

## EXPLORING THE RECREATIONAL POTENTIAL OF URBAN GAPS

***Tímea Žolobaničová, Miroslav Čibík, Roberta Štěpánková***

*Institute of Landscape Engineering, Faculty of Horticulture and Landscape Engineering, Slovak  
University of Agriculture, Tulipánová 7, 949 01 Nitra, Slovakia*

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### **Abstract**

In the process of continuous urbanization, planning errors sometimes appear. Urban structures are loosened, and places are created that do not have a clearly defined function. Empty spaces between two elements have several definitions and terms. One of them is vacant lot. Vacant lot, if they are not built up in a short period of time, they become "lost places" that are out of control and out of order and consequently create green chaos in the city. This brings a new diversity to the urban structure and the possibility of recreation near residential buildings. Vacant lots have become part of the city for many decades and many undeveloped plots of land create an oasis of greenery within the urban environment. People have started to visit such places spontaneously and use them for daily recreation. Often it is no longer possible to bring them back into the city system because people have become accustomed to the greenery in their surroundings and do not always want to exchange it for a new building or a parking lot. A gap full of greenery provides a lot of freedom for visitors to recreate, unlike a city park which is strictly regulated. In such places, animals and plants are beginning to appear in addition to people. Many plants and animals have a presence and a safe territory in the space until the gap is of interest to urban planners or developers. At that point, the chaos becomes an asset and conservation becomes a priority for its visitors. In city centres, there is an emergence of recreational potential that needs to be explored and redesigned through low-cost interventions in the urban environment. This reduces the costs of maintenance, and transport for recreation.

**Key words:** recreation, urban voids, terrain vague, gap-sites, vacant lot

### **Introduction**

Cities are ever-changing and dynamic, and one of their defining features is the existence of empty plots of land known as vacant lots. These parcels of land lack a clearly defined function and can often remain unutilized for prolonged periods. In urban settings, these lots may transform into abandoned spaces that are unregulated and disorganized, leading to an overgrowth of vegetation. However, they can also serve as green oases in densely populated areas, introducing new diversity into the built environment and providing opportunities for recreation in close proximity to residential structures. Public spaces have a great aesthetic role and can complement and beautify the city (Carr et al., 1992). Urban voids are undiscovered places, which have the potential to significantly improve the opportunities for recreation in urban areas. As a result, people have begun to frequent these spaces spontaneously and utilize them for leisure activities. The purpose of this article is to examine the phenomenon of vacant lots and their potential for recreational purposes (HALUZÍK (ed.) a kol., 2020). Urban voids, which are commonly found in urban areas, can be a result of various reasons such as property abandonment, demolition, or redevelopment. In some cases, these lots may become unsightly areas and create an unpleasant atmosphere for residents (Picon, 2000). They may also attract unwanted activities such as illegal dumping and criminal activity, which can have a negative impact on the surrounding community or citizens. We are also facing the problem that these urban voids are being used as landfills. Even though an increasing amount of waste is reused, recycled or energetically valorised. The degradation of wastes in this place results in the production of leachate and gases. These emissions are potential threats to human health and to the quality of the environment (Marišová, Fandel, 2021). Through the revitalization of these areas, we can eliminate this problem. Currently, in Slovakia, residents lack knowledge on how to manage waste. Sometimes, they use lost places or urban voids as garbage dumps, even directly within cities downtown. In general, municipal waste recycling and proper waste management rates are among the lowest in the EU in Slovakia. Landfilling is still the main strategy for handling this kind of waste. The landfill has negative economic effects in the form of resource losses and land occupation in addition to negative effects on human health and the environment (Mariš, Marišová, 2021). However, vacant lots can also provide a range of benefits, particularly when transformed into green spaces. One significant benefit of vacant

