

# Original historical spatial development research methodology on the example of the town of Skawina in Lesser Poland

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**Abstract.** The aim of this article is to present an original methodology that was prepared for the research concerning the history of spatial development of historic towns and their conservation protection. The methodology, already repeatedly verified by the Author in the course of research on the origins, urban model and restoration of selected medieval towns in Poland, is universal and so applicable also during the research carried out in towns outside Poland. In this article it will be exemplified by the studies on the spatial development of the medieval town of Skawina located in Lesser Poland. The methodology consists of five stages. The first stage of research involves the so called “desk study”, which is conducted in selected archives, both in the country where the selected town is located, and abroad. The second stage involves field research in the analysed town. The research is accompanied by an inventory of the area of the chartered town, including its preserved elements such as e.g. the market square, the settlement block or the settlement plot. Photographic documentation is also collected during field research. The third stage of research uses aerial archaeology to analyse the urban layout of a given town. The fourth stage involves confronting the research results obtained at previous stages, primarily comparing archive plans and aerial photographs, as well as analysing them in order to identify changes occurring in the urban layout of the studied town. The final, fifth stage involves assessing the cultural values and the necessary methods for protecting the analysed historic town. The discussed methodology allows for drawing conclusions combined with hypotheses concerning the shape and functional-spatial structure of the examined town in the past, as well as its current values in the context of protecting the cultural landscape. The need to prepare it sprang from the current situation in historic towns which are not always properly protected, and scientific studies of their history are often insufficient. The situation and the need for better protection of historic towns has also been indicated in international documents prepared by the ICOMOS and UNESCO, such as the International Charter on the Conservation of Historic Towns of the ICOMOS from 1987, and the UNESCO Recommendation concerning the historic urban landscape from 2011.

**Keywords:** methodology, historic town, history of spatial development, protection, restoration

## Introduction

The title methodology, which was named the historical spatial development research methodology, was prepared by the Author of this article on the basis of years-long experience and research on the history of spatial development in historic towns. The research was carried out in order to broaden and organize the knowledge, as well as to support the process of proper protection and restoration of those historic towns.

It should be noticed that in Europe, including Poland, there are still many towns extremely valuable in the cultural sense. Thus there exists the need to conduct research concerning their origins, urban structure, and urban model according to which they were founded, so that their current development does not contradict their protection and restoration, and allows for preserving their cultural landscapes for future generations. Such conduct is the basis of the current policy of the United Nations both in the context of activities of the United Nations Educational, Scientific and Cultural Organization [15], and popularising sustainable development,

which gave rise to the AGENDA for Sustainable Development 2030, approved and published in 2015 by the UN General Assembly [12]. It is worth mentioning that among the seventeen goals of sustainable development, precisely in goal 11, there are guidelines for “Increasing efforts to protect and preserve the world cultural heritage /.../” [13].

The proposed methodology, which will be described further on in the article, is to aid the activities meant to safeguard the values of historic towns via multidisciplinary studies the result of which is documentation including the essential information on the city origins, its history, degree to which its urban layout has been preserved, legibility of the urban model, and guidelines concerning its protection and restoration.

The discussed methodology was prepared for the research on historic towns of medieval origin in Poland, or more precisely in Lesser Poland, but can successfully be used in research on towns and cities in other countries, since it is universal.

This article will discuss its implementation as exemplified during the research on the history of the spatial development of the medieval town of Skawina. That town offers a fascinating opportunity for research on the history of urban planning. Its origins date back to the medieval period. It was established in the 14th century as a crucial element in the defensive perimeter of Poland, created then by King Kazimierz Wielki. The town was surrounded with defensive walls and had a castle. Neither of those elements has survived until today, but the urban layout of chartered Skawina, laid out based on the 9-square model using the 'large cable' unit (a.k.a. Krakow cable), has remained practically unchanged. It should be added that the history of spatial development of Skawina during the medieval period had not been thoroughly analysed before the described research was carried out. An additional argument in favour of commencing such studies is the fact that heavy industry developed in the town since the mid-20<sup>th</sup> century, which caused its rapid growth but also blurred the unique history of this royal town in the general, not merely local, awareness.

#### **Need for research and protection**

Historic towns are important elements of a cultural landscape, as they reflect all aspects of the life of a community that created them and has dwelled in them. Therefore, they are inextricably linked to the history of civilisation i.e. the history of human life. Here it was decided to quote the two, in the Author's opinion, key international documents which address the issue of protecting historic towns and cultural urban landscape.

