THE TRADITION AND THE NETWORK OF URBAN FORM RESEARCH IN POLAND

ABSTRACT

This article presents an overview of research on urban form in Poland. Within historical geography this tradition is continued today by geographers from the University of Łódź where for years professors Mark Koter and Mariusz Kulesza have been implementing the research methodology of the English school. This research presents a descriptive approach, while research in the field of architecture and urban planning tends to be prescriptive. They have been, and continue to be, conducted at various architectural universities both in the fields of history and monuments conservation, urban planning, spatial planning, and landscape architecture.
1. INTRODUCTION

The study of urban form has a long tradition in Poland. In Koter and Kulesza, 2010 the authors present this tradition going back to research from the early 20th century. This was mostly research done by geographers.

If we consider the classification introduced by A. V. Moudon we could look at the Polish tradition through the perspective of three separate trends of thinking about urban form: descriptive, prescriptive for urban design and historical – directed towards formulation of historical theories of city building:

1. “The study of urban form for descriptive and explanatory purposes, with the aim of developing a theory of city building (...) Such studies are concentrated on how cities are built and why.”
2. “The study of urban form for prescriptive purposes, with the aim of developing a theory of city design. Such study concentrates on how cities should be built.”
3. “The study of urban form to assess the impact of past design theories on city building. This is in the realm of design criticism, which makes the sophisticated distinction between the theory of design “as idea” and the theory of design “as practiced”.”

The research presented below mostly follows the first two approaches which are carried out by two professional circles – geographers and architects engaged in the problems of urban design, urban planning, or historic monument conservation.

2. METHODS

The paper presents an overview of the state of the work of Polish urban planning thought on urban form. The temporal scope of the study is defined from the interwar period in Poland, when the first significant works dealing with urban form were created, to the contemporary studies. The work makes use of bibliographical sources mainly from geographical, architectural, urban and planning studies. The work presents both the achievements of individual authors and attempts to present some selected theoretical themes.

3. THE TRADITION OF MORPHOLOGICAL STUDY IN THE FIELD OF HISTORICAL GEOGRAPHY

M. Kulesza considers K. Dziewoński and S. Golachowski to be the pioneers of morphological study in Poland after WW II. M. Koter and M. Kulesza in The Study of Urban Form in Poland discuss in more detail the achievements of Polish morphological thought in historical geography.
Contemporary urban morphology related to historical geography is being developed in the circle of geographers based at the University of Lodz. For years, Professors Mariusz Kulesza and Marek Koter have been collaborating with the International Seminar of Urban Form and they are authors of papers published in *Urban Morphology*[^8], and of research works implementing the methodology of the English school.

In his work on Lodz[^9], the author makes reference to the methodology developed by M. R. G. Conzen. A. Araszkiewicz and M. Sobczyński write: “He has pioneered in Poland comprehensive studies on the genesis of industrial urban layout, using both town-plan analysis and the Conzenian burgage cycle method, adapted for this purpose. He has also introduced some new theoretical and methodological notions e.g. urban stratigraphy, index monuments and urbomorphology.”[^10]

M. Kulesza also presents the significance of M. Koter’s work for the formulation of theoretical and methodological premises for the historical geography of the city: “M. Koter’s formulation of theoretical and methodological premises of the morphology of cities (or urbomorphology) as an independent sub-discipline of science, although functioning within the field of the geography of cities, is of great importance for the historical geography of cities. The first work in the series was the article *Fizjonomia, morfologia i morfogeneza miasta. Przegląd rozwoju oraz próba uściślenia pojęć* (Physiognomy, morphology and morphogenesis of the city. A Review of the Development and an Attempt to Clarify the Terminology). The author reviewed the development of city morphology, starting from its theoretical premises, and clarified the meaning of the basic terms for this field of study and their hierarchy, he also offered his own definitions of the said terms. It must be emphasized that his findings introduced a fundamental terminological order into the field of city morphology in Poland. Another work of the above series, discussing morphogenesis of a great city on the example of Łodz (Koter, 1974), expands the earlier findings by determining the aim, subject, objects, elements, scope, and methods of morphogenetic study.