lots transformed into green spaces is that they can enhance the visual appeal of the community. By introducing trees, plants, and flowers, these lots can add colour and life to the surrounding environment, transforming otherwise dull and uninviting spaces into vibrant and lively places. Additionally, green spaces can contribute to the overall well-being of the community by reducing stress and promoting relaxation. We know exposure to greenery can improve mental health, leading to reduced levels of anxiety and depression (Haluzík (ed.) et. al., 2020). Another advantage of green spaces created from vacant lots is that they can provide opportunities for physical exercise and recreation. Residents may use these spaces for activities. These green spaces can also promote social interaction, bringing people together from different backgrounds and creating a sense of community (Clément, 2016). Moreover, green spaces created from vacant lots can have an ecological benefit by providing habitat for wildlife, reducing the heat island effect, and improving air quality (Lososová et. al., 2011). Some animal species, such as birds, move easily and can easily discover and settle in new places in the countryside. The fauna has found a natural way to colonize lost places, from the smallest insects to the largest birds. Species living in these places are not directly tied to specific environments. However, when we look at the rich diversity of vegetation in such places, we cannot expect these places to remain uninhabited (Lososová, 2011). Such places are much safer for animals than agriculturally managed fields. Plants and trees can absorb pollutants and release oxygen, leading to a cleaner and healthier environment. In addition, these spaces can help regulate the urban climate by reducing temperatures through the shading effect of trees and plants, thus mitigating the heat island effect (Vítková, 2015).

### **Materials and methods**

The purpose of this contribution is to identify urban voids within a selected area of the city and recommend their optimal utilization. To achieve this objective, a range of map materials, spatial planning materials, a country atlas, as well as field surveys and our own photo documentation of the cadastral territory of Nitra and its immediate surroundings were necessary. We created a method for site evaluation, which we applied to the city of Nitra.

The sample area we chose is the oldest and most inhabited part of the city, characterized by architectural diversity and a high number of urban voids. This area encompasses the historic city center, block constructions, multifunctional buildings, modern urbanism, parks, and alleys. Urban voids come in various forms and sizes, ranging from small, neglected remnants of land left unmanaged to large, abandoned ruins in city centers. Methodologically, we employed methods such as the "Methods of evaluating public spaces 2015" (Vítková, 2015), supplemented by the "Pixel method" (Žolobaničová, 2022) and the "Methodology of green and blue infrastructure applications" (Haluzíková, 2021).

### **Results**

Case study of exemplary urban void in Nitra Mostná numbers 62 and 66. The current state of the selected location can be described as an abandoned space near in the centre of the urban system. These places have peculiar non-urban characteristics, even though they are not full-fledged public spaces. They are characterized by chaos, disorder, mixed vegetation, unattractiveness, and abandonment. It is not uncommon to find litter there. They have no dominant architecture or vegetation. The proposal is to modify these places into a basic aesthetic form - by introducing organization, order, and offering them to citizens for recreation.

We categorized the possibilities of application and described them methodically - these are applications that have a favourable impact on the environment and are the first point of improvement in the selected locality. Based on the placement of these applications, the space can be further categorized and elements characteristic of closer requirements can be placed in it during interventions or landscape-architectural design. In organized passageways or inner courtyards, it is important to find a function again and make the places accessible or available.

The pixel analysis shows us that the space needs to be integrated into the urban system with permeable surfaces, retention beds, a more resilient herbaceous layer, and the planting of trees that are more suitable for the urban environment, as well as cultural vegetation. It is a very attractive place that is currently unused and empty. In a detailed design, the space will be complemented with flower beds, permeable surfaces, a tree-lined avenue, furniture, and a visual kinetic-optical element.

We found that urban voids provide a habitat for a diverse range of plants and animals, contributing to the urban biodiversity. These spaces can serve as breeding grounds for native species, including birds and insects, and provide a haven for animals that are displaced by urban development. However, vacant lots of face challenges associated with their management and maintenance. The lack of ownership and control over these spaces often leads to neglect and illegal dumping, contributing to the creation of green chaos in the city. Moreover, vacant lots can become a safety hazard if left

unattended for an extended period, leading to criminal activities and vandalism. To overcome these challenges, the study recommends the implementation of low-cost interventions in the urban environment that promote the sustainable use of vacant lots. These interventions include the establishment of community gardens, the creation of temporary public spaces, and the installation of lighting and other safety measures. To change and update something means having the ability to understand the dynamic and living nature of our settlements. The balance between open spaces and structures, private and public spaces, and individualism and socialization can change over time. We are now moving into a new era where planning should focus on human beings and our health, as well as the health of the planet (Back Prochnow, Čibík, 2022).

