WHERE THE SQUARE MEETS THE STREAM: RE-DESIGNING THE RURAL SQUARE IN VEĽKÝ KÝR, SLOVAKIA

Attila Tóth

Institute of Landscape Architecture, Faculty of Horticulture and Landscape Engineering, Slovak University of Agriculture in Nitra, 949 76 Nitra, Slovakia

https://doi.org/10.11118/978-80-7509-904-4-0373

Abstract

The Saint John of Nepomuk Square is the main central open space in the historical core of the rural municipality Veľký Kýr (Western Slovakia, Nitra Region, Danube Lowland). The square has a direct spatial relation to Malá Nitra, a side stream of the river Nitra. The main historical and architectural landmark is the Roman-Catholic Church of the Exaltation of the Holy Cross. The square is framed by two cultural centres, the municipal office, a supermarket, and other buildings. An important element is the statute of Saint John of Nepomuk, on the main compositional axis of the square. The design challenge was to develop design ideas and solutions how to unify the square visually and spatially and make it greener, and more pedestrian friendly. Master students of landscape architecture elaborated four different design solutions with diverse ideas and proposals for enhancing this important open space and making it more sustainable, functioning, and attractive for residents and visitors. The designs were presented to local inhabitants, members of the municipal council and the mayor. The design process initiated discussions on the local level and the square renewal process. The main outcomes of the analytical and creative thinking process are presented in this paper.

Key words: Countryside, Green Infrastructure, Landscape Architecture, Open Space, Waterfront

Introduction

Green infrastructure (GI) is a cross-scale planning and design strategy that is being applied both in urban and rural spatial contexts (Tóth, 2022a), and is strongly integrated in contemporary landscape architectural approaches and practices (Fornal-Pienak and Bihuňová, 2022). GI is also referred to as part of the Fourth Nature concept (Čibik, Back Prochnov et al., 2020), which thanks to its multifunctionality (Halajová et al., 2016) can offer a wide range of ecosystem services (Schneider et al., 2020), such as mitigation of negative impacts of climate change (Rózová et al., 2020), recreational services (Tóth et al., 2014; Šinka et al., 2019) and an overall enhancement of the quality of living environment and well-being (Bihuňová et al., 2021). Furthermore, application of GI can boost a sustainable redevelopment of unused and/or abandoned urban landscapes (Back Prochnow and Čibik, 2022). When designing GI, it is important to reflect mutual relationships between people, spaces, and contemporary technologies (Čakovská et al., 2019).

GI as a strategy has a significant relevance to planning and designing rural landscapes, with a strong focus on transformation of central zones and historical centres (Čibik, Kuciaková, Štěpánková, 2020). It plays an important role in discovering potentials and local identities of rural spaces (Štěpánková and Bihuňová, 2012) linked to specific places, such as main squares and churchyards (Tóth, 2022b), waterfronts (Bihuňová et al. 2017; Čibik et al. 2019), as well as open landscapes with unique cultural (Tóth et al., 2021) and environmental features (Tóth et al., 2018). One of the important design attributes of rural landscapes is represented by woody plants that have a substantial spatial role in forming public open spaces (Bechera et al., 2022).

Planning and designing rural landscapes, their green and open spaces belong to the core competences of landscape architects. This competence is being acquired through several subjects, including design studios. Teaching landscape architecture in the form of design studios simulates a professional studio experience, where students can learn from existing problems, challenges, and assignments in the landscape, while getting into a mutual interaction with real stakeholders, such as municipality representatives and residents (Tóth, 2019). This form of teaching has a long-term tradition in landscape architecture education worldwide (Tóth et al., 2022). This paper presents the main outcomes of the analytical and creative thinking process of a design studio with the task to re-design the main square in the rural municipality of Veľký Kýr, near Nitra (Slovakia). The design challenge was to develop design ideas and solutions how to unify the square visually and spatially and make it greener, and more pedestrian friendly. Master students of landscape architecture elaborated four different design solutions with diverse ideas and proposals for enhancing this important open space and making it more sustainable, functioning, and attractive for residents and visitors.

Material and methods

The municipality of Veľký Kýr is situated in Nitra Region, in the Danube Lowland (SW Slovakia). The design assignment was to re-design the main square, which is an extended streetscape at the church, framed by important public amenities, in a direct spatial connection with the river. The main problems of the square include visual inconsistency, oversized impermeable hard surfaces, unorganised parking, unregulated transport and a lack of green spaces, pedestrian and cyclist corridors, and meeting places, see figure 1.



