

Integration of outdoor learning activities through public participation in landscape character assessment

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1. Abstract

In Hungary, as part of the national level landscape character research, landscape character assessment was prepared at the study area level between 2019 and 2021. One of the study areas was the Tápió-region. This study area is located in the Central Hungary region, Pest County, and covers a total of 9 settlements. During the analysis of the landscape characteristics, it was possible to address the stakeholders, so a great emphasis was given to the involvement of the locals. The main research : How locals perceive the character of the landscape? Stakeholders were involved in two ways, one was the online questionnaire and the other was the organization of workshops. As a result of the public participation, the online questionnaire was completed by 42 people, and a total of 144 people participated in personal and online workshops. Throughout the research, four in-person workshops were organized, as well as an additional online workshop to present the results. Each workshop had a different theme, and each meeting involved different stakeholder groups (local primary school students, local camp participants, residents and domestic tourists, NGO representatives). The methods used included small group guided conversations, descriptions of individual opinions, community mapping, interactive landscaping board games, grouping of study area photographs, asking for feedback on previous results, and a stand-alone guided conversation. Based on the results of small group and stand-alone guided conversations, it can be concluded that the locals also perceive the difference between the previously identified landscape character units: differences are primarily seen in the services and technical infrastructure. The most important values of the area according to the locals was collected: watercourses and lakes, reeds and wetlands, semi-natural grasslands, forests, protected natural areas, educational trails. Among the necessary changes in the area, the participants highlighted the conservation and restoration of natural values, restoration of watercourses, and the development of hiking trails in the Tápió-region. With the help of the interactive board game, we were also able to get answers in a playful way about what land use changes would be needed according to the locals. Based on the experience of the workshops organized during the research, it can be stated that the locals are happy to share their opinions on landscape-related issues in their own environment, even when addressed in outdoor locations.

2. Introduction

Under the leadership of the Hungarian Ministry of Agriculture, a comprehensive national research project was launched in 2016 entitled “Strategic Studies Establishing the Long-Term Protection and Development of Natural Values of Community Importance and the Implementation of the EU Biodiversity Strategy 2020 Objectives in Hungary”. One of the pillars of this was the research project “Methodological research and planning-methodological development for the establishment of a landscape character-based landscape type system in Hungary”.

In the framework of the research, in addition to the national landscape character analysis, the Ormos Imre Foundation also carried out local level surveys in two sample areas selected by the participating researchers, during which we were the first in Hungary to identify and characterize local landscape character units with the involvement of local communities. One of the study areas of local research was the Tápió region of Central Hungary, for which a comprehensive research report was prepared (Boromisza 2020a).

The general aim of the study area research is to increase the local landscape identity and to develop a methodology and guide that can be used in further planning process in order to protect, manage and plan landscapes. As a result of the research, the knowledge and database gained about the landscape will be significantly expanded. The specific goal of the research is to create a database of landscape character units in the sample areas, which helps to identify the condition of the landscapes and the processes, values and threats. To establish this, we conducted an expert landscape survey and involved the local communities extensively in a number of ways, integrating and applying the methods traditionally used for outdoor learning activities. One of the important purposes of involving locals was to gather information about the views of locals on the landscape (e.g. attachment, values, problems, perceived changes, vision) and to get feedback on the partial results of the research presented. This article describes the method and results of this workflow.

3. Background and Literature Review

The roots of character-based assessment of landscapes go back to the 1990s, when landscape analysis covering England and Scotland began (Countryside Commission 1987). The European Landscape Convention, adopted in Florence in 2000, made the character of the landscape a central one by defining the concept of landscape: "landscape is an area perceived by humans whose nature is shaped by natural and anthropogenic influences and interactions". The landscape character does not focus on the different characteristics of the landscape drivers, but on their ensemble, connection, pattern and composition of the landscape, and represents the principle of the uniqueness and distinctiveness of the landscapes (Konkoly-Gyúró et al. 2021; National Landscape Strategy 2020; Swanwick, C. et al. 2002). The Landscape Convention obliges signatory countries to inventory and assess landscapes covering the entire territory of the countries, which means delimiting landscapes by character and presenting landscape features. The first publication in the European Landscape Character Assessment Initiative (ELCAI) project (Wascher, D. M. 2005) provided comprehensive coverage of landscape (character) assessments following a review of a number of European examples.

