

MAPPING THE IN-BETWEEN – APPROACHES AND METHODS OF RESEARCHING URBAN VOIDS

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Abstract

Losses of urban matter in town residential areas represent obstacles in the efficient use of built-up territory. At the same time, they carry a certain value — they are a territorial reserve with the potential for reuse. To ensure increased care, their functional restoration and reintegration into the urban fabric in the form of high-quality public spaces, it is necessary to apply several scientific and research methods. White space research is a long-term process accompanied by a wide range of analyses and different approaches. This quantitative and qualitative research is characterised by a certain sequence of steps and stages that follow each other chronologically and overlap in time. Due to the scope of the issue, it was therefore necessary to develop a work methodology in the initial stages of the research, and later a methodology for mapping and analysing white spaces. The presented article describes these practically proven methods of historical research, data collection, selection into the working database, evaluation, and application of a set of recommendations. Through specific examples from the environment of the regional capital cities of Nitra, Trnava and the district city of Banská Štiavnica, the contribution presents various forms of analytical tools and possibilities for researching white spaces.

Keywords: white spaces, urban voids, urban gaps, inner periphery, urban tourism

Introduction

The urban structure of today's city is intertwined with vagueness. Suburbanisation is on the decline again, and a growing trend of urbanisation and densification of city centres can be observed more and more often. The result is a rising value of empty urban land — gaps in urban matter, spaces without a function, so-called white spaces. Despite this, they are given minimal care and interest. Lost places began to appear on the mental urban maps of Central and Eastern European cities mainly in the 1950s and 1960s. The reason for their emergence is political and socioeconomic changes, an unintended consequence of the organization of the city and the cycle of urban development (Marišová & Lichnerová, 2010). These places surround our everyday life, and we pass by them daily without much notice. They are the subject of various discussions and mostly owned by private individuals and companies. Even though in the territorial plans they are intended for construction, this situation ties the hands of city governments (Marišová et al., 2023). They are often inactive and practically powerless in this regard. Nevertheless, they have a huge potential to be an accelerator of change in model cities for restoration and further urban development (Bihuňová et al., 2020). By implementing appropriate scenarios and strategies for their transformation and renewal, they can become full-fledged living public spaces reintegrated into the urban fabric (Čibík et al., 2019).

Typology of white spaces

White spaces have different size, shape, form, and character. They vary depending on location, ownership, and function (original or temporary). As part of the research, a categorisation of white spaces was created from the point of view of space typology and based on their location in the city, various scenarios were developed through graphically interpreted schemes:

- the centrum (compact urban structure, historic city centre, dense built-up area)
- the inner city (settlement inner spaces, campuses and larger units, residential complexes, the territory between the periphery and the city centre)
- the outer city and peripheral areas (industrial areas, brownfields, open free land)

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 objects, 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. Scenario number five describes an empty space at the corner of an ending build-up area, for example, when a street or sidewalk crosses it. 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 (Fig. 1).

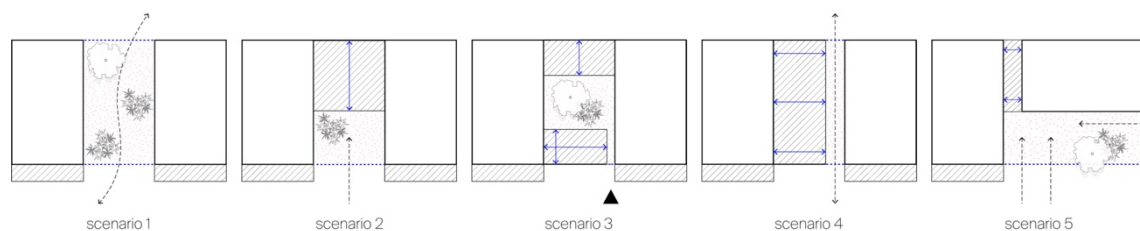


Fig. 1: Different scenarios of white spaces. Case study: city centrum. Source: author.

Scenario number one presents the space between two objects with a transition function. This case is characterised by the division of an already small open area into two or more even smaller units, which makes it quite impossible to create a comprehensive design here. Fragmented areas mostly provide space only for non-conceptual greenery. The tracing is purposeful, formed by the use of space and not designed in advance. Scenario number two is a typical example of a settlement inner space that has no been built. Space is impassable but provides a background and intimacy for various activities with a residential and recreational function. Scenario number three presents a typical gap between two objects, 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. Scenario number four interprets the development between two objects. It is mostly one-story and impassable building, or the first floor is elevated, and the ground floor are transitional. The area reserved for the building can be used for vertical layers. The last scenario creates the most generous space for various activities with a residential and recreational function. It is partially passable, but the tracing does not divide the open area and the path runs along the building (Fig. 2).

