

Research Article

Interpretation of the landscape by the method of visuality

Benedek Bubics

Balaton Uplands National Park Directorate, Nature Conversation Department, Zalaegerszeg, Hungary

Article Details: Received: 2023-05-25 Accepted: 2023-09-20 Available online: 2023-11-30



Licensed under a Creative Commons Attribution 4.0 International License



This study focuses on the means of interpreting the landscape is a visually supported summary based on the experiences of surveying special landscape values in the Hungarian settlements belonging to the Mura-Drava-Danube Biosphere Reserve (MDDBR). This work is an attempt to define and provide a holistic landscape architectural perspective, which serves to present and comprehend the landscape consisting of elements, while by highlighting the details it reveals the values of landscape, their importance and the necessity of their preservation. Landscape environment is often hard to define for a person who desires to move out of the city and comes from urban conditions, however theoretic and legal definitions do not make it much more understandable either. Therefore the primary target audience of the study is the individual looking into the natural landscape either on purpose of investment or just pleasure or relaxation. After reviewing the building blocks of landscape in general, the research focuses on describing the natural vegetation of the Mura region and the graveyards in detail, eventually it ends with an abstract of a brief description of landscape values.

Keywords: unique landscape values, biosphere reserve, landscape protection, perception, appearances of trees

1 Introduction

Accurately specified studies based on strict definitions have already been written about landscape, its values and the importance of its preservation (Bauer & Weinitschke, 1976; Jámbor & Szilágyi, 1995; Csemez, 1996; Csemez, 2001). However based on my experiences in landscape protection, I am more and more of the opinion, that landscape and its interpretation cannot be constrained within stiff limits and strictly defined models, since it is a living, constantly changing yet in a sense permanent, extremely complex and multi-faceted system of elements. It is permanent, because the landscape as the environment surrounding people has always been present, it is and will be present in our lives. It is constantly changing, since the proportion of its elements and their effect on each other are always varying. We as humans are both participants and controllers at the same time in this complex procession. In a way we all have an image of the landscape in our minds: it is the inner landscape that lives in us. This is the first image that appears before our mind's eye if we hear the word "landscape" or "nature". We try to shape and form our smaller or larger

environment according to this pattern, because we are connected to it not only physically but also emotionally and mentally. Therefore, we can acknowledge that the landscape, its actual value and preservation cannot be comprehended solely by scholastic theories and it cannot be measured in centimetres or grams either, but it is something we need to live and get acquainted with through personal experiences on the spot. The elements of two landscapes can be somewhat similar, yet on the whole each landscape is different from the other, which makes it unique and special. Experiences in procedures of settlement planning and working in landscape protection point to the fact, that the inner landscape living in our minds is moving further and further away from the true standards of natural landscape and the appreciation of it. The purpose of my study is primarily to define and provide a kind of approach to landscapes by introducing the means of interpreting the landscapes, revealing its values and drawing attention to the importance of landscape protection through the visual method of landscape architecture. It all serves to tighten the relationship between the landscape and common people and to understand the coherence

^{*}Corresponding Author: Benedek Bubics, Nature Conversation Department of Balaton Uplands National Park Directorate,

♀ 16, Kossuth Lajos street, Csopak, Veszprém, 8229, Hungary, ► +363 04 91 00 94

► bubicsbenedek@bfnp.hu

and connections, in order to consider the landscape as a value more and more widely. As we know, we can only take care and manage something responsibly, if we actually know it and feel it like our own.

