

REIMAGINING PERI-URBAN LANDSCAPE: SMALL-SCALE EPHEMERAL INTERVENTIONS FOR SUSTAINABLE REGIONAL DEVELOPMENT

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<https://doi.org/10.11118/978-80-7701-025-2/0244>

Abstract

Peri-urban landscapes are dynamic zones where urban and rural elements interact, offering unique challenges and opportunities for sustainable development. This research explores how small-scale, ephemeral interventions can shape these landscapes to foster cultural continuity, recreation, and community engagement. Using a multidisciplinary approach, it examines how temporary architectural elements can enhance spatial identity, restore functional zones, and promote social inclusivity. Focusing on the Liptov region and the fluctuating water levels of the Liptovská Mara reservoir, the study investigates spatial, historical, and environmental contexts influencing peri-urban interventions. It analyses the legacy of traditional wooden architecture and its potential reinterpretation in contemporary design. By assessing transport networks, visual composition, and user activities, the research identifies key parameters for integrating small-scale interventions that preserve cultural heritage while meeting modern spatial needs. Findings suggest ephemeral structures can catalyse sustainable regional development, balancing ecological sensitivity with functional adaptability. These interventions minimise environmental impact while boosting local engagement, tourism, and recreation. The study contributes to adaptive landscape strategies, proposing a framework for integrating small-scale architectural solutions in evolving peri-urban environments. Ultimately, it advocates for ephemeral interventions as responsive, low-impact solutions that redefine the relationship between people, landscape, and the built environment in transitional spaces.

Key words: peri-urban landscape, regional planning, temporary urbanism, small-scale interventions, recreation

Introduction

Peri-urban landscapes form dynamic interfaces where urban growth meets rural heritage, creating transitional environments full of both spatial ambiguity and latent potential. These areas are often perceived as peripheral or undefined zones—so-called “white spaces”—that lack strong spatial identity or clear function (Čibík, 2024). Yet their very vagueness presents opportunities for innovation. Through ephemeral, small-scale interventions, these in-between spaces can be transformed into catalysts for social interaction, cultural continuity, and ecological awareness. This research focuses on the Liptov region of Slovakia, particularly the fluctuating landscapes around Liptovská Mara reservoir, to explore how ephemeral architecture, inspired by vernacular heritage, can activate overlooked environments. The work introduces the concept of reciprocal architecture, wherein temporary installations both draw from and enrich the existing landscape. The interventions respond to contextual qualities—views, openness, materiality, and terrain—while simultaneously revitalizing their host spaces through new functions and meanings. Referencing the legacy of traditional wooden architecture in Liptov and the memory of flooded villages, the research proposes a contemporary reinterpretation of these forms as cultural reminiscence. These ephemeral designs are not merely aesthetic gestures but act as spatial narrators, capable of restoring the identity of forgotten territories. As Kuczman, Bechera, and Tóth (2022) point out, the spatial character of rural corridors and vegetation patterns can strongly influence the perception and usability of a place. Similarly, Čibík, Kuczman, and Bechera (2022) advocate for adaptive reuse of agricultural landscapes in ways that echo local identity while embracing eco-social values. By examining compositional axes, user activities, and environmental characteristics, this work argues for a sensitive and strategic integration of small-scale architectural objects that embody memory while offering renewed function (Kuczman et al., 2024). Ultimately, the goal is to redefine the role of ephemeral interventions as tools for sustainable regional development, capable of enhancing spatial identity, cultural awareness, and environmental harmony in peri-urban territories.

Materials and methods

The methodology of this research follows an interdisciplinary framework rooted in landscape architecture, environmental design, and heritage studies. The design process and analytical tools were informed by selected case studies and supported by contextual mapping, field observation, and

comparative analysis. The Liptovská Mara region served as the main research area (Fig. 1). It represents a complex landscape shaped by anthropogenic change, seasonal water fluctuations, and the loss of built heritage through the flooding of entire villages. Materials for the conceptual and physical designs were derived primarily from locally available natural resources, especially wood, which links the interventions directly to the vernacular typology of the area.