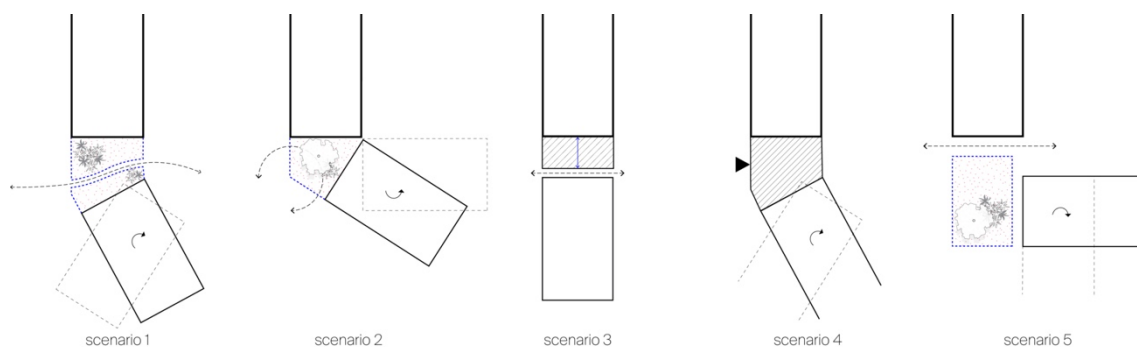


Fig. 2: Different scenarios of white spaces. Case study: inner city. Source: author.

Approaches and methods of white space mapping

White spaces research is a complex project. For the purposes of this contribution, a sequence of steps has been compiled, the observance of which is necessary to map white spaces and subsequently to create the necessary documents for possible work with such spaces. Based on long-term research and practical experience from the environment of several cities, the next steps and four parallel activities were defined:

- 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). 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 also investigated (Fig. 3,4).



Fig. 3: Pixel grid method. All white spaces were marked on the first map. On the second, inner blocks and urban gaps, and on the third map property relations. Source: author

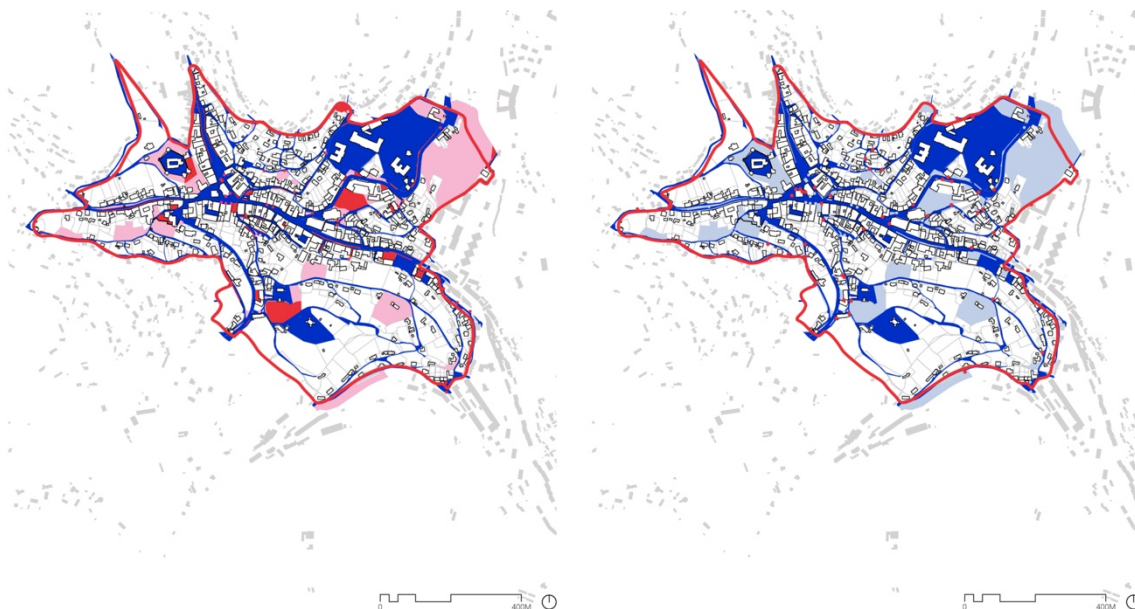


Fig. 4: Analyses of white places and public spaces. Inverse urbanism. Source: author

The method of selecting white spaces for the working database consists in the selection of all places within a pre-defined area where there is lack of urban mass. The boundaries of the territory can be defined based on several aspects (city districts, according to housing typology, according to transport infrastructure, based on spatial dominants and the urban morphology, or according to following areas – centrum, the inner city, the outer city, and peripheral areas). As part of the field trips to the selected locations, the final working database of white spaces with information on the exact location, type of

scenario, ownership, origin, and current function is later processed (Fig. 5). The result is a material containing dozens of spaces, which serves as a basis for future research (Fig. 6). The database and the information in it must be regularly updated as necessary.



Fig. 5: BM_03_MICHALSKÁ STREET. Sample of the fact sheet within the work database. Description: 1. orthophoto map, 2. actual photo, 3. work name, 4. basic data. Source: author



Fig. 6: Working database of all analysed white spaces. Source: author

Conclusion

Based on long-term multilevel research, the presented article describes the possibilities of data collection and introductory methods of mapping and analysing white spaces in the city environment. It follows procedures proven in practice and brings its own ways of looking at the issue. Using various schemes, the article also presents different scenarios within the typology of white places in relation to their location in the city. The contribution is the basis for the processing of a complex methodology for mapping white spaces.

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Souhrn

Cílem tohoto příspěvku bylo přiblížit přístupy a metody mapování bílých míst i samotnou problematiku těchto dostatečně nevyužívaných městských prostorů. Článek odkrývá jednotlivé kroky v procesu přípravy podkladů a sběru dat. Prezentované možnosti obsahového a formálního zpracování úvodních metod víceúrovňového výzkumu mohou posloužit jako základ pro komplexnější práci s těmito prostory. Výsledkem by měla být integrace bílých míst do struktury města v podobě plnohodnotných živých veřejných prostorů.

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