# **EXPLORING WHITE SPACES ON URBAN MENTAL MAPS**

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# Abstract

There are several definitions for the term "white spaces", and none of them can be fully identified as explicit. This collocation is accompanied by multi-conceptuality, where the group of concepts can include terms such as urban voids, terrain vague, inner periphery, places between places or even weird places. Some of the definitions are closer linked to urban planning - undeveloped places situated in a standing continuous urbanism, which are intended for future development, where is the tendency to supplement the original building so the meaningful structure would be created again. This includes places of local memory loss such abandoned blocks, gap-sites, vacant lot, mid-blocks, inner-blocks, micro spaces, courtyards, terraces, or gaps. White spaces can include specific, physical, and substantial urban places hidden under the layer of new structures. They often arise under unclear circumstances, where the cause is a poor-quality spatial planning process, or the forced, regulated, or random abolition of forgotten elements. Presented research will map such seemingly ordinary everyday spaces and review, examine, and confront diverse lost places in the city. Through several mapping methods and specific examples, the presented contribution will reveal how these places were created historically, how they are designed today, who they belong to, what functions they create in the city, or could have created, and what will happen to them in the future.

Key words:tourism, urban voids, terrain vague, inner periphery, places between places

# Introduction

Lost places or white spaces without a function began to appear on the mental urban maps of Central and Eastern European cities mainly in the 1950s and 1960s. In this period, within the countries of the former Soviet Union, the cause of their origin is the onset of the socialist regime and the brutalist architecture associated with it. This mainly consisted of the demolition of old burgher's houses and the construction of modern architecture without any sophisticated urban planning concepts. Another reason for the beginning of the creation of white spaces was the privatisation of companies and their subsequent closure, which resulted in the decay of industrial areas (brownfields) and their facilities (Hajduková & Sopirová, 2021). Lost places arise not only in the process of urban development, political or economic downfalls, but also as a result of natural disasters (Haluzíková, 2020). In Slovakia, the World War II, especially the bombing by the liberating Red Army at the end of it, contributed significantly to the creation of urban gaps and disruption of the urban structure. White spaces fulfil a predominantly eco-stabilising function in the city. Many perceive them negatively or not at all (Prochnow & Čibik, 2022). From the perspective of urban development, they are quite logically considered a problem. Although they are intended for reconstruction, many times this is not possible, or the process takes an infinite amount of time (Fornal-Pienak & Bihuňová, 2022). The reason is unsettled land, regional planning regulations, or the size of the space (Šinka et al., 2019). Nevertheless, they have a huge potential for their restoration and further development (Hajduková & Sopirová, 2021).

# **Materials**

Lost places have different forms and size parameters - from small, neglected remnants of land left uncultivated, to large, abandoned areas (Haluzík et al., 2021). For the needs of initial mapping methods in the framework of long-term multi-level research focused on white spaces, it is necessary to define which spaces in terms of size and character can be included in the working database.

In the beginning of the contribution, places like urban voids, terrain vague, inner periphery, places between places or even weird places are mentioned. Research works primarily with definitions of spaces that can be classified according to typology. This includes places such abandoned blocks, gap-sites, vacant lot, mid-blocks, inner-blocks, micro spaces, courtyards, terraces, or gaps.

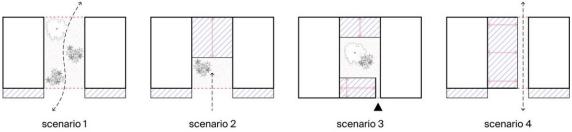


Fig. 1: Different scenarios of possible white spaces in terms of space typology

According to Haluzík et al. (2021), white spaces are divided into gaps in time (temporary vague spaces) and gaps in space (permanent vague spaces). For the purposes of this work and a simpler overview and categorisation of white spaces from the point of view of space typology, four different scenarios (Fig. 1) were developed as part of the research through graphically interpreted schemes. Scenario number one presents a typical example of a gap, where the space between two building elements is passable and open from both sides. There are cases where one of the sides remains closed by a wall with the original facade to preserve the street line. However, the space behind the remaining wall remains empty and again passable. Scenario number two presents a space where one of the buildings is set back from the street, creating a micro-space that cannot be built on. The depth of the micro-space varies depending on the surrounding buildings. Scenario number three describes an example of a hidden inner-block behind a gap between facades creating an intimate forgotten place reserved from the surrounding city life. The width of the entrance part as well as the area of the inner-block varies depending on the surrounding buildings. Scenario number four presents a typical gap between two building elements, where the space is passable and open from both sides, creating a micro-space that cannot be built. The width of the gap varies depending on the surrounding buildings. All presented scenarios are the most representative examples of the origin of white spaces in an urbanised environment stylised into simple graphic schemes for easier readability and understanding of the essence. Their morphology is of course variable.