In connection with the involvement / participation of local stakeholders / communities, the methodological guide on the topic (Balázs et al. 2020) and the research antecedents of the Department of Landscape Protection and Landscape Restoration, Hungarian University of Agriculture and Applied Sciences, their experience in environmental education and science communication projects (Boromisza et al. 2020b, Cai-Boromisza 2020, Jákli-Boromisza 2017).

4. Method and Data

The study area is located in Central-Europe, Hungary, in the Central Hungarian region, in Pest county and covers a total of 9 settlements, which are: Bénye, Farnos, Gomba, Káva, Pánd, Tápióbecske, Tápióság, Tápiószentmárton, Úri. The sample area covers 336.99 km². A total of 24,162 people live in the settlements. The largest population is Tápiószentmárton (5245 people),

the smallest is Káva (683 people). According to CORINE's land cover database (2018), arable land covers more than half (57%) of the study area. Deciduous forests and transitional forest-shrub areas together account for almost 20% of the study area. Pastures are found in almost 6% and natural grasslands in another 3% of the area. Urban areas cover almost 5% of the study area.

As a first step in involving local people, local actors and local stakeholders in each sample area were mapped and identified in connection with the following areas: agriculture, forestry, water management, hunting, nature conservation and environmental protection, education, tourism, spatial planning and development, municipalities, NGOs. To involve, we used two basic methods: an online questionnaire and personal on-site interactive workshops.

The main research question is How locals perceive the character of the landscape? For each involvement method, we sought answers to the following questions from respondents:

- the participants personal relationship to the landscape
- the character of the landscape, the values of the given landscape
- landscape problems, conflicts, threats
- changes in the landscape
- vision and objectives related to the landscape

The online questionnaire was created using the free Google Forms questionnaire application. In the case of the Tápió region, the questionnaire was divided into two landscape units (Monor-Irsai hills, Tápió valley plain) in order to find out the differences between the individual units of the study areas. It took 1.5 months to complete the questionnaire.

A workshop is an event where we think, brainstorm, plan for a purpose with the help of community planning methods. During the research, four workshops were organized for each study area in 2020. The purpose of their was 1.) on the one hand, to inform the locals about the purpose and the participatory process; 2.) on the other hand, getting to know the opinions of the locals about the landscape, collecting information and points of view related to the landscape; 3.) thirdly, requesting feedback on the partial results of the research.

The range of stakeholders / local communities addressed varied from study area to workshop. Different topics were used in each workshop to address a different focus topic at each meeting. Based on the experiences and results of the first workshops, the topics of the later workshops could be modified. The workshops were organized in a pre-arranged time frame, in each case under the guidance of a moderator.

In the case of the Tápió region workshops, various stakeholder groups were contacted for some workshops, which typically represented different age groups:

- local primary school students (ages 7-10)
- participants in a bird ringing camp (national park staff, NGOs, students - typically 20-29 years old)
- locals and ecotourists (typically 30-44 years old)
- representatives of non-governmental organizations (typically 45-64 years old)

Depending on the current topics, issues (e.g. landscape values) and the target group, the following involvement methods were used during the workshops:

- free association drawing
- purpose and method presentation
- small group guided conversation

- recording of location-related information on a large-scale printed aerial images (community mapping)
- small group guided conversation about the values, problems, changes and character of the landscape,
- interactive landscaping board game
- grouping photos of the study area units by their landscape character
- requesting feedback on previous results (previous workshops, questionnaires)

5. Results

The online questionnaire was finished by 42 local respondents. In the case of the most important elements and features that determine the landscape character, the respondents highlighted different elements and features in the case of the two previously identified landscape character areas of the study area. In the case of the Monor – Irsai hills, most respondents identified forests as very important elements of the landscape (followed by terrain forms, watercourses and grasslands). In the case of the Plain along the Tápió Valley, on the other hand, most respondents identified watercourses, reeds, wetlands, and grasslands as very important landscape features.

In the case of landscape elements that are not important for the landscape character, the answers were less uniform. In the case of the Monor-Irsai hills, it can be emphasized that the majority of respondents agreed that arable lands in this region are less dominant and important.

According to the respondents to the questionnaire, the main values of the Tápió region are watercourses, forests, reeds, wetlands, semi-natural grasslands, and protected natural areas (Fig.1.). The majority also highlighted educational trails and lakes as values. Fewest of the respondents (less than a quarter of the respondents) consider statues and monuments, wine cellars, vineyards, hillforts and loess walls to be the main values of the area. The cultural heritage values of the region - such as churches, chapels, castles and mansions - were highlighted by only almost a third of the respondents. Based on these, it can be stated that the main values of the Tápió region are considered to be natural values by the people associated with it.