2 Material and methods

Considering its approach and methods the profession of a landscape architect is equally diverse and colourful as the subject of its observation, the landscape itself, since it is constantly composing and building from the landscape. According to this, I am using the method of visuality to present the landscape, that is able to demonstrate different landscape situations, to analyse spatial positions and to discover the values hidden inside the landscape based on the principle: "a picture says more than a thousand words". I carry out this study primarily with the help of analysing freehand drawings and photos made on the spot, and digital graphics based on them. On-site photos and drawings help to understand the basics of the landscape not only from above but also spatially, and to perceive the empirically deduced relationships. Drawing is in the first place an artistic work, but at the same time a constructive and interpretative procession based on observing details and comprehending relationships. The details unfolding

during the observation are captured by drawing and we acquire new knowledge by arranging the experiences and conclusions. My method is featured by approaching from a distance, moving from general to particular, and highlighting similarities and differences, which help to reveal causalities and to understand relationships. For the creation of the graphics, specific locations were selected that focus on the characteristics of the landscape along the river Mura, thereby serving as an authentic source to illustrate the settlement landscape of the Mura-Drava-Danube Biosphere Reserve, and they draw attention to the balance between man and nature that must be preserved.

3 Results and discussion

Nowadays, more than half of the world's total population lives in urban conditions, and as a result, their direct relationship with nature has essentially ceased. The ancient desire for an undisturbed landscape and a natural living space still remains part of human nature to some extent. During the years of the COVID-19 pandemic this exact wish for nature and open spaces got stronger in townspeople. The desire for a freer life first manifested itself in the mass of people moving out of the city to the countryside and in the rush to

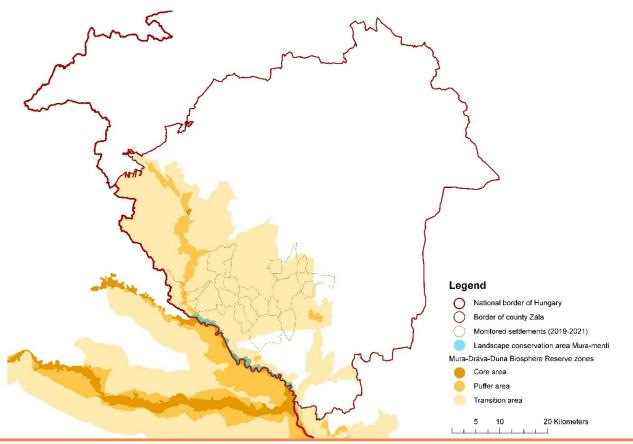


Figure 1 Settlements surveyed by Balaton Uplands National Park Directorate (BUNPD) in the area of MDDBR

buy plots of land (Teveli-Horváth & Varga, 2023). This process had an invigorating effect on rural areas with decreasing population, however its impact on natural landscape is not so beneficial. People who are used to urban conditions have the urban way of thinking, which often manifests itself in buildings that are unable to fit into their surroundings and the landscape, that are out of scale yet they keep sprawling like mushrooms. The balance between natural and built environment that we once had, has been upset, and now the tip of the scales is approaching the built world which appears as a significant component of the landscape. This process particularly threatens those landscapes, that are mostly intact, where natural conditions are still dominant. The region of the settlements belonging to the Mura-Drava-Danube Biosphere Reserve (MDDBR) is considered such an area in Hungary which I got acquainted with during surveying special landscape values that I carried out for the Balaton Uplands National Park Directorate. This Biosphere Reserve is a mutual agreement established by five countries (Austria, Slovenia, Croatia, Hungary, Serbia), that gives priority to the coordinated protection of transboundary natural areas, complemented by restoration and education (WWF & WWF, 2019).

The Hungarian part of the Mura-Drava-Danube Biosphere Reserve affects the low populated settlements along the Slovenian-Croatian boundary. My study is based on the experiences of surveying landscape values in the Biosphere Reserve in Zala county (Figure 1).

The characteristics, vibes and details of the landscape along the river Mura can be perceived with the help of a freehand drawing of this countryside, through which we can get acquainted with the spirit of the place, also known as "genius loci". Landscape drawing also serves to illustrate a general landscape analysis and interpretation method (Figure 2).