#### Methods

White spaces research is a complex project that consists of four parallel activities:

- a. Mapping
- b. Analysing
- c. Concept
- d. Design

Mapping takes place in the field through direct observation methods. The basic basis for mapping is a set of well-processed historical analyses and related map materials. Archival research of historical sources and freely available documents characterising the historical development of the city's urban structure is also ongoing to clarify the progress of the urban development, historical connections, and regional planning procedures (Čibik et al., 2019). Subsequently, the research presents the basic contours of the strategic process that can be observed around the concept of white spaces at the level of the surrounding European countries and deals more closely with specific examples (Čibik et al., 2022). Through the methods of qualitative research, the white spaces that were included in the working database in the preparatory phase are studied and compared. The relations between the forgotten place and the city are also analysed in terms of physical, social, and economic dimensions in order to find out what role such space plays in the city and how it can function as its full-featured public space. Property relations are being investigated.

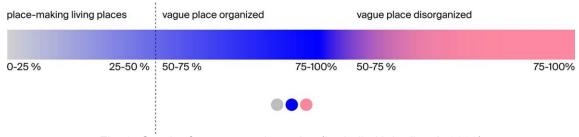


Fig. 2: Graph of vagueness intensity. (Ludmila Haluzíková, 2020)

The intensity of vagueness according to Haluzíková (2020) is one of the methods that research deals within its process. Thinking about the function and not only the type of space is essential in identifying its future use. Haluzíková divides white spaces into organized vague spaces and unorganized vague spaces. Along with the place-making living places, it is possible to evaluate and compare all the places included in the working database and to perceive their immediate surroundings through the methods of comparative research (Fig. 2).

Organized vague spaces: They represent a set of certain rules. For the place, they are tolerated in surroundings, but not frequented. In general, these are spaces, unpaved areas, which are filled with overgrown greenery, and therefore fulfil at least an eco-stabilising and aesthetic function. Alternatively, these are parking lots, paved areas in private ownership, but development intention is excluded. Such places fulfil a certain function, but if they are located in the city centre, it is appropriate to think about a new, more meaningful function.

Unorganized vague spaces: They have no function in the urban structure. Empty, chaotic places left to their own fate, waiting to be restored to at least a temporary function. Life here goes at its own pace. Place-making living places are all other space-creating places that fulfil the function of a full-featured urban public space.

# Results and discussion

The research will interpret the possibilities of future use of such spaces in an innovative form, especially by graphic outputs, through various case studies applied to the specific areas, which will significantly simplify the process of restoring function as a result. The professional aim of the research is to create a typology of the territories included in the working database and the phasing of their potential temporary, short-term, or long-term use regarding financial and spatial possibilities. In duration of the research, these spaces will be gradually "occupied" through participatory processes - Research by Design, in the form of one-shot community events or short-term invasive interventions.



Fig. 3: Map of the location of the bomb impact (left). The resulting white spaces (green) after the forced liquidation of buildings and urban structures (right)

A partial output of the presented research is the result of mapping white spaces in the regional city of Nitra. In the 20th century, the city underwent a fundamental modification, which was influenced by two world wars, the regulation of the Nitra River and the period after the World War II, when the city experienced a significant urban development. However, Nitra was most marked by the raids of Soviet bombers at the end of the World War II in 1945, which completely changed the structure of the city with its streets, blocks, and squares. 53 buildings were destroyed and 301 were severely damaged (Košovan, 2012). This event, together with the removal of urban blocks after the new regime took place, resulted in the creation of several white spaces in the city centre. The map on the left (Fig. 3) shows the location of the impact of the bombs. On the right are the localities shown in green, within which the urban structure has not been supplemented since the bombing. Most of these places have the character of white spaces. The research will deal with them in more detail in its next phases.

#### Conclusion

Research focused on white spaces is an effort to positively recognise the potential and a constructive approach in the search for a new temporary use of these spaces. It is the opposite of ignoring the problem or perceiving only obstacles to potential solutions. In all areas mapped so far, research uncovers hidden potential. They are places that could provide a background for meaningful activities. The goal is to work with a suitable solution for the temporary as well as long-term use of these underutilised urban spaces, which have potential with several benefits applicable in social, economic, and ecological interrelated areas. By including them in the living structure of the city, it is possible to significantly support place-making functions, but also to reflect today's current ecological functions with regard to urban tourism.

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#### Souhrn

Bílá místa jsou prostory představující lokální výpadky paměti města a místa s obrovským skrytým potenciálem. Masivní suburbanizace je na ústupu a v době nepřetržité a intenzivní vnitřní urbanizace města, se stávají "díry" lukrativními součástmi kompaktní městské struktury zvané urbanita. Předkládaný článek popisuje úvodní metody dlouhodobého víceúrovňového výzkumu zaměřeného na právě taková místa. Sleduje postupy ověřené v praxi a přináší vlastní způsoby nahlížení na danou problematiku. V závěru odkrývá, rozeznává jejich skrytý potenciál a hledá možnosti dočasného využití a navrácení jim funkce.

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