
Reading the Urban Sacred Space: A Case Study

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Elżbieta Mydlowska¹

Abstract:

Purpose: The aim of the article is to highlight the importance of religious factors and the functioning of religious buildings and their impact on the urban space (physical and social), as well as to indicate the case study as a research method to analyse this space, facilitating its reading.

Design/Methodology/Approach: To achieve the intended purpose, the following was proposed as a part of the case study: - for content relating to the transformation of the sacred landscape - the desk research: - the documentary method (including spatial information available on the National Geoportal), the snapshot method; while for - the mutual relations between the sacrum and the surrounding space - the observation method and sentiment analysis using AI.

Findings: Sacred objects and religious factors are involved in the process of shaping the sacred landscape in the urban fabric. They have had and continue to have a significant impact on the development (including spatial) of the city. They perform a variety of functions (some variable over time), among which are: religious, educational, social, defensive, tourist, cultural, etc. The case study method was treated as -a research project through which real problems in reading space were brought into focus.

Practical Implications: Developing the skills of seeing, hearing, speaking, feeling, i.e. altogether - reading the place/space (here: sacred space) is important in the process of training the spatial sense typical for a civic society. It can be particularly useful for people involved in spatial management and spatial planning, as it has a direct impact on shaping the quality of life of residents.

Originality/Value: The article makes an important contribution to the development of knowledge about the importance of sacred spaces in the urban structure and how to analyse them. The case study method, combined with modern analytical techniques using AI, provides a unique approach to reading urban space that is crucial for understanding the dynamics of the relationship between sacred and profane in the urban context. This type of analysis can be used both in scientific research on urban space and in planning practice.

Keywords: Urban sacred space, case study, research methods, AI, civil society.

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¹Ph.D., University of Szczecin, Institute of Spatial Management and Socio-Economic Geography, Poland, e-mail: elzbieta.mydlowska@usz.edu.pl;

1. Introduction

Urban space is a clearly distinguishable fragment of geographical space, characterised by a specific organisation and physiognomy and a specific legal statute. In urban space, two main components are distinguished in spatial-social studies: physical space and social space. Physical space is made up of territory, buildings, infrastructural facilities and similar elements that serve to meet the needs of the inhabitants and the needs of the economic activities carried out in the city. In contrast, the social space of a city is made up of people, social groups, institutions, activity systems, etc., (Jagielski, 1982; Słodczyk, 2003).

The similar conception of the two main components of city space (social and physical) forms the basis of the approach presented by Wallis (1977), who treats the city as a system composed of two, interrelated, yet autonomous, subsystems: urban and social. The first subsystem represents the totality of the man-made material elements of the city, as well as the natural elements that make up its spatial structure.

It determines the spatial distribution of all the basic functions carried out in the urban area, i.e. places of residence, work, study, worship, religion, culture and others. The social subsystem, in turn, comprises (forms) the collective of the city's users, of which the primary group is made up of the inhabitants, and in relation to the sacred space, first and foremost the followers of a given religion (Słodczyk, 2003).

The construction of the urban subsystem reflects the diversity of the social subsystem, with the urban subsystem usually changing much more slowly than the social subsystem. Four classificatory divisions are proposed to be used in analyses of urban space (Walis, 1977):

- into open and closed,
- public and institutional (including private),
- according to the dominant functions performed,
- according to the importance or extent of the functions performed.

Sacred urban space can be considered within each of these classification divisions.

Religion is the integral, normal part of modern and modernising societies (Davie, 2010). It plays an important role in people's lives, significantly affecting their quality of life and their sense of belonging to a community. Religion provides an axiological foundation that supports the construction of social identity and allows individuals to understand their place and purpose in the world. Throughout history, belief systems and religious practices have been a key element of cultures around the world.

Religion provides a counterbalance to the liberal currents prevalent in modern democratic states by offering a deeper understanding of man and his values (Pabich,

2020). Fromm (1966) states: “There was no such culture in the past and, it seems, there can be no such culture in the future that does not have religion”.

The importance of sacred space is very significant, as it is a specific area or place that is perceived as sacred or consecrated, dedicated to religious or spiritual practices. According to Przybylska (2008), it is a part of the geographical space that reflects the needs and possibilities of expressing the religious beliefs of a community. It (space) constitutes a visible and tangible aspect of religion, allowing it to interact not only at the individual and community level, but also at the broader level of impact on the surrounding public space.

The filling of public spaces with objects and phenomena related to religion, as well as the very presence of objects and phenomena related to religion in them, constitutes the definition of the sacralisation of public spaces. This phenomenon can be considered dynamically as a process and statically as an effect of the presence of religious phenomena (objects and phenomena) in public spaces. Sacralisation occurs through the coexistence of secular surroundings with the meaning-rich symbolic elements used by the sphere of religion (Przybylska, 2014).