The first of those is the International Charter on the Conservation of Historic Towns, published by the ICOMOS in 1987, which in a way supplemented the regulations of the International Charter for the Conservation and Restoration of Monuments and Sites from 1964, known as the Venice Charter [4]. The Charter from 1987 redefined the principles, goals, methods and measures necessary "to preserve the character of historic towns, to promote the harmonious existence of individuals and communities, and aim to preserve those properties, however modest in scale, that constitute the heritage of mankind" [5]. It also recalled what is involved in protecting a historic city by referring to e.g. the UNESCO Recommendation concerning "the safeguarding of historic or traditional areas and their role in contemporary life", signed in Nairobi in 1976 [14], saying that "the protection of historic towns is understood as activities necessary to their safeguarding, conservation and restoration, as well as their harmonious development and adaptation to the needs of contemporary life" [5].

Attention was drawn to the need for consistent policy of protection of historic towns and the policy of economic and social development, and their relation to spatial, urban and regional planning, which has repeatedly been emphasized by researchers analysing the issue of protection and proper management of historic towns [1, 7, 8, 9, 10, 16].

The second, and at the same time the most relevant, international document addressing the issue of protection of historic towns is the UNESCO Recommendation on the Historic Urban Landscape, signed in Paris in 2011, which was an update of the guidelines concerning historic towns included in the aforementioned Recommendation concerning the Safeguarding and Contemporary Role of Historic Areas from 1976. The Recommendation from 2011 states that "historic urban areas are among the most abundant and most diverse manifestations of *././* cultural heritage, shaped by generations and constituting a key testimony to humankind's endeavours and aspirations through space and time". It was also observed that the so called "urban heritage is for humanity a social, cultural and economic asset defined by a historic layering of values that have been produced by successive and existing cultures and an accumulation of traditions and experiences, recognised as such in their diversity". Authors of the Recommendation stressed that nowadays "rapid and frequently uncontrolled development is transforming urban areas and their settings, which may cause *././* deterioration of urban heritage". Therefore, it is essential to "support the protection of cultural *././* heritage" e.g. by putting "emphasis on the integration of historic urban area conservation, management and planning strategies into local development processes and urban planning" [15]. The analysed document also highlights the relation between the protection of historic towns and the principles of stable and sustainable development which "provides for the preservation of existing resources and active protection of urban heritage and its sustainable management", which is a prerequisite for its future development.

In answer to the above quoted recommendations and other international documents (International Charter on the Conservation of Historic Towns – ICOMOS) emphasising the necessity of protecting, and consequently documenting historic towns, their history, tradition and tangible and intangible values, the aforementioned research methodology was prepared.

### Research methodology

In response to the current situation related to the condition of the cultural landscape in historic towns and contemporary problems of their protection, the already mentioned research methodology was prepared, called the historical spatial development research methodology. It consists of five stages, each of which is based on concrete research methods described below.

The first stage involves the so called “desk study” that should be conducted in selected archives, both in the area where the analysed town is located, and abroad. The aim of the research is to obtain necessary historic materials related to the origins and the spatial development of the town, which would allow for accurate estimation of the stages of its development and the original spatial structure. Those materials include historic written and printed records, as well as iconographic and cartographic materials referring to the past of a given town.

The second stage concerns the existing condition of the cultural landscape in a selected town. It is field research involving mainly the inventory of the area of the chartered town, with regard to its preserved elements such as e.g. the market square, building development blocks, settlement plots, as well as architectonic heritage. The photographic documentation of the existing state of the town is also collected during field research.

The third stage uses aerial archaeology in order to analyse the urban layout of a town. In general, aerial archaeology involves observing the surface of the earth from the air in order to discover and document any types of settlement structures (defined and organic) within the researched area. Therefore, specialist aerial photographs of an urban layout are taken at that stage of research.

The fourth stage that uses analysing and logical construction involves confronting research results obtained during the earlier stages; mainly comparing archive plans and aerial photos, as well as analysing them to discover changes occurring in the urban layout of an analysed town and its monuments.

The final, fifth stage of research is based on synthesis and serves to identify the cultural values and indispensable actions that have to be taken to protect the analysed town. Thanks to the information acquired at the earlier stages it is possible to identify the most valuable, existing elements and properties of the cultural landscape of the town and to recommend the restoration of those parts that require it. It also allows for working out suitable directions in the town protection which will slow down its degradation without impeding its development.

