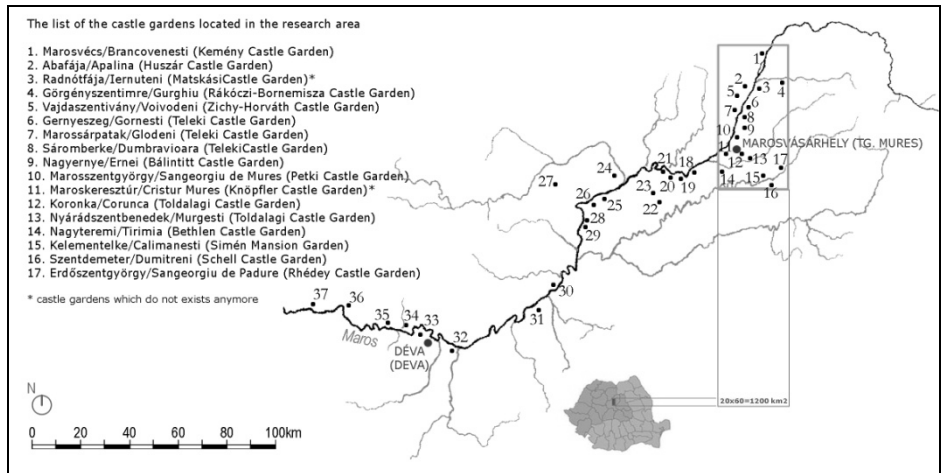


Figure 1. List and location of the investigated castle gardens

Methods

The method is based on the case study approach in which a number of gardens along the Maros river will be studied in detail. The research makes use of literature, archival materials and other written sources, map analysis and fieldwork.

1. Garden history research

It was the first phase of the research. The historic overview compiled on the basis of the accessible archives aims at elucidating the development of the surveyed gardens and their surroundings (settlement, landscape) as much as possible. It treats the role of gardens in shaping the character of the landscapes, settlements and structures, it examines on landscape scale all those connections which were taken into account as local conditions at the conception of the manor gardens, and which determined significantly the aspect of the larger areas hosting the examined manor houses. Garden history research also touches upon the history of the castle or manor house and the family history of the owner.

decrease of garden density, it is more useful and expressive to give the inverse value of the LGHD, the GD (Garden Density). $GD = 1000/LGHD$

2. Field research

The field research is carried out during field survey or field examination. In each manor garden's case the existing situation was described accurately (drawings, manuals, GPS coordinates, geodetic surveys, plant survey, digital photos etc.), thus the values which can be still found and saved offer progress report and a basis for comparison of future protection and reconstruction strategy, whenever such projects should be carried out. Field research also aims at elaborating a value and state survey of garden architecture, made with the help of the geodetic map (land registry map etc.). An important step was the definition and systematization of the survey criteria.

In order to achieve this, we took as a starting point the criteria applied in historic garden surveys in Hungary, but we also deemed necessary a few additions and modifications based on local conditions. On the data sheets we specified the data characteristic for the examined field according to historic building, landscape, townscape and dendrology criteria, setting up as a primary task the definition of the botanic, architectural and unique landscape values, with respect to the visual connections and landscape structure.

Results

The historical survey shows that some of the castle gardens in charge have renaissance roots, others were established in baroque times or later, in different periods of landscape gardens. (Table 1.)

All the studied settings can be recognised as important pieces of the Transylvanian landscape architecture, the existence of which spans several periods of garden history and where the known sources provide evidences of late renaissance features, the stylistic signs of French formal gardens, landscape gardens, botanical collections and eclectic, historical revival gardens.