The aim of the article is, on the one hand, to highlight the importance of religious factors and the functioning of sacred buildings and their influence on the urban space (physical and social), as well as to point out the case study with selected research methods, to analyse this space, improving its *reading*, which is the resultant of cognition of space through the senses (seeing, hearing, speaking and feeling).

2. Data and Methods

A case study method was proposed to achieve the intended purpose, which recommends the triangulation of research methods. Among the methods, according to the author, particularly useful in the case study of the *reading* of urban sacred space are - for content/issues relating to the transformation of the sacred landscape - the method of information of found data (desk research), which includes:

- The documentary method based on the analysis of previously collected information that was produced for social and economic policy purposes; data related to the functioning and organisation of sacred space in the city can come both from documents produced by administrative bodies and by religious and cultural institutions, including activity records, internal reports, newsletters and analytical studies. Reports and analyses produced by institutions specialising in collecting and processing socio-cultural and religious information for research purposes can also be the important source (Stachak, 1997; Pizło, 2009).

For the purposes of the analysis, spatial data, relevant to studies dealing with space (here: urban, sacred), available on the National Geoportal website (<https://www.geoportal.gov.pl/>), are also valuable. Spatial data is data that takes into

account absolute location or spatial arrangement (Anselin, 1992). Depending on the type of information, they are divided into four types (Cressie, 1993) area lattice data, surface data, point pattern data and spatial objects. The distinction between points pattern data and spatial objects occurs sporadically in the literature. Spatial objects are usually included in points pattern data and constitute one category of data. The main properties of spatial data arise from its location characteristics, which are spatial interdependence and spatial heterogeneity.

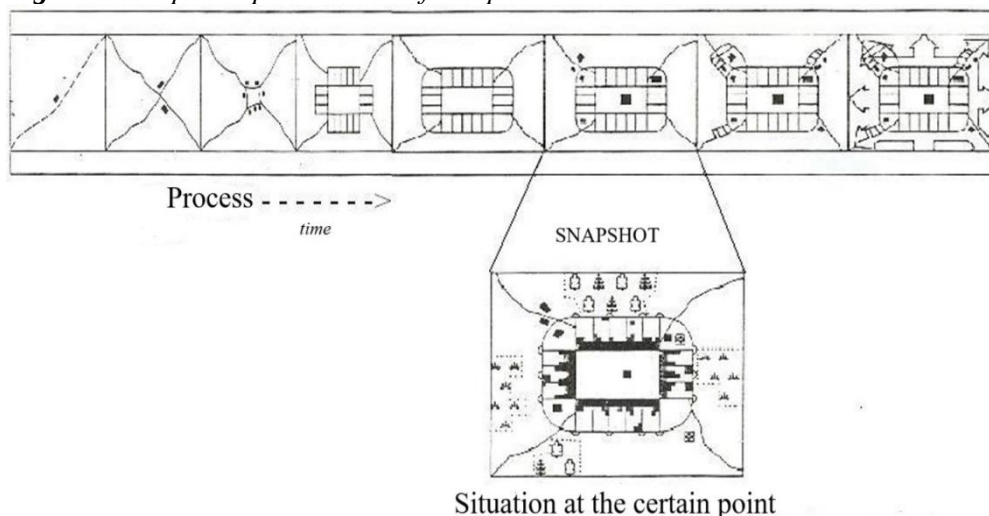
Spatial interdependence (continuity of feature values of spatial units) means that the intensity of certain phenomena transfers from an object to other neighbouring areas (Tobler's first law of geography - spatial autocorrelation). Spatial heterogeneity, on the other hand, is the assumption of the lack of constancy in the distribution structures of the values of the studied characteristics in different locations. The basis of spatial data is localized data, which can be in the form of a set of characters, a set of words or a set of numbers (statistical data) (Jaworska *et al.*, 2014).

The web-based application - the National Geoportal - allows viewing spatial data and searching for spatial data sets and services that belong to the National Spatial Information Infrastructure. Spatial information infrastructure is a set of legal, organisational, economic and technical measures ensuring universal access to spatially referenced data from the territory of the country and geoinformation services

This has an impact on the effective use of geoinformation for the growth of the competitiveness of the economy, taking into account the principles of sustainable development of the country, enables rational management of geoinformation resources managed by the government and local government administration, and also contributes to the development of the idea of the information society. The basic task of the service is to provide citizens, entrepreneurs and public administration with spatial information from official registers. They guarantee its quality, validity and reliability.

- The snapshot method – consists in documenting and studying changes in space/objects through a series of sequential ‘snapshots’ in time; this allows us to take a closer look at a some form at the specific stage of its development (Figure 1).