All in all, it can be stated that the described methodology consisting of the above described stages that require employing specific research

methods allows for drawing conclusions combined with hypotheses concerning the shape and the functional – spatial structure of the analysed towns in the past, as well as their current values in the context of protecting the cultural landscape and their contemporary development.

### Results and Discussion

The above methodology was verified in the course of research on over twenty medieval towns in Poland, which does not rule out its usefulness in research in other historic towns, also those abroad.

So far, the research with the use of the discussed methodology was carried out for such medieval historic towns in Poland as: Ciężkowice, Grybów, Krościenko nad Dunajcem, Lanckorona, Muszyna, Myślenice, Nowy Targ, Piwniczna, Proszowice, Skawina, Słomniki, Tylicz (Miastko), Tymbark, Uście Solne, w Dębowiec, Jaśliska, Osiek Jasielski, Pilzno, Tyczyn and Żmigród Nowy.

The usefulness of the methodology will be presented in more detail on the example of the town of Skawina. The town is located around 20 km from Krakow, the former capital of Poland. It was founded in 1364 as a royal town [3]. Almost immediately after the town had been founded, its regular urban layout was established, the parish church and town walls were erected, and a little later – the castle [6, 11, 17]. The monarch’s involvement in the rapid development and, primarily, the defensiveness of Skawina was dictated by his desire to include the town in the defensive system of Poland at the time, which was created by King Kazimierz Wielki himself. The system was based on chains of fortified towns and castles located along the state borders [11, 18]. As mentioned before, the research in Skawina resulted from the need for an extensive study of the history of the town’s spatial development and assessing its cultural value because of its uncontrolled development which poses a threat to its heritage. Results of the study are critical for the restoration of the town. They also support the current conservation policy realised by the Voivodeship Monument Protection Office, and the planning policy created by the local authorities.

During the first stage of the research in Skawina, carried out according to the approved methodology, the so called “desk study” was conducted. The purpose of the study was to collect vital archive documents (written, printed, iconographic and cartographic) related to the town’s history, and on their basis to determine the key stages in the development of the town, as well as the most important objects and spaces recorded in sources.

The aforementioned study was carried out in the units of the National Archive, in the archive of the



Fig. 1. Skawina on the First Military Photograph from the years 1779-1783 – “Galizien und Lodomerien - First Military Survey”). Org. [in:] Austrian State Archive, Kriegsarchiv in Vienna.



Fig. 2. Skawina on the Second Military Photograph from the years 1861-1864 – “Galicia and Bukovina - Second military survey of the Habsburg Empire”. Org. [in:] Austrian State Archive, Kriegsarchiv in Vienna.

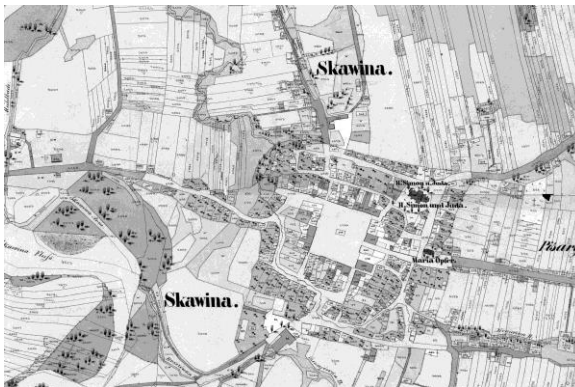


Fig. 3. Skawina on the Galician cadastral plan from 1845. Org. [in:] National Archive in Krakow, sign. 29/280/0/9.1/3457.



Fig. 4. Market square in Skawina at the beginning of the 20th c. View from the south-west towards the fragment of the northern and eastern frontage. Photo from Archive KHAUiSzP WA PK.

Voivodeship Monument Protection Office in Krakow, in the Archive of the Chair of History of Architecture, Urban Studies and Art at the Faculty of Architecture, Cracow University of Technology and the Austrian State Archive – in the Kriegsarchiv branch in Vienna. The research yielded substantial amount of material in the form of archive documents, historic maps (e.g. Austrian maps: the First Military Photograph from the years 1779–1783 – “Galizien und Lodomerien – First Military Survey”), the Second Military Photograph from the years 1861–1864 – “Galicia and Bukovina – Second Military Survey of the Habsburg Empire”, and the cadaster of Galician towns from 1845), as well as archive iconography presenting old views of the town and its most valuable monuments. The above-mentioned studies allowed for initially determining the stages in the architectonic and urban-planning development of the town.