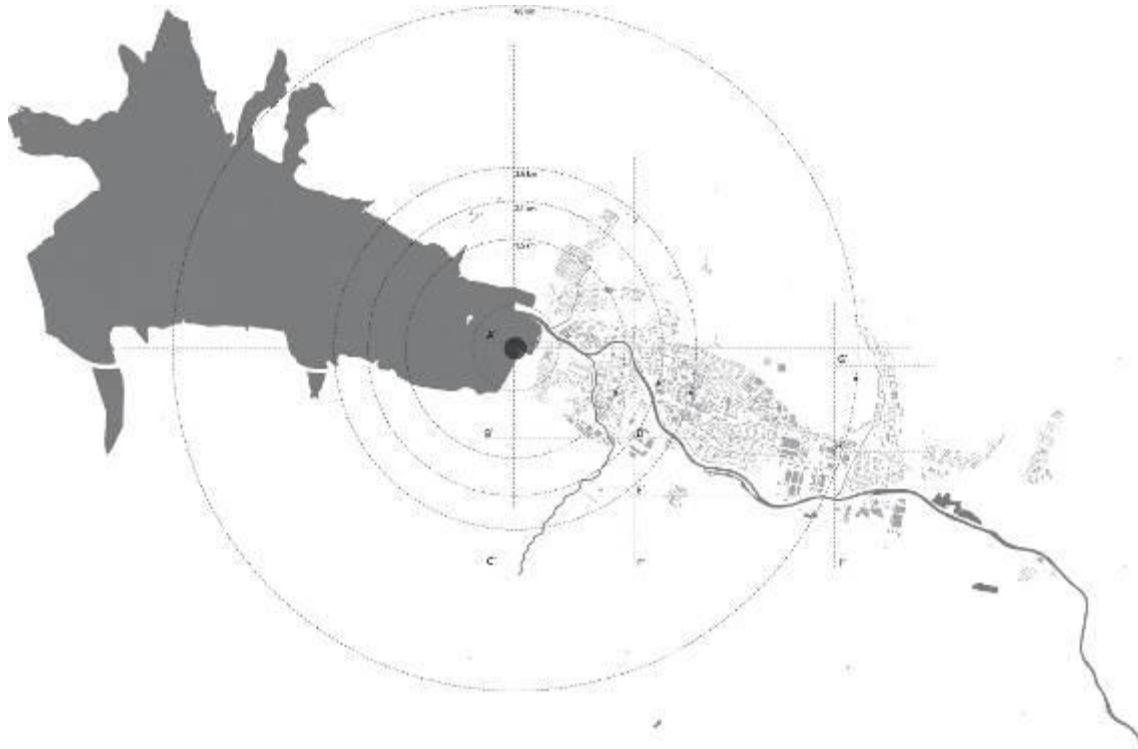


Fig. 1: The area of interest (marked with a black dot on the map) is located between two types of landscape in the transit zone of the peri-urban area. Source: Žuffová and Čibík, 2024.

Analyses and methods used:

- Landscape identity analysis: historical development, visual character, and regional typology.
- Compositional and functional mapping: existing axes, open and closed spaces, and sightlines.
- Environmental conditions: changes in water level (Fig. 2), vegetation structures, and land use.
- Activity zones and transport networks: identification of nodes for potential user interaction.

Ephemeral interventions were modelled digitally using parametric tools, and their placement was tested in simulation for spatial visibility and impact. The theoretical base also reflects the land art and site-specific installation traditions, with attention to public interaction and landscape immersion. This design-research process emphasizes context-responsive creativity, aiming to produce low-impact structures that integrate with their environment while stimulating new ways of engaging with the landscape. The resulting framework can be adapted to other peri-urban territories facing similar challenges of identity, function, and transition.