In conclusion, the paper highlights the importance of urban avoids as an essential component of urban green spaces. The sustainable use of these spaces can contribute to the creation of a more liveable, sustainable, and resilient city.



Fig. 1: Typical urban urban avoid. Nitra ulica Ďurková 3. For many years, an urban gap near the city center in a lucrative location, where it already lives its own green life behind the fence

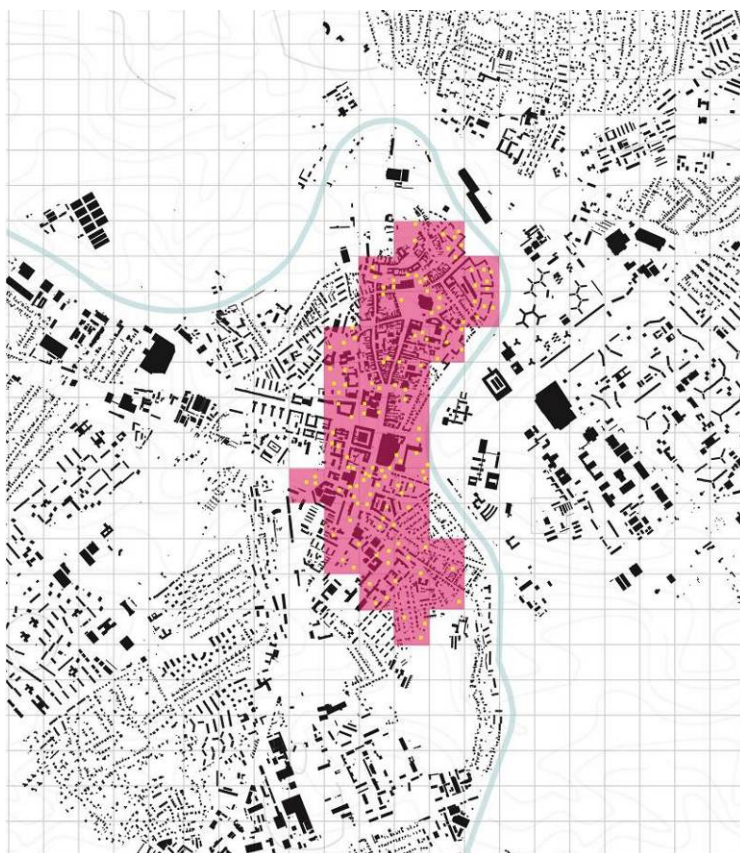


Fig. 2: Pixel analysis of the city of Nitra was conducted, with the selected location being the city center. A grid of 100x100m squares was used, with a total of 38 squares analyzed. Within the selected area, 125 lost places were identified.



Fig. 3: The selected sample area for analyzing the location is the range of addresses 62-66 on Mostná Street. On the left side is the original state, and on the right side is an example of a short-term intervention.

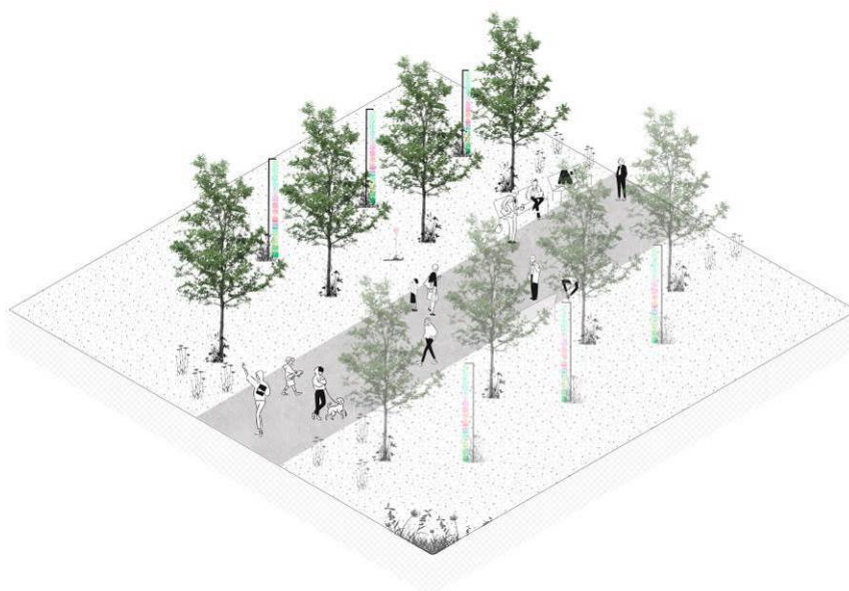


Fig. 4: Urban avoid revitalization proposal that provides residents with short-term recreation near the city center