The field survey proved the existence on site of a considerable number of original garden features defined as historical values – like space structure and composition, relationship with the river and surrounded landscape, vistas, prospects, visual axes, built- and artistic elements etc. (Fekete, 2007)

Table 1. Typical periods/styles of the surveyed castle gardens

	late renaissance garden (17th century)	baroque g. (18 th century)	landscape garden (19 th century)	still existing garden
Marosvécs/Brancovenesti	1648 (B. Nagy, 1973)	no datas	yes (III. Military Survey)	yes
Gemyeszeg/Gornesti	1751 (B. Nagy, 1973)	1792 (Bíró, J. 1943)	yes (III. Military Survey)	yes
Görgényszentimre/Gurghiu	1652 (B. Nagy, 1973)	yes (Bíró, J. 1943)	yes (III. Military Survey)	yes
Nagyteremi/Tirimia	1647 (AkadLt.48/16)	no datas	yes (III. Military Survey)	in ruins
Szentdemeter/Dumitrei	1629 (AkadLt.113/S)	no datas	yes (III. Military Survey)	in ruins
Sáromberke/Dumbravioara	no data	end of 18 th c. (Bíró, J. 1943)	yes (III. Military Survey) (Bíró, J. 1943)	yes
Koronka/Corunca	no data	end of 18 th c. (Bíró, J. 1943)	1825 (Bíró, J. 1943 and II. Military Survey)	in ruins
Erdőszentgyörgy/Sang de Pad.	no data	no data	1817 (Bíró, J. 1943)	in ruins
Radnótfája/Iernuteni	no data	no data	end of 19 th c. (Bíró, D. 2006)	NO
Marossárpatak/Glodei	no data	no data	middle of 19 th c. (III. Military Survey)	yes
Nagyemye/Ermei	no data	no data	1868 (Orbán, 1868)	yes
Marosszentgyörgy/ Sangeorgiu de Mures	no data	no data	end of 19 th c. (III. Military Survey)	yes (ruins)
Maroskeresztúr/ Cristur Mures	no data	no data	end of 19 th c. (III. Milit Surv)	NO
Abafája/Apalina	no data	no data	end of 19 th c. (III. Military Survey)	yes
Nyárádszentbenedek/ Murgesti	no data	no data	middle of 19 th c. (Toldalagi, Róza, 1900 In: Fekete, 2007)	yes
Vajdaszentivány/Voivodeni	no data	no data	end of 19 th c. (Zichy, Jozsefa, 2003 In: Fekete, 2007)	yes
Kelemetelke/Calimanesti	no data	no data	1853 (Jókai In: Vita, 1975)	yes

Outcomes

The ensuing results of the estate/castle garden-landscape relationship's study in the area can be summed up as follows:

1. In the eastern part of Transylvania, the studied castles and estates erected on the banks of the Maros river were border fortifications in the noblest sense of the word. They were not only physical protections, but the fortresses equally protected the intellect, national identity, cultural heritage and humanity.
2. The upper Maros valley, where the studied estates are located, is partially such a traditional landscape where - due to the relative isolation and the lack of collectivisation - forces shaping the traditional cultural landscape are still effective, while its morphological and landscape structural characteristics have survived to this day.
3. Surrounding the investigated estates, the cultural (historical) landscape alongside the Maros river is defined by anthropogenic morphological elements, characteristic land use patterns and the built environment, that is the settlement structure. (Figure 2)

4. The cultural landscape of the region has been shaped by striking and still existent linear elements of the former noble residencies: riverbeds, fishponds, ox-bows, dead channels and other terrain formations linked to the natural or artificial uses of water systems of the Maros river. (Figure 2)