The latest work by M. Koter[^12] of this series – *Od fizjonomii do morfogenezy i morfologii porównawczej. Podstawowe zagadnienia teoretyczne morfologii miast /From Physiognomy to Morphogenesis and Comparative Morphology. Basic Theoretical Problems of City Morphology/ -* is a summary of the theoretical aspects of this discipline. It contains explanations of the following terms: physiognomy, morphology, morphological stratigraphy, development morphology, evolution morphology, comparative morphology as well as morphology *sensu strico* and *sensu largo*, and also presents their mutual relations. Moreover, the author offers a schematic presentation of the hierarchic system of the city’s constituent parts as well as of a network of cities and discusses the changes taking place within these systems. It must be emphasized that introducing such order into the problems of terminology and into city morphology research problems promotes both systematization and further development of this discipline, not only in Poland.”[^13]
4. THE TRADITION OF URBAN FORM STUDY IN THE FIELD OF ARCHITECTURE AND URBAN DESIGN

Oskar Sosnowski, mentioned in review – was a professor of the Faculty of Architecture at Warsaw University of Technology, and very active in many areas of scientific study, being also a practicing architect and urban planner. He designed many churches and urban complexes (the garden-city Sadyba), and was also engaged in monument conservation, theory of urban design (the design of the so-called okolnica – rundling). In 1923 he was one of the initiators of establishing the Society of Polish Town Planners. In 1929 he founded the Chair of Polish Architecture at the Faculty of Architecture, Warsaw University of Technology. He was killed in the first days of the war (September 1939) trying to rescue the archives of the Chair.

His contribution to the development of urban morphology is primarily the work discussing the street network of Warsaw – published in 1930 Powstanie, układ i cechy charakterystyczne sieci ulicznej na obszarze Wielkiej Warszawy / Emergence, layout and characteristic features of the street network in the area of Greater Warsaw, dealing with its morphogenesis and typology (Fig. 1.).

4.1. Tradition of research in the field of history and conservation of monuments of architecture and urban design

History determined the choice of pragmatic approach to the research tasks in the field of urban morphology in Poland. The damage brought on by the WW II in Poland was as high as 2/5 of the whole cultural property of the country, and the country itself shifted its territory – a half of the area was lost to the USSR, whereas areas were regained in the west.

Challenges posed by the task of rebuilding the country were related both to the housing stock and industrial infrastructure, and also to the reconstruction of whole urban organisms. Warsaw, Gdansk and many other Polish cities were in complete ruin.

The research on the preserved urban fabric and the existing documentation of the material infrastructure was the foundation for reconstructing not only single buildings but also whole urban complexes. It was thanks to the efforts of extraordinarily talented Polish architects and monument conservationists that the reconstruction of many historic urban complexes was made possible.

The example of Warsaw is the most important here, and its reconstruction is also a symbol of the nation’s perseverance and the continuity of its culture. Given the enormity of the damage and the countless amounts of other needs, the reconstruction of the Old Town in Warsaw was by no means an obvious decision. It took a lot of effort and diplomacy for the decision to rebuild the Warsaw Old Town to be finally undertaken.
The decisive voice on the matter of rebuilding the Old Town was that of prof. Jan Zachwatowicz, a student of Oskar Sosnowski, who supervised the reconstruction from 1946 onwards. The inventory and conservation works were also started in that year. The architects even used the inventory works carried out by students before the war which managed to survive. The land use plan came into legal force in 1948, and in 1949 the rebuilding began in practice.

The way the city infrastructure was to be reconstructed stirred up some controversy. The plan took inspiration from 18th century Warsaw – the period of the city’s greatest grandeur, yet preserving the spatial layout given to it in the 14th century. The reconstruction plan of the appearance of the buildings was developed by architects and art historians using the priceless images of Warsaw painted by Canaletto (Bernardo Bellotto).

And thus “the Polish school of monument conservation” took shape in the years 1946 – 1950. It developed from the need to respond to the challenge of raising the centre of the capital from complete ruin. The symbolic reconstruction aimed to recreate the ideal historical form of the city and at the same time to adjust it to the needs of contemporary users. Hence the decisions to reconstruct only the façades of whole city blocks, whereas the functional layout of flats and the infrastructure were to be built according to modern functional and technical standards.

Prof. J. Zachwatowicz, who decided to choose this reconstruction approach, realised that the situation required rational reconciliation of two legitimate needs – the need to reconstruct the historical urban complex and the need to deliver the architectural fabric meeting the modern standards of use. In this aspect, the reconstruction of Warsaw was unique in the whole world also because this is exactly the approach that is adopted now – in many different scales – to the restoration of individual historic monuments and their complexes.