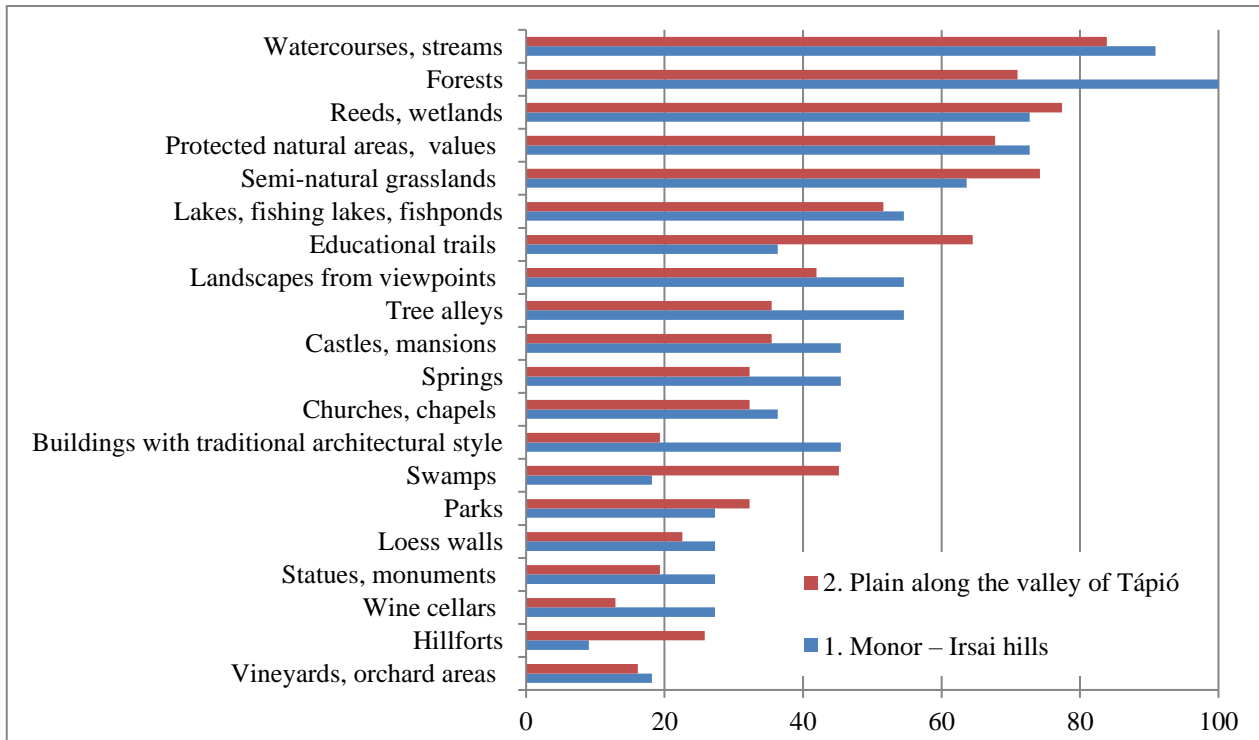


Figure 1. The main values in the landscape according to the respondents

The 4 workshops were visited by 144 people altogether. The 1st workshop was organized in 4 local primary schools, with the participation of 102 pupils. Information was gain in the topics of favorite and characteristics sites. The buildings that currently dominate them, such as their home and school, have appeared in large numbers on their drawings, but the natural values of the given settlement have generally been illustrated more times. This suggests that outdoor green spaces play an important role in the lives of young people in the Tápió region. The 2nd workshop was organized for the representatives of local NGO's (10 participants). Information was collected on the values, problems, landscape changes and its locations, mostly relying ont he community mapping method (Fig 2.).



Figure 2. The community mapping method allows us to get information ont he spatial aspects of landscape values, problems perceived by locals

The 3rd workshop was took place in a bird ringing nature conservation camp, with 12 local participants. The focus topics were landscape values, problems, changes and visions / expectations of the region’s future. The 4th workshop was organized at a public swimming pool, participating with 20 visitors, mostly applying an interactive board game (Fig 3.). The main goal was to involve the previously underrepresented middle-aged locals, focusing on the visions / expectations of the region’s future, and on identification of the landscape units with similar characteristics.