If we look at the landscape as a whole, at first we can notice the dominance of natural elements, but observing it thoroughly traces of human hands can also be discovered in the landscape. We consider sky, relief, surface water and vegetation natural elements, while the areas of different land uses – such as vineyards, forests, mowing fields, meadows and arable fields – seem to be all natural elements at first sight, yet their proportions indicate human action. The purely built elements and settlement areas – graveyards and residential areas – take a smaller proportion, and they are situated



Figure 2 Freehand drawing of Mura region landscape in the neighbourhood of Lispeszentadorján Source: author



Figure 3 The situation of the relief and the hydrography in a freehand drawing of Mura region landscape Source: author

in a way embedded in their surroundings, yet their unnatural, geometric shapes make them stand out from the landscape to a certain extent. With the help of the previously described landscape interpretation method, I first examine the landscape in a general way, then in detail, during which I will summarize the information gained from the scenery and the conclusions derived from it. During the examination we can better understand the relationships between the components of the landscape and their composition.

The basic boundary of the drawing and also of the landscape is the horizon where the sky (blue) and the earth's surface (green) meet. The ever-changing sky is an indispensable and defining element of the landscape (Figure 3). Changing light conditions and colour effects due to the times of day, seasons and weather conditions have different effects on the observer. The line of the horizon is also the primary vertical dividing point of the landscape. The relief – in this case the rolling hills – divides the landscape rather in space, and it helps to interpret close and distant points and to understand their position in relation to each other. The relief usually consists of clearly distinguishable lines that are easy to

follow, giving space and basically defining the spatial position and potentials of the built-on elements, surface water and vegetation.

The hydrography cannot be explicitly separated from the relief, as they are in constant interaction with each other: the relief determines the situation of the surface waters, but at the same time, waters are continuously shaping their surroundings, transforming the relief. The typical impervious layer near the river Mura is clay, as a result where smaller or larger depressions are formed in the ground, ponds and wetlands can occur periodically – in case of high groundwater or a heavy rainfall - or even permanently (Figure 4). Due to the different elevations of the relief, streams flow from the higher terrains into the valleys underneath, which can be dammed either by animals (beavers) or by human-built barrages, that can also create still waters. Like the vascular system meshing through our body, watercourses also enwreathe the landscape, connect its elements, transport from one place to another, so that they give life. In other words, water is the blood of the landscape. The most significant watercourse in the region is the river Mura, where on its Hungarian section the natural processes that are



Figure 4 Different appearances of water and habitats in Lispeszentadorján (1–4) Maróc (5) and Bázakerettye (6) Source: author

shaping the landscape – migration of the river bed, evolving oxbow lakes and fillings, changes in floodplain vegetation – are still taking place today (BFNPI, 2019).

Diverse land use and vegetation of various shapes, colours and textures contribute to the further division of the relief, creating a manifold landscape structure. Vegetation can also be seen as the clothing of the landscape, which changes according to the seasons, sometimes showing more, sometimes less of the details of the landscape (Figure 5). Compared to the topographic and hydrographic changes described earlier, vegetation changes much more dynamically every year, depending on the climatic conditions. The "dark-dense" and "lightempty" spots are clearly separated from each other in the landscape, which can be observed in the quantitative distribution and spatial location of forests, as well as mowing fields, meadows, pastures and arable fields. The distant forest belts have a solid texture, while the closer forest areas are already featured by more diverse pattern and formal structure. The silhouette of the clumps of trees can be interpreted by the outlines. In case of trees standing at close quarters, even the branch system and foliage are clearly visible. In addition to determining the

land use, the colours and textures also help distinguish arboreal and herbaceous vegetation.