What is interesting, prof. J. Zachwatowicz was one of the signatories of the Venice Charter (1964), which opposes reconstruction of historic monuments, and the Old Town in Warsaw, although raised from ruin against the prevailing doctrines of monuments conservation, has gained recognition and has been entered onto the UNESCO List of World Heritage (1980).

“The Polish school of monument conservation” is an extensive tradition encompassing numerous trends and a great many projects. The field of urban design, which is the subject of interest for us here, has been developing in response to the enormous needs related to reconstruction of historic urban complexes. It is impossible to mention all the achievements of archaeologists, art historians, architects, conservationists, urban designers, and spatial planners. Their works, initially directed primarily towards reconstruction of the infrastructure lost during the war, with time started to become more open to the possibilities of exploring the past purely for the sake of expanding knowledge. At present, numerous research projects, also frequently carried out
in response to some contemporary need, lead to new discoveries and reform our knowledge on the way cities were built in the past.

It is worth mentioning at this point, as an example, the enormous body of work done by researchers engaged in the study of Krakow and Małopolska urban development history. The scale of the research area may be easier to perceive if we realise that until the 17th century there were 284 town locations in Małopolska, 217 of which have survived until today. Although based on detailed study of individual places, the works are comprehensive and complete with theoretical conclusions at the urban scale. We cannot fail to mention here, either the Krakow Charter formulated in 2000, which presents the concerns of the Polish conservationists in the face of contemporary challenges related to protection and development of urban spaces.

4.2. The tradition of research in the field of urban design and spatial planning

Polish post-war urban design was developing in response to the enormous needs of rebuilding the country. Shortages of flats, infrastructure, work, and manufacturing places required a great effort both in design and construction. The period of social realism and later the modernist ideals promoted the creation of bold and daring visions of development. The political system gradually nationalized both the land and buildings including businesses. Cities were able to expand freely on the newly absorbed areas, and the method of building with prefabricated elements, introduced step by step, gave hope for a fast completion of new urban complexes.

In most of the historic urban complexes, their fabric was protected, and reconstruction aimed to save whole urban blocks. In new development areas, however, the planners broke with the traditional urban design and, following the modernist trends, opted for the “play of masses brought together in light.” There are two most important concepts which are the contribution of Polish urban design theory to the study of urban morphology. These are – an urban enclosure and an urban composition.

4.2.1 Urban enclosure

K. Wejchert has presented the definition of an urban enclosure: “All types of limitations create a kind of “enclosure” around the observer who has stopped at a certain point, regardless of the absolute dimensions of the perceived fragment of the environment.” The theory of landscape enclosure is also related to the Polish tradition. Enclosure has been defined by J. Bogdanowski, M. Łuczyńska-Bruzda and Z. Novák, who wrote about its role:

“We get to know a landscape by exploring its individual enclosures. An enclosure here are the whole physiognomic surroundings of the place from which we are looking at the landscape. Obviously, there may be an infinite number of such
places. Nevertheless, it is possible to limit their number, while exploring an area, to the series of the ones which most fully characterize the individual types and forms of the landscape, and thus usually constitute its key points.”

An enclosure is a spatial unit which offers the opportunity of learning a landscape. It presents this cognition as a sum of individual elements and is based on the account given by the senses. Such enclosure may be defined as “a starting point for learning and forming landscape architecture.”

Both the Krakow School of Landscape Architecture (Fig.2.) and K. Wejchert’s theory understand the enclosure as a material whole, which makes their approach different from the one of K. Lynch, G. Cullen, or Y. Ashihara, who emphasize the manner of perception of space by a human.

4.2.2 Urban composition

The fundamental concept ordering the thinking about city morphology after the II WW is the concept of urban composition.

First, we must emphasize at this point the differences between architectural and urban composition. It is not only the question of their scope or the different perception of the objects to which they pertain. Urban composition is predominantly a resultant of the composition (coordination) of all the other aspects related to the city. It was most aptly formulated by Tadeusz Tołwiński, Polish architect and urban planner, theoretician, and practitioner, while defining the role of urban factors: “Simultaneously with the five urban factors (…), a factor of different nature also operates – the factor of intentional creation. It encompasses the whole structure and form of the city, whatever their origin. Based on the foundation derived from the permanent and concrete data provided by all the above-mentioned factors and on the whole living system of the city, created in the areas represented by these factors, the factor of composition creates the idea encompassing all of the phenomena occurring in the city. It coordinates, harmonizes, and creates – of all the individual factors and parts – one uniform organism, simple in its structure and clear in its unified form. Periods of its domination and calm control over the other five factors are the periods of high urban design quality in the organization of the city. Periods of its downfall, chaotic and helpless subordination to the prevailing forces of the other factors accompany the downfall of the city culture and sometimes reflect the general chaos reigning in the culture and civilization of a given country and certain historic era. Its contribution to the development of an urban organism, or absence of such contribution, may be seen from the plan and appearance of a city or its parts almost at the first glance (…). There is no way to create it artificially, upon request, when it is needed. It is a creative emanation of human spirit; it is a profound phenomenon of culture.”