Results

The selected intervention site is located near Liptovský Mikuláš, in an area functioning as an informal beach along the Liptovská Mara reservoir. Despite its recreational use, this space remains relatively hidden—situated behind a railway line, it is primarily known and frequented by local residents. This separation creates a subtle sense of detachment, contributing to its unique character and identity as a quiet, semi-private natural retreat. While less visible to tourists or casual visitors, this spatial obscurity can paradoxically enhance its appeal. As people are increasingly drawn to discovering places that feel untouched or “secret,” such hidden areas hold the potential to become experiential landscapes. Their informal and intimate atmosphere encourages individual exploration and deeper engagement, especially when enriched by thoughtful spatial interventions.

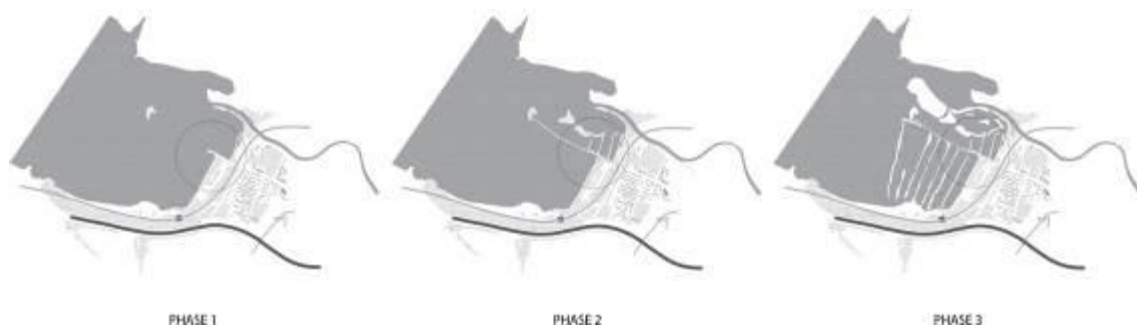


Fig. 2: This diagram presents the variability of the water level of the Liptovská Mara dam, which is a complex phenomenon that includes several factors and processes. One of the main factors influencing this variability is the precipitation regime in the area. The intensity and distribution of precipitation significantly affects the water inflow into the reservoir. Source: Žuffová and Čibík, 2024.



Fig. 3: Based on this spatial reading, a wooden installation was proposed for this location to elevate its identity and public potential. The design draws inspiration from the traditional log cabins of the Liptov region—vernacular structures that reflect centuries of adaptation to the local environment. These wooden houses, with their iconic gabled roofs and decorative details, represent a significant layer of regional architectural heritage shaped by natural, climatic, and cultural conditions. Source: Žuffová and Čibík, 2024.

In the proposed intervention, elements typical of Liptov's wooden architecture (Fig. 3) were reinterpreted through contemporary design language. The construction system references traditional wooden frameworks combined with wooden shingles or thatch roofing, while maintaining sloped, overhanging rooflines that once served practical and symbolic functions. Decorative wooden gables (Fig. 4)—often adorned with carvings or painted motifs—are reflected in the detailing of the new structure to retain a cultural and visual link to the past.

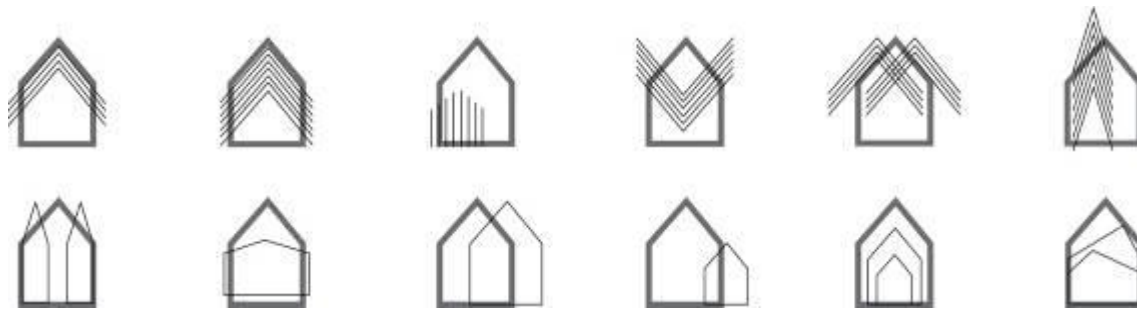


Fig. 4: The inspiration for the installation was the gable of a house in village Likavka, which is characterized by a unique decoration that is not found anywhere else in Slovakia. Specifically, elements of the gable were used, which was characterized by ornate crossed and shaped cladding. Source: Žuffová and Čibík, 2024.