Man-made structures are the smallest in size, yet they are significant and defining elements of the landscape. The church tower emerging behind the foliage, the mass of residential buildings and the tombstones of the graveyard have specific colour, material and geometry. The built elements appear in the picture as the centre of gravity, which illustrate the proportions of nearness and distance, and at the same time stand out from the landscape as eye-catching orientation points. Through their presence, they subtly yet clearly send a message to hikers that they are heading towards an inhabited area and that the unfolding landscape bears traces of human hands. Therefore, it is particularly important that, by finding the right proportions, the built elements fit harmoniously into their environment, complementing the landscape and not competing with it. Otherwise, there is a chance of the landscape showing a falsely transformed face for those who come to the Mura region especially for its traditionally developed natural landscape.



Figure 5 The situation of the vegetation and the built environment in a freehand drawing of Mura region landscape Source: author

As the first step of visual cognition, the natural and built elements of the landscape have been presented. At the next level of the research, I examine the details, during which I focus on the group of arboreal vegetation of the natural elements, and the graveyards of the built elements. The role of trees in shaping the landscape is very diverse. Their presence or even their absence is of significance for us: they form a boundary and separate, connect and lead on, highlight, complement or cover. Seen at the scale of the landscape, based on their appearance, trees can basically stand en masse, in clumps or alone. Looking at the landscape, we can meet all three types primarily in a transitional or mixed form, nevertheless, each form of appearance has a specific role in the landscape. Standing en masse, the trees divide the structure of the landscape, form boundaries and spatial walls, therefore, visually appearing as continuous dark formations, they are associated with the sense of solidity. These solid units can be interpreted as a complement to the "void" of sunny meadows, mowing fields and pastures. If the width is sufficient, they can be supplemented with shrubs and undergrowth. The most well-known examples are forest patches and forest belts protecting fields, which

provide ecological corridors between different habitats as an active information channel for the living being (Figure 6).

The clumps of trees are of various morphologies and sizes, mostly they stand out from the herbaceous vegetation as playful patches, enlivening the landscape and guiding the viewer's gaze. Representatives of tree clumps are multi-trunk trees and scrubs (Prunus avium, Pyrus pyraster, Corylus avellana), which are sometimes accompanied by some shrubs (Crataegus sp., Prunus spinosa, Rosa canina). These isolated groups of plants are small oases and important habitats: their loose shade provides shelter in the summer heat, and their remaining fruits serve as food for the winter. Vegetation belts running along streams and girdling around wetlands consist of trees standing in clumps, that have a natural appearance. With their covering effect, in the riverside setting they tend to offset the vision of linear elements and help them fit into the environment. Planted by humans, they can be observed in roadside afforestation and orchards. In case of a route running through a cultural landscape, their rhythmic repetition rather highlights the linearity of the road compared to the agricultural fields. Woody pastures

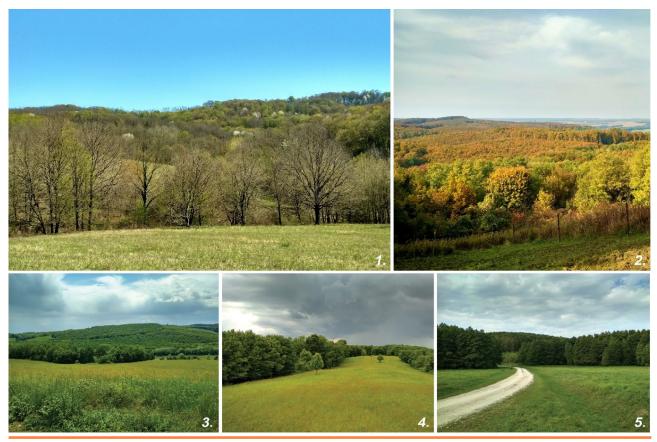


Figure 6 Trees standing en masse in the landscape in Lispeszentadorján (1; 3–4) Oltárc (2) and Kányavár (5) Source: author

and groves are between natural and artificial formation, where the landscape is more subtly shaped by the use of the landscape, albeit under the influence of human activity (Figure 7).