Urban composition is a concept which characterizes accurately the views of some scholars. Bolesław Malisz, creator of threshold theory, views composition as assembling a whole from parts. “The whole is governed by
UP: Fig. 1. Sosnowski, Streets of Warsaw before 1881 – typology. (Sosnowski, Oskar, Powstanie, układ i cechy charakterystyczne sieci ulicznej na obszarze Wielkiej Warszawy, Wydawnictwo Zakładu Architektury Polskiej Politechniki Warszawskiej, Warsaw, 1930)

DOWN: Fig. 2. Bogdanowski’s idea of urban enclosure based on room elements (Bogdanowski, Janusz, Kompozycja i planowanie w architekturze krajobrazu, Ossolineum/PAN, Wrocław–Warsaw–Krakow–Gdansk, 1976)
its own rules, which cannot be derived from the rules governing the parts. The broadly understood process of composing operates simultaneously from more general formulations to details and in the opposite direction. The method of composition must therefore necessarily follow the pathway of subsequent close-ups and gaining more distance. This difficult path will lead us in the right direction only if we comply with certain criteria collected in one system.”

The composition gives the model a more crystallised form: “… we try to combine a sum of premises in one whole and “fit” it harmoniously into the natural environment.” Composition, as seen by the aforementioned school of landscaping, is based on enclosures, and “Creating the enclosure is the foundation of composing a landscape.”

W. Ostrowski defines the city by the order in its structure, composed hierarchically of units characterised by different features. K. Wejchert points out the comprehensive character of a city composition, encompassing all its parts and scales. “The subject of urban composition are all urban complexes, regardless of their content or scale: it affects the smallest groups of houses, housing estates, social centres and huge complexes of city central areas, industrial complexes, sports and recreational areas.” He also emphasises the role of beauty in urban reality: “The main objective of urban composition is to elicit or create beauty in the environment surrounding human beings.”

W. Cęckiewicz deems the correct hierarchy of spatial scales to be the foundation of urban composition. It starts from the scale of the country, regions, cities, and agglomerations all the way down to small towns and villages. In the scale of the city, the fact whether there is order in it or not is decided by the relation between the central historic complexes and the new complexes of housing estates. Nevertheless, the foundation for spatial order is the harmony between culture and nature: “… only between these two creations may our daily life go on in an orderly fashion – between the wildlife, which is the creation of nature, and culture, which is the creation of human race.”

4.3 The tradition of research in the field of landscape architecture

The Polish school of landscape architecture, whose achievements have already been mentioned above, developed in Krakow as an independent discipline of science based on the tradition of research in the fields of architecture and urban design. Its pioneers were professors associated with many academic centres in Poland. Nevertheless, it is Janusz Bogdanowski who must be recognised as its main founder.

In 1973, in collaboration with Zygmunt Novák and Maria Łuczyńska-Bruzda, Bogdanowski published the work entitled Architektura Krajobrazu (Landscape Architecture), reprinted many times since its first publication, and in 1976 – Kompozycja i planowanie w architekturze krajobrazu (Planning and Composition in Landscape Architecture).
In 1963, prof. Bogdanowski developed his own original method of research on the landscape through enclosures and architectural-landscaping units (in Polish: JARK-WAK). It was described in the work *Studium wartości krajobrazowych Sandomierza i okolic* (Study of the Landscape Values of Sandomierz and Its Surroundings) and given a more comprehensive formulation in the studies of the Jurassic castles of Mirów and Ogrodzieniec in 1964. It features three spatial scales:

- architectural-landscaping units, called JARKs (at the scale of urban planning),
- complexes of architectural-landscaping enclosures, called ZWAKs (at the urban scale),
- architectural-landscaping enclosures, called WAKs (at the architectural scale).

The factors considered while defining the units are land configuration, its cover and also the level of development and historical transformations. The research is to serve the purpose of evaluation and drafting the correct plan.