This reimagined installation not only enhances the sensory and symbolic value of the site but also transforms it from an undefined recreational edge into a landscape of memory and interaction. Through subtle architectural gestures, the intervention strengthens the identity of the site, fostering both social and cultural resonance while remaining respectful of its fragile ecological and visual context.



Fig. 5: One of the main aspects of the concept symbolizes the decay and losses associated with the historical transformation of the landscape that was submerged under the waters of Liptovská Mara reservoir. Each object represents an aspect of the past that was lost or transformed due to the construction of the reservoir. These objects are partially swallowed by time – they are symbols of the culture and lifestyle of the people who once inhabited this location. The wooden houses represent a symbol of the past, traditional heritage and connection with nature. Their disappearance and absorption by water evokes not only the physical disappearance of the structures, but also the loss of cultural heritage. Source: Žuffová and Čibík, 2024.



Fig. 6: Visualizations. Source: Žuffová and Čibík, 2024.

Conclusion

This research underscores the potential of small-scale ephemeral interventions to serve as catalysts for sustainable development in peri-urban landscapes. By engaging with the historical, cultural, and ecological narratives of transitional environments such as the Liptov region, these temporary

structures offer more than spatial enhancement—they become vessels of memory and tools for community engagement. The reinterpretation of vernacular architecture through contemporary design allows for a nuanced dialogue between past and present, reinforcing a sense of place and belonging. Ephemeral installations, while impermanent in form, leave lasting impressions by enriching public experience and stimulating awareness of regional identity. The proposed framework highlights the relevance of context-sensitive, low-impact design in fostering adaptive, inclusive, and resilient landscapes, pointing toward new pathways for landscape architectural practice in zones of transformation.

References

- Čibík, M., Kuczman, G. Bechera, D. (2022). Possibilities of Unused Rural Agricultural Land Renewal Using Strategies of Contemporary Eco-socialism. In Public recreation and landscape protection – with sense hand in hand?. Brno : Mendel University in Brno, pp. 229-232.
- Čibík, M. (2024). Mapping the In-Between – Approaches and Methods of Researching Urban Voids. In Public recreation and landscape protection – with sense hand in hand?. Brno : Mendel University in Brno, pp. 211-215.
- Kuczman, G., Bechera, D., Tóth, A. (2022). Evaluation of Non-Forest Woody Vegetation along Roads in the Rural Landscape. In Public recreation and landscape protection – with sense hand in hand?. Brno : Mendel University in Brno, pp. 110-113.
- Kuczman, G. et al. (2024). Roadside Vegetation Functions, Woody Plant Values, and Ecosystem Services in Rural Streetscapes: A Qualitative Study on Rural Settlements in Western Slovakia. In Land, 13, p. 272.

Acknowledgement

This paper is an outcome of the cultural and educational projects KEGA 038SPU-4/2024 U:INT - White spaces and ephemeral Urban INTerventions and KEGA 004SPU-4/2023 KR:EK:IN - Landscape Economy for an Innovative and Sustainable Interdisciplinary University Education in Slovakia.

Souhrn

Článek představuje výzkumný a návrhový přístup k příměstské krajině na příkladu oblasti Liptovské Mary. Zaměřuje se na analýzu proměnlivého území s důrazem na kulturní kontext, krajinnou identitu a paměť místa. Na základě terénního a historického výzkumu je navržena efemérní dřevěná instalace inspirovaná tradiční architekturou, která má symbolicky reagovat na zaniklou krajinnou stopu. Studie ukazuje potenciál malých zásahů pro obnovu významu opomíjených míst a navrhuje metodiku jejich citlivého začlenění do současného prostředí.

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