Due to their characteristic appearance, solitary trees are indispensable dividing, orientation and viewing points of the landscape. Thanks to the open space, the fully developed branch system characteristic of the given species and the decorative value can be truly observed by these single trees (Figure 8). With their ability to change, they always enrich their surroundings near and far with a different character, and make it unique. Over time, some of these trees become majestic giants, wooden methuselahs.

Graveyards are undoubtedly connected to human existence, but at the same time, in many cases, they are embedded in the natural and landscape environment. Thanks to this dual quality, graveyards are stations that, besides serving as places of burial, they also preserve the imprints of previous generations. A graveyard is an indispensable source of information in the life of a settlement in terms of traditions, materials, forms, and plant use. The experience gained during the research shows that, despite the small population and small size

of the settlements, there are usually two graveyards within a village. The number of graveyards can be traced back to two reasons: one, the age of the establishment, by which we can define old and new graveyards, two, the fusion of neighbouring villages, by which we can speak of graveyards named after parts of the settlement.

A comparison of the old and new graveyards reveals both similarities and differences. A common feature is the large crucifix at the entrance or in the centre of the graveyard with the figures of the crucified Christ and the praying Virgin Mary. There is also a similarity in the resting places for contemplation and settling, as well as in the decoration of the graves with flowering plants (Figure 9). The tombstones of successive generations can be distinguished in both graveyards, based on the differences in the use of plants, the shapes, and materials of the graves.

In most cases, the ancient graveyards are located at a higher point of the landscape surrounding the settlement, at the edge of its tissue. Thanks to their elevated location, they can be seen from afar, so that the settlement and the surrounding natural landscape unfold from a great distance. The hilltop location of the ancient graveyards can most likely be explained by religious and



Figure 7 Clumps of trees in the landscape in Lispeszentadorján (1) Oltárc (2; 5) and Kányavár (3–4) Source: author



Figure 8 Solitary trees in the landscape in Kányavár (1; 3) Oltárc (2; 6) Lispeszentadorján (4) and Maróc (5) (by Source: by the author



Figure 9 Common features of the old and new graveyards: tomb with flowering plants, shady resting place and central crucifix in Lispeszentadorján (1; 3; 5) Bázakerettye (2) Zajk (4) and Maróc (6–7) Source: author

physical reasons: the natural elevation is the meeting point of heaven and earth, which can be interpreted as a place of closer relationship to God; on the other hand, even during a possible inundation or an intense flood the graves remain untroubled. The relief, as a given, also influences the location of the graves, as a result the ordination of the graves is somewhat irregular yet clear-cut. Ornamental and fruit trees standing alone or in clumps are common in the graveyard, among which we can find even species peculiar to the landscape. Therefore ancient graveyards also have a kind of stock and gene preservation role (Molnár et. al, 2018). The verge of the graveyard is bordered by a row of trees or shrubbery, or perhaps a forest belt. Due to their orderly structure, these gardens are subtly different from the natural landscape, yet because of their smaller scale, they can also fit into their surroundings (Figure 10).

New graveyards are typically located in flat areas of the settlement that have already been landscaped for this purpose, and they are physically more connected to the village. The background of the location change can presumably be the easier accessibility and the artificially

arranged hydrographic conditions. The more favourable terrains ensure more space, therefore the layout of the graveyard is also larger, which offers the opportunity to create larger graves and honorary monuments. In these gardens, the architectural design dominates, orderliness is strongly manifested in the grid of the tombstones, in the regular internal paths, in the rows of trees planted along them and in the design of the built elements (fences, gates). Instead of the small, carved crosses made of quarry stone and wood used in old graveyards, there are mostly artificial stone tombs of more grandiose sizes and shapes (Figure 11).

The presentation of landscape value surveys is supported by map graphics. According to the technical possibilities of representation, the bird's-eye views of the individual settlements and the short description of the landscape values help to present, access and place them on our mental maps. The description with maps can also help to define the development goals of the settlements, providing a basis to prepare a tourism strategy (Figure 12).