Fig. 1: Aerial view of the main square in Veľký Kýr (by Ľ. Moravčík, 2021).

Students worked individually in two main creative phases (analysis and design). They evaluated the historical development and current situation of the square, including its urban fabric, transport structure, architecture, functions and facilities, spatial composition, and visual features. The outcomes are four different design solutions for redesigning and improving the square, see figures 2, 3 and 4.

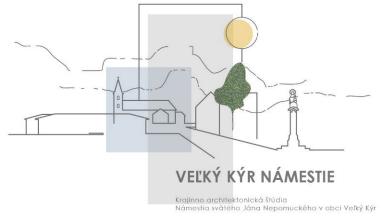


Fig. 2: The cover page of the design booklet designed by Anna Kulperová is an abstract stylisation of the main landmarks of the village centre.

Results

The four design solutions provided the municipality with a valuable input for starting the discussions on the revitalisation of the square at the local level. All design approaches addressed the main challenges and generated ideas on how to organise the transport and parking, how to bring more green spaces and permeable surfaces on the square and how to make the square generally more sustainable and attractive both for residents and visitors, see figures 3 and 4.

PARCOVACIF MISHA
**CHINICAL LIAN
**ERENACIF MISHA
**CHINICAL LIAN
**ERENACIF MISHA
**EREN

Fig. 3: Design No. 1 by Iveta Kojdová (left) and design No. 2 by Silvia Smoláriková (right).



Fig. 4: Design No. 3 by Anna Kulperová (left) and design No. 4 by Andrea Varga (right)

Discussion

All four authors integrated principles and elements of green infrastructure into their design solutions as suggested by Tóth (2022a) and Čibik and others (2020). Design studio as a method of project-based and research-led teaching has proved to be an effective way to address current challenges of open spaces through design and design teaching (Tóth, 2019; Čakovská et al., 2019), like a previous similar assignment in another rural municipality in the region (Tóth, 2022b).

Conclusion

Solutions generated within the design studio include a set of analyses and design ideas for the main central open space of the municipality Veľký Kýr. The outcomes of the design studio are currently being used as a basis and starting point for a long-term process of a comprehensive renewal and greening of the square by the municipal authority and local government.

References

Back Prochnow, S., Čibik, M. (2022). Unconventional Interventions on Redeveloping Unused Urban Landscapes Based on Social Interactions. In Acta Horticulturae et Regiotectuare, 25(1): 92-98. Bechera, D., Kuczman, G., Čibik, M. (2022). Evaluation of Woody Plants Located in Rural Public Park Areas. In Public Recreation and Landscape Protection - with Environment Hand in Hand..., pp. 120-123.

Bihuňová, M., Halajová, D., Tóth, A. (2017). Revitalization and Recreational Proposal of the Váh Riverbank. In Public Recreation and Landscape Protection - with Nature Hand in Hand? Conference Proceeding 2017, pp. 311-316.

Bihuňová, M., Supuka, J., Tóth, A., Šinka, K., Kuczman, G. (2021). Urban Green Areas and Woody Plant Composition: Dwelling Space Quality Factor in the Klokočina Housing Estate. Ekológia Bratislava, 40(1), pp. 80-90.

Čakovská, B., Bihuňová, M., Hansen, P., Marcheggiani, E., Galli, A. (2019). Methodological Approaches to reflect on the Relationships between People, Spaces, Technologies doi:10.1007/978-3-030-13417-4 20.

Čibik, M., Toth, A., Štěpánková, R. (2019). Integration of the Historical Watermill into a Sustainable Peri-Urban Riverfront Redesign. In Public Recreation and Landscape Protection - with Sense Hand in Hand..., pp. 212-216.

Čibik, M., Back Prochnow, S., Stiles, R., Štěpánková, R. (2020). Recognising Green Infrastructure as a Part of the Fourth Nature Concept Through University Campuses. In Acta Horticulturae et Regiotectuare, 23(2): 71-75.

Čibik, M., Kuciaková, B., Štěpánková, R. (2020). Transformation of the central zone respecting therural values: case study Kanianka, Slovakia. In Public recreation and landscape protection - withsense hand in hand? pp. 543-547.

Fornal-Pienak, B., Bihuňová, M. (2022). Evaluation of current landscape architecture approaches in chosen cities in Poland and Slovakia. In Acta Horticulturae et Regiotectuare, 25(1): 28-36.