## Discussion

The city is not always homogeneous; it is composed of multiple places, and each city has its own secrets, waiting to reveal its potential. Italo Calvino believed that every city is made up of invisible places that form its character. Urban identity is not based on just one place, but on the entire society (Calvino, 1997). Currently, society focuses mainly on public spaces, parks, urban and suburban landscapes. However, lost places escape our attention, providing opportunities for development (Witting, 2004). Urban gaps bring wilderness into the hearts of cities. The phenomenon of vacant space, lost places, and urban avoidance is related to urbanism. These places are an integral product of urbanism, although an unintentional expression, and therefore, inevitable (Haluzík (ed.) et. al., 2020). Architect Michal Fisher, who, after completing his studies, was left with remnants of the Berlin Wall, commented on these places as areas where traditional urban planning rules do not apply, where plants grow, and the city's inhabitants visit, even where decay should prevail, and development should not occur (Haluzík (ed.) et. al., 2020). In cities, various accessible corners, incomplete spaces, or brownfields remain where abandoned walls of pure concrete or metal panels decay, as if life has vanished from these places, and they seem to belong to no one. However, when the community focuses on them, they can bring them to life, attracting new visitors (EZOP 257, 2016). Biologist Jiří Sádlo says that "the center represents order, and the periphery represents chaos," but order arises



from chaos, and the center always tries to maintain decorum. In contrast, peripheries have their own order in chaos, having civilized themselves in their own way without the need for architects. Thus, a subnatural landscape opens up to us, which we only need to visit (Sádlo, 2019). Various experts speak of the recreational potential of these places urban gaps, but in practice, we see that we have not yet dared to discover it. It is a different, wild world, but it works and brings a new dimension to the city's society.

## Conclusion

In conclusion, through our research we have discovered the potential for underutilized spaces to provide new opportunities for urban recreation. By identifying and transforming these areas through green and blue infrastructure, cities can offer greater diversity and leisure opportunities for their residents. Integrating these spaces into the urban fabric and creating modular solutions to urbanize them provides a unique opportunity to efficiently enhance public spaces and collaborate with the surrounding environment. Urban avoids can also attract various species of plants and animals to inhabit these areas. Lost spaces, vague terrains and urban avoids have become a second world within the city, a different, wilder world that bring a new dimension of urban recreation.

Some places in masterplan are meant to be "empty" to allow the entire urban landscape to breathe (Back Prochnow, Čibík, 2022). But when they are empty for too long, they begin to go crazy and become unruly within the city system, and we cannot use them. Urban avoids full of nature provide us with new spaces to communicate with greenery. As active participants in urban life, we are not passive recipients of the surrounding events. We actively participate in the events and processes that take place in these urban avoids. The principle of returning function to urban avoids offers us recreational spaces in the centers of cities.