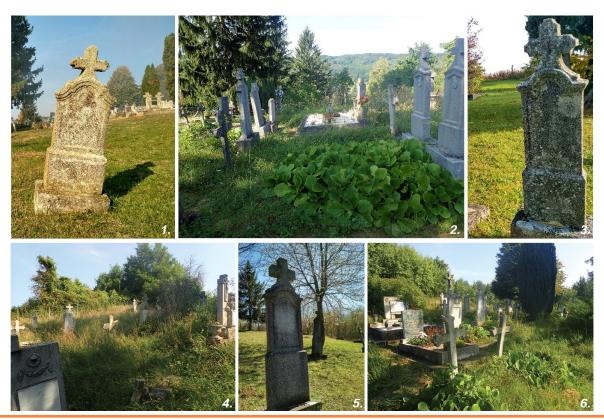


Figure 10 Characteristic features of an old graveyard: smaller tombstones in freer order in Rigyác (1; 3) Maróc (2; 4; 6) and Lispeszentadorján (5) Source: author



Figure 11 Characteristic features of a new graveyard: large-sized tombstones in architectonical order in Zajk (1) Lispeszentadorján (2; 5) Maróc (3) and Oltárc (4) Source: by the author



Figure 12 Map and short descriptions of unique landscape values in Oltárc Source: author

4 Conclusions

Understanding the concept of landscape and recognizing its values is not an easy task for a person used to urban conditions, therefore the purpose of my research was to prepare a landscape study that focuses on visual communication that is easier to understand, besides written description. Starting from further away, the general components of the landscape were first defined, then detailed and categorized by analysing the landscape drawings made from the Mura region. After an overview of the elements of the landscape, in terms of natural elements the appearance forms of the arboreal vegetation were presented, and from the built elements details of the old and new graveyards were described. The written and mapped descriptions of landscape values from the examined settlements serve to recognize, preserve and develop the existing values, providing a basis to prepare a tourism strategy for the settlements of the underdeveloped regions. Thanks to the graphic form of the study, it can be suitable for making groups of younger age susceptible to landscape values as a tool for environmental education. Since the foundation of the correct value system already begins in childhood, for which visuality offers a way of approach, that is more necessary than we think in our superficial, fast-paced world.

Acknowledgments

The author would like to thank Anna Takács for her assistance in translation.

References

Bauer, L., & Weinitschke, H. (1976). *Landschaftspflege und Naturschutz*. Budapest: Mezőgazda.

BFNPI. (2019). *Mura-menti Tájvédelmi Körzet*. Letöltés dátuma: 2023. május 22., forrás: Balaton-felvidéki Nemzeti Park: https://www.bfnp.hu/hu/tajvedelmi-korzetekrol/mura-menti-tajvedelmi-korzet-hu

Csemez, A. (1996). *Tájtervezés-tájrendezés*. Budapest: Mezőgazda.

Csemez, A. (2001). *A tájképi potenciál és a tájjelleg meghatározása* (doktori értekezés). Budapest: Magyar Tudományos Akadémia.

Jámbor, I., & Szilágyi, K. (1995). Környezetértékelés: Táj és település. Veszprém: Veszprémi Egyetem.

Molnár V., A., Löki, V., Csathó, A., Mészáros, A., Schmotzer, A., Takács, A., ...& Urgyán, R. (2018). *Élet a halál után*. Debreceni Egyetem TTK Növénytani Tanszék: Alföldi Nyomda.

Teveli-Horváth, D., & Varga, V. (2023). Housing preferences of the Hungarian creative youth and its changes in the light of COVID-19 – results of a longitudinal focus group study. *Tér és Társadalom*, 37(1). https://doi.org/10.17649/TET.37.1.3414

Wwf, A., & Wwf, A. (2019). Protecting rivers across borders. Interreg Danube Transnational Programme-coop MDD, 17.