The second stage of research involved the field research carried out in Skawina, which primarily included the chartered urban layout. The inventory of the cultural heritage of Skawina carried out in this way, with the photographic documentation of the current state, allowed for stating that a considerable number of culturally valuable spaces and structures have survived within the analysed area until the present. Among the most important are: the medieval urban layout, the parish church of St. Simon and Jude with the churchyard, the filial church of the Visitation, the synagogue, the 19th-century town hall, the railway station complex, the building of the former “Sokół” Gymnastic Association, the historic tenement houses surrounding the market square, relics of wooden buildings, relics of industrial buildings from the end of the 19th and the beginning of the 20th century, as well as numerous historic roadside shrines.

During the third stage of the research the method of “aerial archeology” was used. Professional aerial photographs were taken, which allowed to carry out multifaceted analyses of the urban layout of the town. The contemporary orthophotomap clearly shows the urban structure of Skawina, formed at the time of its foundation, with the centrally located market square surrounded by settlement blocks and visible relics of their division into settlement plots.

The fourth stage involved comparing the research results obtained during the earlier stages. The archival plans (First Military Photograph from the years 1779–1783 – “Galizien und Lodomerien – First Military Survey”, Second Military Photograph from the years 1861–1864 – “Galicia and Bukovina – Second military survey of the Habsburg Empire” and the Galician cadastre of the town from 1845) on which Skawina had been marked were compared with modern-day aerial photos. It allowed for identifying transformations in the urban tissue and



*Fig. 5. Market square in Skawina nowadays. View of the fragment of the market square and the western frontage. Photo by D. Kuśnierz-Krupa.*



*Fig.6. Skawina on a contemporary aerial photo – orthophotomap. Photo by W. Gorgolewski, 2017.*



*Fig.7. Aerial photo of the urban layout of Skawina. View from the south. Photo by W. Gorgolewski, 2017.*

its elements such as the market square, settlement blocks, the communications system or plots on which the culturally significant objects were located.

The final stage of research according to the proposed methodology involved assessing the cultural values of the town, which, as has been confirmed by the results of earlier stages, are very high. Skawina, founded around the 14th century, was given a regular, defined urban layout that has remained discernible until today and was only slightly altered in the past. The considerable extent to which the urban layout of the chartered town has been preserved, and the related communications system, also influence the legibility of the urban model according to which Skawina was founded. It was the so called 9-block model in

which a rectangular market square was located in the centre of the layout, surrounded by eight single building development blocks divided into settlement plots. Relics of the original division have been preserved till today in the diagonal block, in the south-east corner of the market square.

The results of the research carried out in keeping with the approved methodology have led to the conclusion that Skawina, as a historic town, has maintained its high values until today. Those values should be under absolute conservation protection, first of all by means of inscribing the urban layout into the monument register. The historic heritage of the town and its condition ought to be constantly monitored and verified, and subsequently restored.

### Conclusion

In the conclusion to this article, it should be emphasised that its aim was, on the one hand, to present the original research methodology prepared in order to protect historic towns, to document and popularise them, and on the other, to draw attention to the issue of protecting historic towns at the time of far-reaching spatial transformations related to their development. The methodology is an original combination of selected research methods such as “desk studies”, field studies, “aerial archaeology” or the method of analysis and logical construction, and their suitable application at particular stages of the research. It allows for distinguishing individual stages of urban development, determining the state of preservation of the chartered town layout, legibility of the model used to lay out the town, as well as indicating measures indispensable for its protection and restoration. Research results obtained thanks to implementing the discussed methodology can be used both in the current conservation policy and the planning process. They verify the frequently outdated scientific findings and are created on the basis of knowledge obtained from archive sources, which is compared to the current state of urban structure.

The Author hopes that the methodology she has prepared will be more frequently applied both in Poland and abroad since, as has been demonstrated, it allows for pinpointing the most significant existing elements and values of the urban cultural landscape, with a recommendation for the restoration of those parts that require it. It also helps in a working out appropriate directions in its protection, thus slowing down the degradation of the cultural heritage in the town, which forms “the basis for collective identity and a factor that might enhance the sense of belonging by integrating various communities – local, national, religious and ethnic – therefore activities geared at preserving it and popularizing knowledge about it can be identified with contributing to the common good” [2].

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