Halajová, D., Bihuňová, M., Tóth, A., Vaculová, V. (2016). Memorial Landscapes & Outdoor Recreation: Evidence of Landscape Multifunctionality by the Case Study Jankov Vŕšok, Slovakia. In Public Recreation and Landscape Protection - with Nature Hand in Hand, 2016 Conference Proceedings, 105-113.

Rózová, Z., Supuka, J., Klein, J., Jasenka, M., Tóth, A., Štefl, L. (2020). Effect of Vegetation Structure on Urban Climate Mitigation. In Acta Horticulturae et Regiotectuare, 23(2): 60-65.

Schneider, J., Kalasová, Ž., Fialová, J. (2020). Ecosystem Services and Disservices of Watercourses and Water Areas. doi:10.1007/978-3-030-18363-9_14.

Šinka, K., Kuczman, G., Billiková, M., Supuka, J. (2019). Vegetation Structures of the City and their Use for Recreation Activities. In Public Recreation and Landscape Protection - with Sense Hand in Hand... Conference Proceeding, 466-472.

Stěpánková, R., Bihuňová, M. (2012). Hidden Potential of Osadné Village. In Public Recreation and Landscape Protection - Hand in Hand, 2012 Conference Proceeding, 159-165.

Tóth, A., Bihuňová, M., Halajová, D., Štepánková, R. (2014). Towards an Inclusive Approach to Recreation and Landscape Protection. In Public Recreation and Landscape Protection - with Man Hand in Hand? 2014 Conference Proceeding, 335-339.

Tóth, A., Bihuňová, M., Kuczman, G., Halajová, D. (2018). Designing Environmental Education Landscapes: Case Study Dropie, Slovakia. In Public Recreation and Landscape Protection - with Nature Hand in Hand? Conference Proceeding 2018, 97-102.

Tóth, A. (2019). Foreword. Jorgensen K. et al. (eds) Teaching Landscape: The Studio Experience, VI-VII. London, New York: Routledge. 260 p. ISBN 978-0-8153-8055-9.

Tóth, A., Bihunová, M., Halajová, D. (2021). Cultural and Natural Values of Small Sacral Objects and Sites in Everyday and Exceptional Slovak Landscapes. In Public Recreation and Landscape Protection - with Sense Hand in Hand! Conference Proceedings, 113-116.

Tóth, A. (2022a). Planning and Designing Green Infrastructure across Landscapes and Scales. In Acta Horticulturae et Regiotecturae, 25(1):1-7. doi: https://doi.org/10.2478/ahr-2022-0001.

Tóth, A. (2022b). Re-Designing a Rural Park Square and Churchyard in Poľný Kesov, Slovakia. In Public Recreation and Landscape Protection - with Environment Hand in Hand..., pp. 268-272.

Tóth, A., Supuka, J., Kristiánová, K., Vaněk, J., Salašová, A., Sitta, V. (2022). Landscape Architecture Education History in Slovakia and the Czech Republic. The Routledge Handbook of Landscape Architecture Education (pp. 233-242) doi:10.4324/9781003212645-25.

Acknowledgement

This paper is an outcome of the educational projects KEGA 004SPU-4/2023 KR:EK:IN - Landscape Economy for Innovative and Sustainable Interdisciplinary University Education in Slovakia, 2020-1-SK01-KA203-078379 LeLa - Learning Landscapes (Erasmus+); and research projects BIN SGS02_2021_013 RelmaGIne: Research and Implementation of Green Innovations in Landscape Architecture (Norway Grants), and ITMS 313011W112 SMARTFARM: Sustainable smart farming systems taking into account the future challenges (OP Integrated Infrastructure).

Souhrn

Článek prezentuje výstupy ateliérové výuky na Ústavu krajinné architektury FZKI SPU v Nitře, která dlouhodobě funguje jako efektivní nástroj pro iniciování a podporu udržitelného rozvoje venkovských sídel, jejich krajinných a sídelních prostor, včetně ploch veřejné a vyhrazené zeleně. Předmětem řešení byla obnova Náměstí svatého Jana Nepomuckého v obci Veľký Kýr na Slovensku. Výsledkem tvůrčího procesu jsou tematické analýzy a čtyři variantní ideová řešení obnovy náměstí. Výsledky jsou příkladem propojení vzdělávacího procesu s potřebami a požadavky venkovských sídel.

Contact:

doc. Ing. Attila Tóth, PhD. E-mail: attila.toth@uniag.sk

Open Access. This article is licensed under the terms of the Creative Commons Attribution 4.0 International License, CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/)