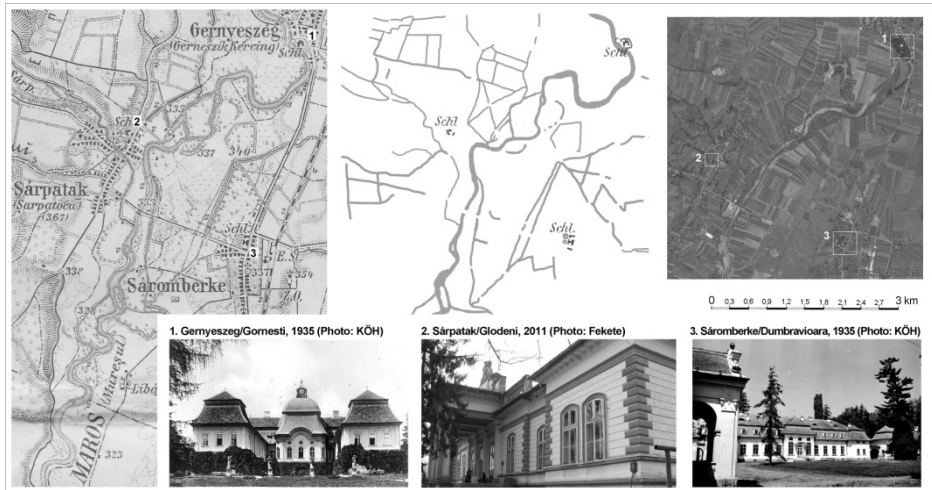


Figure 2. Disposition of three Teleki castles along the Maros river. The figure beside the characteristic settlement structure (1884) and land use patterns (Google maps) shows the shape of different water features at the end of the 19th century

5. The landscape connected to the main river valley trough along the left side branches of the Maros river is characterised by highland agriculture, based on the duality of forestry and animal husbandry. As a result of several centuries of development, it also bears the marks of the various colonization periods, people of diverse social, possessory and economic situations, as well as that of the different agricultural technologies.



Figure 3. The view of the Teleki Castle garden from Gernyeszeg looking from the Teleki crypt from Sáromberke (approx. 2 km). The dome of the castle is rising over the green mass of the castle's park vegetation (Photo: Fekete, 2014)

6. The virtual extension of a park's borderlines, an introduction of the surrounding landscape's sight into the overall display of the garden was a deliberately applied tool in landscape design for castle gardens throughout Europe. "Visual axes are the main design element of English landscape gardens. [...] There are 300 of those here – and so every turn in the path brings a new view of the garden kingdom." (Kresta, 2008)

The results of this study confirm the landscape design role of sights, as well as the fact that visual connections as deliberate means of landscape design were applied in the upper Maros valley in numerous places. Through their application a certain landscape fragment was determined for several decades or even centuries. (Figure 3)

7. Due to the large number of significant exotic woody plants, frequently planted in mass, some of the surveyed castle gardens (Abafája/Apalina, Gernyeszeg/Gornesti, Görgényszentimre/Gurghiu, Sáromberke/Dumbravioara) present dendrological garden characteristics, having remotely striking appearances. By the means of their visual connections still present, they enrich the landscape of the Maros river valley, appearing as spots or characteristic elements and represent a serious value to landscape aesthetics. (Figure 4)



Figure 4. Coniferous group (Pinus sylvestris and Taxodium distichum) in the landscape garden in Abafája/Apalina (Photo: Fekete, 2015)

8. The research shows the importance of the proprietor families. They have that conceptual and cultural background essential for the formation of the genius loci and the identity of the site, as well as for the creation of the residence gardens and that of the economic and human background of the estate-development.

9. The protection, care and maintenance of the cultural landscape cannot merely consist of the conservation of the inherited landscape and its characteristic elements, rather the potential for their development should be dealt with instead. Often, the traditional agricultural forms keep alive

landscape patterns whose natural and ecological values are also of high significance (hedges, ridges, alleys as ecological corridors etc.)

Conclusion

The historical garden (in the present case the aristocratic castle garden or manor house garden) was not a simple ornamental or vegetable garden, but rather an intrinsic part of a complex, cultural-historic, ecologic and - perhaps most importantly - economic (estate) system. It is exactly due to this that the garden was operable and sustainable. The studied gardens are not (were not) merely the representative environment of a given castle or manor, nor were they simply prominent elements in the appearance of a micro-region; moreover, seen from landscape ecology, they influenced the land, the vegetation, the water resources and thereby the image of entire districts. Thus we are studying an ecological-technical system with significant historic and artistic content, which can only be interpreted in its entirety – that is, together with the neighboring settlement and landscape. Only this way do their former significance and present value become clear, and only with this kind of perception of the Eastern-European residential gardens will it be possible for us to understand the important role of the noble families in the formation of the present Transylvanian landscape.

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