5. BETWEEN THE TRADITION AND *ISUFPOLSKA*

The academic and practical achievements presented in the chapters on the tradition of the study of urban form in Poland have continued in subsequent years. It is impossible to list all these activities.

*In the field of historical geography*

In addition to the research carried out in the University of Lodz scientific community by M. Koter and M. Kulesza we have to mention works done by Marek Sobczyński on Polish borders and note the scientific community of the University of Wrocław with Barbara Miszewska, who has been researching the morphology of Wrocław’s urban structure.

*In the field of history and conservation of monuments of architecture and urban design*

Andrzej Kadłuczka devotes his works to the important issues of the relationship between the historic substance and contemporary functional requirements. He is also the initiator of the so-called *Charter of Krakow* on the Protection of Architectural Cultural Heritage, which was signed in Krakow in 2000.

The figure of Krzysztof Pawłowski should be also mentioned, who worked on historic towns in southern France and was the discoverer of circulades - a particular form of medieval round towns.
**In the field of urban design and spatial planning**

K. Wejchert’s work is continued by Sławomir Gzell, author of many works on urban planning and promoter of the idea of harmonising activities in urban design\(^7\). An important theoretical position is the work of Jacek Gyurkovich on *powerful form*\(^48\) in the urban landscape. The author explains the idea of *powerful form* as follows:

“The quest to exist in the urban space and in the consciousness and memory of users has always involved the search for individual, distinctive features of (...) buildings - powerful forms (...).

The surrounding space is perceived, remembered and recognised through characteristic sequences. Powerful forms play an important role in the crystallisation of these sequences, co-creating their atmosphere and constituting legible signs, allowing for an unambiguous identification of places and spaces. Therefore, the singling out of signs, special features, constituting points of reference, is a process accompanying the entire history of the development of civilisation and culture. These signs are defined here as powerful forms. Thanks to their characteristic features, such as being different from other structural elements and expressive power, they play an important role in the visual information system. These characteristics, achieved by means of special shaping, saturation of detailing, textural or colour solutions, allow them to achieve expressiveness through contrast with their surroundings.”\(^49\)

**In the field of landscape architecture**

Janusz Bogdanowski has published works up to the first years of the 21st century\(^50\). They concern specific cultural landscape issues as well as theoretical issues and didactics. His successors include Aleksander Böhm\(^51\), author of, inter alia, works on the synergy of urban interiors\(^52\) and methodological issues related to landscape architecture, and Wojciech Kosiński, whose research focuses on issues related to tourism, urban theory, and landscape architecture theory\(^53\).

Agata Zachariasz, in turn, focuses her research interests on urban and park greenery\(^54\). It should also be noted the direction of research in which computer techniques are used to study landscape visibility\(^55\).

**URBAN MORPHOLOGY - POLISH NETWORK**

The Polish MU network was formalised in 2019 and operates as *ISUFPOLSKA*\(^46\). The following is a summary of the work directions presented by those involved in the Polish urban morphology network. As has been stated above, at present, the issues of urban morphology in the field of historical geography are the
subject of research carried out by scholars of the Lodz school of geographers founded by prof. M. Koter and associated with the Conzenian tradition. Another important research centre is in Wroclaw, in Institute of Geography and Regional Development, University of Wroclaw. Tomasz Figlus, Łukasz Musiaka, Magdalena Deptula present the Faculty of Geographical Sciences, University of Lodz and Robert Szmytkie - University of Wroclaw.

As regards the research in the field of architecture and urban design – their history, theory and planning as well as building practice – an enormous body of research work must be ascribed to trends no 2 and 3, defined by A. V. Moudon (Moudon, 1997) as the trends of viewing urban form: “for prescriptive purposes, with the aim of developing a theory of city design” and “to assess the impact of past design theories on city building”. This rich tradition has been accumulated independently of the theoretical achievements of the classic schools of urban morphology and has been both the basis and inspiration for contemporary research.

Authors working in the field represent different schools – Cracow University of Technology (A.A. Kantarek, M. Motak, K. Dudzic-Gyurkovich), Lodz University of Technology (M. Hanzl) and Opole University of Technology (M. Adamska).

In Krakow, research based on J. Bogdanowski’s theory of landscape enclosures are being continued, inter alia, by Zbigniew Myczkowski.