## References

- Back Prochnow, S., Čibík, M. (2022). Unconventional Interventions on Redeveloping Unused Urban Landscapes Based on Social Interactions. In *Acta Horticulturae et Regiotecturae*, 25(1): 92-98.
- Calvino, Italo. (1997). *Invisible cities*. Vintage publishing, pp. 160. ISBN 978-00-994-2983- 8
- Carr, Stephen et al. (1992). *Public Space*. Cambridge: University Press, pp 400. ISBN 780-52-135-9601-3
- Clément, G. (2016). *Manifeste du Tiers paysage*. DU COMMUN, pp. 60. ISBN 979-10- 956-3005-0
- Cément, G. (2016). Not absolute control. In *Landscape teory*. [online] <https://landscapetheory1.wordpress.com/tag/gilles-clement/>
- EZOP 257. (2016) PSÁT O MĚSTĚ: EZOP 257 - Graffiti, pohyb městem. Available: <https://www.youtube.com/watch?v=NAUvAqQQHf4>
- Haluzík, R.(ed.) a kol., (2020). *Mesto naruby Vágní terén, vnitřní periferie a místa mezi místy* . Praha: Academia, 400 s. ISBN 978-80-200-3041-2
- Haluzíková, L. (2020). *Vágní Praha: studio work*. Praha: FA ČVUT, Praha.
- Lososová, Z. et. al. (2011). Diversity of Central European urban biota: effects of human-made habitat types on plants and land snails. doi: 10.1111/j.1365-2699.2011.02475.x
- Marišová,E., Fandel,P. (2021) basic visions of Slovakia's environmental strategies: a case study in two selected regions. Strategy and innovations in the raw materials policy of the Slovak Republic and the EU - historical development of the importance of raw materials. Book of abstracts. 2022, pp.104
- Mariš,M.,Marišová,E. (2021) Innovationsin Waste Enterprising: TheApproachestoWaste Recovery, Innovative business and start-ups in current business environment, 2021, pp. 48.
- Picon, Antoine. (2000) "Anxious Landscapes: From the Ruin to Rust." Translated by Karen Bates. *Grey Room* 1 (September): 64–83. doi:10.1162/152638100750173065.
- Sádlo, Jiří. 2019. *KRAJINA!*. Kodulek. pp. 78-120 . ISBN 978-80-906-3115-1
- Trancik, Rodger. (1986) *Finding Lost Space: Theories of Urban Design*. Wiley, 256 s. ISBN 978-04-712-8956-2
- Vitková, L. (2015) Methods of evaluating public spaces. Alfa Stuba. pp.33 [https://alfa.stuba.sk/wp-content/uploads/2020/05/1\\_2015\\_4\\_Vitková-1.pdf](https://alfa.stuba.sk/wp-content/uploads/2020/05/1_2015_4_Vitková-1.pdf)
- Witting, Rüdiger. (2004) The origin and development of the urban flora of Central Eu- rop. Urban Ecosystem. In *UT*. pp doi: 10.1007/s11252-005-6833-9
- Žolobaničová, T. (2022). *Stratené miesta mesta: diploma thesis*. Nitra: ÚKA, FZKI, SPU in Nitra

## Souhrn

Při zkoumání této problematiky jsme objevili potenciál prázdných míst pro rekreaci. Metodicky tato místa umíme identifikovat díky pixelové analýze a také proměňovat díky prvkům zelené a modré infrastruktury. Dlouhodobé nebo krátkodobé intervence na těchto mezerách jsou důležité pro města, protože poskytují novou rozmanitost v zastavěném městském systému a možnosti rekreace pro obyvatele v blízkosti jejich domovů. Začlenění těchto měst více do městského organismu a vytvoření pro ně modulární řešení, která by je dokázala o trochu více urbanizovat a poskytnout obyvatelům k rekreaci je velká příležitost. Do doby, dokud se jim nenaskytne jiná – lepší příležitost v městském urbanismu. Je to příležitost, která dokáže efektivně doplnit veřejná prostranství a lépe spolupracovat s okolím. Vandalismus je v našich podmínkách běžný, ale tato místa nepotřebují přímou ochranu. Dokážou to samy. Proto jsou méně nákladné než klasická veřejná prostranství. Díky aplikacím zelené a modré infrastruktury mohou mít i tato místa rovnocenné zastoupení a kolemjdoucí je nemusí obcházet. Zeleň v těchto místech přiláká i různé rostliny a živočichy kterým bylo místo z důvodu výstavy předtím sebráno a oni mohou osídlit to co už člověk předtím opustil.

Ztracená místa, vágní terén, bílá místa, městské mezery, proluky se staly městem ve městě, druhým světem, městem naruby. Je to jiný, divoký svět ale funguje a když podpoříme jeho potenciál přinese společnosti novou dimenzi městské rekreace.

## Contact:

Tímea Žolobaničová

E-mail: [xzolobanicov@uniag.sk](mailto:xzolobanicov@uniag.sk)

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