A fragment of reality as a moment returning in the form of an object, landscape, event, fragment, is recorded in a spatial freeze frame as if in a photograph. In this way, the analysis of the studied space can become an instrument for researching its historical development, by reproducing the process of creating a physical substance, then revealing the stages of its development and analysing its "individual" features characteristic of a given historical moment, as well as the nature of the transformation (Pirveli, 2002).

Figure 1. Graphical presentation of 'snapshot' method

Source: Own elaboration based on Pirveli, 2002

This allows for capturing the transitional states of the place under study, which translates into an analysis of the dynamics of the changes taking place. This method makes it possible to perceive the development and changes in the spatial, structural and functional forms of objects and the space around them.

In turn, the study of the mutual relations between the *sacrum* and the surrounding space was carried out using the observation method and sentiment analysis using AI, based on materials obtained through an internet query.

- The observation method is defined as an elementary method of empirical cognition included in other methods such as, among others, field research, holistic and sample surveys, monographs and others, and is often treated as a complementary method (Pizło, 2009). The tools most commonly used to document observation are an observation card and/or a note, often supported by photographic documentation.

- Sentiment analysis involves determining the subjective polarization (positive or negative) and the strength of polarization (strongly positive, moderately positive, weakly positive, etc.) of a given reviewing text, i.e., determining the opinion of the author of the text (Nasukawa and Yi, 2003). Sentiment analysis draws on solutions developed in the field of natural language processing (NLP). Its area of application is quite wide - from examining the sentiment of short comments/statements posted in instant messengers or social media, or survey responses to single questions, through customer opinions about products or services and reviews of the effects of creative work, to the summarizing of texts for a shortened opinion (Idczak and Korzeniewski, 2022). Basically, two methods of text classification can be distinguished (Tomanek, 2014):

- lexical methods - analysis of the content of texts and statements - utilizes words and phrases relevant to the given text; it employs the language of logic; uses the meanings of the words and phrases analysed; takes into account the lexical and syntactic rules governing language;
- statistical methods - quantitative tools treating the text as an object characterized by quantitative data, which can describe both the content of the document (e.g. the number of words or phrases, the level of text complexity, number of citations, etc.), and the document itself (e.g. publication date, number of characters in the document, etc.).

Sentiment analysis is based on two assumptions, firstly, some spoken words express emotions; secondly, there are words whose utterance can evoke emotions (Pang and Lee, 2008). On the one hand, sentiment analysis indicates the emotional states of the author of the utterance; on the other hand, it serves to determine the emotional effect that a given utterance can produce. The basis for the classification of words is the Regressive Imagery Dictionary (RID). The author of the dictionary is psychology professor Martindale (1990). The dictionary refers to basic and primary cognitive processes to which it assigns specific words (WORDSTAT, 2024).

The case study method, generally refers to three methodological aspects (Ptak-Kostecka, 2005):

- the case of the analysed phenomenon of a method adopted independently of the scientific discipline,
- the case study relating to the analysis of phenomena, the description of a phenomenon or the analysis of a description,
- the case study method used to methodically analyse the case.

In the undertaken research topic, the proposed case study method refers to the third aspect - namely to the monographic approach to a given problem in the research of spatial and social cities. In research, attention should be paid to the scientific credibility of these materials, ensuring that the data are both current and complete, which allows you to obtain reliable and full analysis results.

3. Analytical Structure of the Case Study of the Urban Sacred Space

The analytical framework of the case study presents the key elements for conducting a multi-faceted analysis of an urban sacred space. This provides the basis for developing the skills of seeing, hearing, speaking, feeling, i.e., collectively reading the place/space (here: sacred space). Jest to szczególnie istotne w procesie kształtowania zmysłu przestrzennego typowego dla społeczeństwa obywatelskiego.

This is particularly important in the process of shaping of sense spatial sense which is typical of civil society. This procedure is based on the research methods described

earlier for a holistic understanding of the meaning, function and impact of sacred space on the urban environment. The analysis takes into account the following:

Part 1. Sacrum space, in term of:

1. Religion - a brief introduction on the meaning of the symbolism associated with a particular religion and sacred object; a discussion of religious doctrine, an analysis of the internal organisation of a particular religious community, including the clergy hierarchy and administrative structure. Examination of the impact of this structure on the functioning of the sacred space and its influence on the social environment..
2. The sacral object – developed in the following arrangement:
 - a. Location and accessibility. Description of the site's location within the urban fabric, including its location in relation to other important urban points. Assessment of transport accessibility (public transport, access roads) and accessibility for people with disabilities.
 - b. History of the object and its transformations. Basic information on: the date of construction, the state affiliation at the time of its establishment and its denominational affiliation. Details about individuals associated with the sacred object, such as key figures in its history (founder, benefactor, caretaker, patron), as well as those responsible for its ongoing care, including clergy and administrators, are also considered. Spatial data describing the location, size, and shape of the object, along with topological relationships, are analysed. The snapshot method is applied to the analysis of historical documentation of the object, taking into account structural, adaptive, and functional changes over time. The retrospective arrangement of photographs and documentation serves as the basis for analysing the stages of development and transformations of the object.
 - c. Architecture. Architectural characteristics of the building (style, construction materials used, information about the designer), information about architectural changes and adaptations carried out; presentation how the building's architecture fits into the wider urban and historical context of the city space.
 - d. Function and use. Presentation of the primary ecclesiastical functions (church services, religious ceremonies, religious education, pastoral care, counselling, charitable activities) and additional functions (not directly related to religious activities, e.g. cultural, tourism, retail etc.) performed at the facility. An assessment of the impact of these functions on the perception and role of the facility in the local community. Analysis of changes in the functions of the facility over time.
 - e. Development of the space immediately adjacent to the site (for example, greenery, fencing, entrance gate)
 - f. Management and maintenance. Description of the management and maintenance system for the site, particularly those relating to sites under the protection of the conservation officer, in order to preserve their historical and cultural values.

Part 2. Spatial context – *sacrum* – *profanum* space, in term of:

1. Nearest neighbourhood/environment:
 - a. Types of objects and their functions: on the basis of spatial data from the national geoportal and the observation method, identification of objects in the immediate vicinity and their functions; identification of legal restrictions on the possibility of commercial and service activities due to the presence of a religious object
 - b. Public perception: analysis of opinions on the studied *sacrum* space and the *sacrum-profane* spatial context is based on NLP methods. Both lexical and statistical methods are worth using in the study. Methods of text analysis are supported by computers; in the research topic undertaken, chatGPT, developed by OpenAI, was proposed. Opinions relating to the examined sacred object/sacred space (collected using an internet query) presented in the contents of different articles, social media, Google ratings (awarded by users of this search engine in the form of stars and comments) are subjected to sentiment analysis. Using chatGPT, words are counted and grouped into two categories: emotionally positive (positive emotions, emotionality, glory) and emotionally negative (anxiety, sadness, aggression); this allows for determining the social perception of the users of the studied sacred space.

Part 3. Generalisations and conclusions:

The last part of the case study provides a summary based on the analysis carried out on the impact of the presence and functioning of religious facilities and related religions on the urban space, providing a foundation for the *reading* process of the urban sacred space. Generalizations may be aimed at solving a given problem faced by the functioning of a sacred object in the urban fabric, or social conflicts on the background of a different religion from the one present in the local community. They may also include debatable problems requiring the application of further research.

4. Discussion and Summary

The case study is a versatile research method used in nomothetic and idiographic sciences. It is also a method that can support the didactic process, allowing students to become active, bringing them closer to the problems associated with the skilful and comprehensive *reading* of the studied space.

The sacred object as one of the institutions that maintain historical traditions, especially religious traditions and customs, counteracts the creation of 'ruleless societies' and stimulates 'ethical societies'; it sustains the formation of such important non-economic features of social capital as trust, norms and connections (Giddens, 2002; Fukuyama, 1997). Fukuyama (2003) links social capital to the ability of people to cooperate among themselves within groups and organisations to pursue their own interests.

Social capital is, after all, a set of informal values and ethical norms shared by members of a particular group and enabling them to interact effectively. If the representatives of a group have reason to believe that other members will act in a fair and honest manner towards them, they will begin to trust each other.

Trust acts like a grease that increases the efficiency of the functioning of any group or institution" (Fukuyama, 2003). It is therefore impossible to prejudge the role of religious institutions in learning about 'one's own' through 'another's' culture and in nurturing social tolerance (Landes, 2003; Putnam, 1995).

Therefore, *reading* place/space, using a case study, by developing the ability to see, hear, speak and feel it, supports the training of a spatial sense for civil society. A civil society with different social status, different economic status, different cultural characteristics, different physical abilities.

5. Conclusions

Public space, which includes sacred space, is an asset with specific utilitarian characteristics, a place of transmission of various tangible and intangible products satisfying a variety of needs of local and supra-local communities; while the quantity and quality of the products reflect the state of satisfaction of needs (Przybylska, 2014).

The case study method, combined with modern analytical techniques using AI, provides a unique approach to *reading* urban sacred space. It is crucial for understanding the dynamics of the relationship between sacred and profane in an urban context. This type of analysis can be applied both in the academic study of urban space and in planning practice, providing tools for a more informed and sustainable management of public space.

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