In the years 2017-2020 Polish Network of Urban Morphology ISUF POLSKA together with Serbian Network of Urban Morphology realised Grant financed by International Seminar on Urban Form, University of Belgrade, and Cracow University of Technology - ISUF Small-scale Projects: Research and Practice, Plot by plot urbanism”. Mapping post-socialist changes in urban tissues. Case of Krakow and Belgrade. A Comparative Study. It was done by teams from Cracow University of Technology (Anna Agata Kantarek, Krzysztof Kwiatkowski, Wojciech Korbel) University of Belgrade (Vladan Đokić, Ana Niković, Aleksandra Đorđević) and Urban Morphology Research Group University of Birmingham (Ivor Samulels) and concerned the state of urban design and planning in the post-socialist era.

In September 2022, ISUF POLSKA organised the XXIX ISUF Conference in Lodz and Cracow, Poland. It was focused on: Urban Redevelopment and Revitalisation: A multidisciplinary perspective with main conference topics:

- Classical and innovative theoretical concepts of the redevelopment and revitalisation of spatial structures.
- Methods of research of the transformation processes of settlement spatial structures and their application.
- Decision-making factors and political, legal and administrative conditions for redevelopment and renewal of the urban tissue.
- Social and cultural determinants of spatial redevelopment and regeneration.
- Economical, functional and infrastructural changes and their impact on the renewal processes.
- Directions of change in the historic urban structures.
- Practical architectural and urban solution

The conference gathered over 300 participants from 36 countries, in face-to-face and online format.

CONCLUSIONS

The outline of the development of thought and research on urban morphology in Poland presented above is only an introduction to a broader and more in-depth study. It is impossible to present all researchers and conducted research in a short study. In particular, there is a need for a detailed extension of the search to include studies conducted in various academic centres throughout Poland and also for a broader view through fields of science other than those represented here.

It seems essential to realise that morphological research carried out today is one of the important ways of looking at contemporary developments in built-up environment. Many of them promote spatial and meaningful chaos, posing a threat to the proper development of the human being. It is necessary to see the efforts of researchers also in this perspective - in the perspective of the danger to the integrity of Euclid’s three dimensions, time and the infinite number of psychic and spiritual dimensions of the human being. “… urban morphology – based on the three-dimensional form developed in time – is a synthesis of other aspects of a city’s existence, and the research into its essence – carried out in many aspects and from many perspectives – is given its fullest form here.”

NOTES

2. Anne Vernez Moudon, “Urban morphology as an emerging interdisciplinary field”, in Urban Morphology (1997) 1, pp. 3-10
3. Ibidem, p. 8
5. Mariusz Kulesza, *Morfogeneza miast na obszarze Polski Środkowej w okresie przedzborowym: dawne województwo łyczyckie i sieradzkie*, [Morphogenesis of urban settlements in Central Poland in the pre-partition period: the former łyczyckie and sieradzkie voivodeship], (Wyd. UŁ, Łódź, 2001), pp. 13-16


10. Anna Araszkiewicz, Marek Sobczyński, “Professor Marek Koter Scientific way from cartography to political geography”, in Region and regionalism no 8/1/2007, University of Łódź, Governmental Research Institute Silesian Institute Society, Łódź, Opole, 2007, p.8


13. Mariusz Kulesza, Morfogeneza miast na obszarze Polski Średkowej w okresie przedrozbiorowym: dawné województwo łyczyckie i sieradzkie, [Morphogenesis of urban settlements in Central Poland in the pre-partition period: the former łyczyckie and sieradzkie voivodeship], (Wyd. UL, Łódź, 2001), pp. 18 – 19.


15. Other options which were also considered included leaving the ruins as they were permanently or building up the area of the Old Town with a modern housing estate.


17. Warsaw on UNESCO List of World Heritage https://whc.unesco.org/en/list/?search=warsaw&order=country (accessed on 12.06.2023)


*Karta Krakowska 2000a*, *Wiadomosci Konserwatorskie* 7,8/2000:10-13 *Karta Krakowska 2000b* [https://www.triestecontemporanea.it/pag5-e.htm](https://www.triestecontemporanea.it/pag5-e.htm) (accessed on 17.01.2023)

These problems have been presented more extensively in Kantarek, Anna Agata, *On Orientation in The Space of The City*, (Lambert Academic Publishing, Saarbrücken, 2013), pp. 32 – 35.