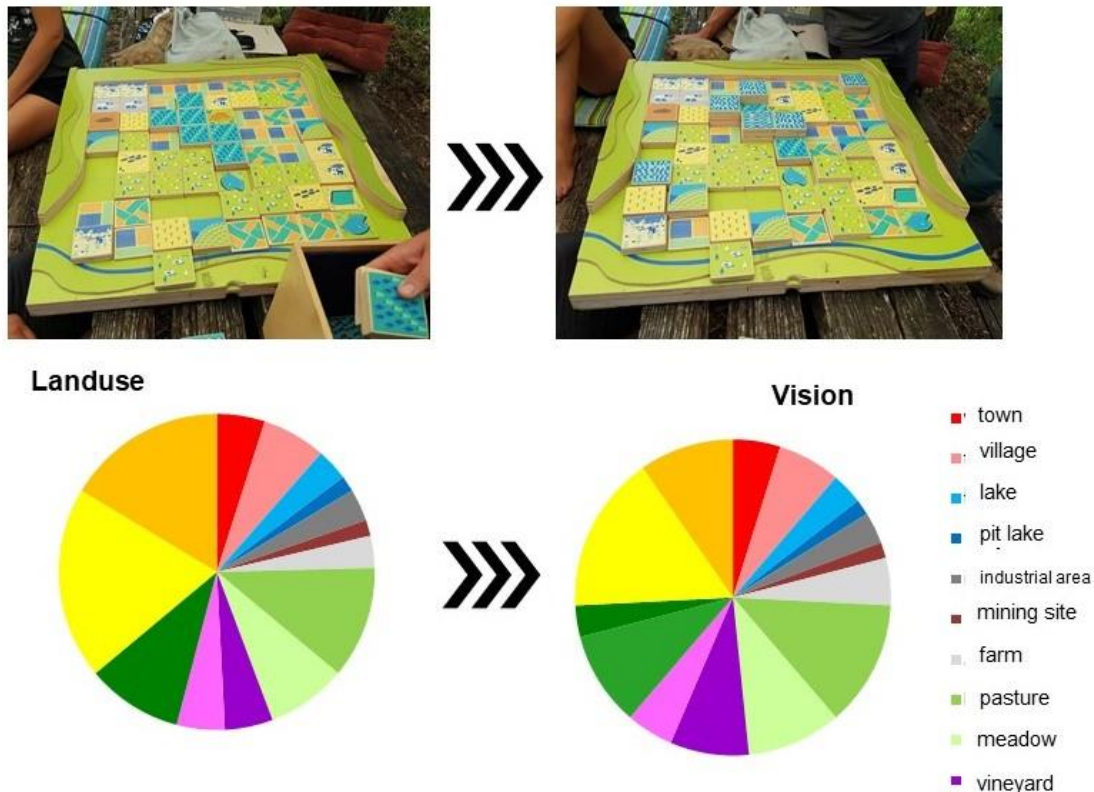


Figure 3. With the interactive landscaping board game it is possible to assess to landscape change, the expected future landscape pattern etc. perceived by local communities

6. Discussion and Conclusion

Involving locals has not only added value to sample research as a source of information. In particular, the results and experiences of the workshops show how much the picture of society about the landscape - its functioning, condition, values, problems - differs from the expert opinion, and how much difference there is between social knowledge and scientific knowledge, where there are big differences.

An example of the above is that the delimitation of landscape units, the interpretation of units, and the formulation of territorial differences appear in the minds of the population from a completely different perspective, thus providing less input during the creation of study area / local types from national landscape character types. Locals also perceive the difference between the previously identified landscape character units, but the differences are primarily seen in the services and

technical infrastructure of some settlements (built in areas), changes in natural features at landscape boundaries, and differences in the landscape are less recognized based on the results of the present research. The popularity and awareness of natural values is very favorable and differs significantly from the results of previous research in other sample areas, partly with a similar age group). The results of the involvement of locals are very useful in formulating the objectives, future visions for the landscape.

The various methods used (e.g. free association drawing, small group guided conversation, community mapping, interactive board game, grouping of study area photographs) are not only suitable for assessing people's thoughts, knowledge and emotions about the landscape, but also for providing an experiential, interactive, perceptual program, can also be seen as an educational program. The reverse is also true: in addition to scientific communication, interactive games, playful tasks and programs can also be suitable for examining the image of society / local communities of the landscape. The above findings also point to further research tasks in the field of analysing the image of communities of the landscape. Possible future research questions include:

- From what source does people gain, receive information about landscape values? What is the role of ecotourism in this?
- Where does the population perceive the boundaries of the landscape?
- What is the communities's knowledge of landscape change and its drivers?
- What is the social perception of semi natural / restored habitats?

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