Ibidem, p. 19

Ibidem, p. 19

Kazimierz Wejchert in Kazimierz Wejchert, *Elementy kompozycji urbanistycznej*, (Arkady, Warsaw, 1974), presented the main elements of urban fabric defining its structure. The classification remained clearly under the influence of K. Lynch, yet it refers to the structure of the city itself, not only to the perception of the city. Wejchert lists the following elements: streets, districts, edges, nodes, dominants, outstanding landscape elements, characteristic features. He also introduces the general concept of *elements crystallising the city plan*, which relies on
the perceivable principle or major structural element which we remember: “Elements crystallising the city plan are its components which constitute its main features, clearly visible and easy to remember. (...) Their characteristic spatial features symbolise the whole city in the eyes of its inhabitants; clearly visible in the space are absorbed by all users, regardless of their background.”


29. These factors are the factors of natural conditions, fortification (safety), transportation, the economic factor, and the moral/legal factor.


40. The following scholars: F. Krzywda-Połkowski, T. Tołwiński, A. Wodźczko, W. Czarnecki, Z. Novák, A. Zielonko, A. Scholtz, G. Ciolk, W. Niemirski, L. Majdecki and J. Bogdanowski have been listed in Aleksander Böhm, Wojciech

41. See also Janusz Bogdanowski, Metoda jednostek i wnętrz architektoniczno-krajobrazowych (JARK-WAK) w studiach i projektowaniu., (Wyd. PK, Krakow, 1999),

42. Marek Sobczyński, Trwałość dawnych granic politycznych Polski w krajobrazie kulturowym kraju (w świetle badań morphologicznych i użytkowania ziemi) [Persistence of Poland’s former political borders in the country’s cultural landscape (in the light of morphological and land use studies)] (unpublished PhD thesis, Lodz University, 1986)

43. Barbara Miszewska, Elementy struktury morfologicznej Wrocławia, (Acta Universitatis Wratislaviensis, 438, Prace Instytutu Geograficznego Uniwersytetu Wrocławskiego, B 3; Wrocław, 1979); Barbara Miszewska, Struktura morfologiczna peryferyjnych osiedli Wrocławia, (Prace Instytutu Geograficznego Uniwersytetu Wrocławskiego, B 14; Wrocław, 1996); Barbara Miszewska, Struktura przestrzenna Wrocławia ze szczególnym uwzględnieniem morfologii miasta (collection of publications constituting the habilitation thesis), (Wrocław: University of Wrocław, 1997),

44. Karta Krakowska 2000a, Wiadomości Konserwatorskie 7,8/2000:10-13

45. Circulade https://en.wikipedia.org/wiki/Circulade (accessed on 03.06.2023)

46. Krzysztof Pawłowski and Mirosław & Weronika Wiśniewski presented the work of french urbanism in three volumes untitled Urban planning a la francaise; Krzysztof Pawłowski, Urban Planning à la Française, vol. 1, (NID, Warsaw, 2020); Krzysztof Pawłowski, Tysięc lat doświadczeń i europejskich innowacji Dopelnienie obrazu, [A thousand years of experience and European innovation Complete the picture], (Universitas, Krakow, 2017); Mirosław Wiśniewski, Weronika Wiśniewska, Od wielkiej rewolucji po nowe tysiąclecie, (From the great revolution to the new millennium, vol. 3, (Universitas, Krakow, 2018),

47. Sławomir Gzell, Wykłady o współczesnej urbanistyce, (Oficyna Wydawnicza Politechniki Warszawskiej, Warsaw, 2015), pp. 208

48. Jacek Gyrkovich, Znaczenie form charakterystycznych w kształtowaniu i percepcji przestrzeni. Wybrane zagadnienia kompozycji w architekturze i urbanistyce, [The importance of characteristic forms in the shaping and perception of space. Selected issues of composition in architecture and urbanism] monography nr 258, (Wyd. PK, Krakow, 1999),


50. https://suw.biblos.pk.edu.pl/search&query=bogdanowski&termId=1,2,79 (accessed on 02.06.2023)
A geographer and historian (the Faculty of Geographical Sciences, University of Lodz). His scientific achievements mainly concern the issues of spatial structures of settlement and cultural heritage in geographical and historical perspective, with particular emphasis on the origin and changes in rural settlement patterns. Some new work uses graph methods to analyse the variability of planning over time. He devotes much attention to the morphological transformation of city centres in Poland and villages incorporated into the cities or located in suburban zones (Łukasz Musiaka, Tomasz Figlus, Robert Szymtkie, “Models of morphological transformations of centres of the largest Polish cities after World War II”, European Planning Studies, 2021, 29 (3), pp. 511-535). He recently participated in a research project aimed at a historical and urban study of Łódź and its rural components.

A geographer with postgraduate studies in the field of GIS (the Faculty of Geographical Sciences, University of Lodz). In his scientific work, he combines urban geography, historical geography and cultural heritage studies, particularly concentrating on urban morphology. He focuses on the spatial layout analyses of historical cities and socio-spatial-economic role of cultural heritage. At present, he is mainly focused on the spatial transformations of post-war landscape, post-war recovery, and revitalisation (Łukasz Musiaka, Tomasz Figlus, Robert Szymtkie, “Models of morphological transformations of centres of the largest Polish cities after World War II”, European Planning Studies, 2021, 29 (3), pp. 511-535). Currently, he is leading a grant entitled ‘Models of morphological transformations of the large cities of the former Recovered Territories after 1945 in the context of challenges of contemporary urban spatial policy.

A geographer, (the Faculty of Geographical Sciences, University of Lodz), the author of PhD thesis: Magdalena Deptuła, Proces kształtowania się zjawiska fringe belt w miastach polskich na wybranych przykładach, [The Process of...
shaping the fringe belt phenomenon on the example of several selected Polish cities] PhD thesis, typescript, (Łódź, 2014) and Magdalena Deptuła, Zjawisko Fringe Belt w strukturze morfologicznej miast polskich na przykładzie Radomia, (Wydawnictwo Uniwersytetu Łódzkiego, Łódź, 2021).


61. Anna Agata Kantarek contribution to the study of urban morphology is the research presented in a PhD thesis, published in an abridged form in Anna Agata Kantarek, Paryskie kwartały. Współczesna koncepcja kwartału zabudowy w strukturze miasta, (Wyd. PK, Krakow, 2004), with the definition of the form of the contemporary urban block, based on the research on the contemporary urban fabric in Paris in 1977 – 97. Subsequent publication (Anna Agata Kantarek, On Orientation in The Space of The City, (Lambert Academic Publishing, Saarbrücken, 2013) presents the relations between the condition of the city form and the possibilities of its perception. In conclusions the concept of orientation in the space of a city as an important operational category was described in Anna Agata Kantarek, Tkanka urbanistyczna. Wybrane zagadnienia (Wydawnictwo PK, Krakow, 2019) selected problems related to the urban tissue were presented.; Maciej Motak, professor at Cracow University of Technology, is the author of, inter alia, the study of the Officers’ Housing Estate in Krakow - Maciej Motak, Osiedle Urzędnicze w Krakowie Urbanistyka i Architektura 1924-1942, IInd ed., (Wydawnictwo PK, Krakow, 2022); Karolina Dudzic-Gyurkovich is the author of PhD thesis on urban barriers related to transport systems - Karolina Dudzic-Gyurkovich, Pokonywanie barier urbanistycznych związanych z układami transportu na obszarze Metropolii Barcelońskiej – wybrane problemy, [Overcoming urban barriers related to transport systems in areas of Barcelona Metropolis, selected problems], (Krakow, Wyd. PK, 2019).

62. Małgorzata Hanzl is an architect and associate professor at Lodz University of Technology, Visiting scholar at Warsaw University of Technology, Architecture for the Society of Knowledge March Program with a Fulbright Senior Award in Massachussets University of Technology, SENSEable City Laboratory in 2014. Her research focuses on urban morphology in relations to cultural and anthropological studies. Her recent book addresses Jewish Culture and Urban Form in Central Poland before the Holocaust as a case study (Małgorzata Hanzl, Jewish Culture and Urban Form. A Case Study of Central Poland before the Holocaust, (Routledge, 2022)). Moreover, she deals with the normative issues of urban design in the context of postindustrial and Modernist fabric. In her research she explores topics of urban health, walkability and public space design from both qualitative and quantitative perspective (Małgorzata Hanzl, “Culture as a Determinant of City Form. The Case of the Former Jewish District in Lodz”, Cities in Transformation Research & Design: Ideas, Methods, Techniques, Tools, Case Studies, Bovati M., Caja M., Floridi G., Landsberger M. (Eds.), vol.1,
Monika Ewa Adamska is an architect and associate professor at Opole University of Technology and head of the Architecture and Urban Planning Department. She has received research grants from the Herder Institute in Marburg (2015, 2016) and the Prussian Cultural Heritage Foundation in Berlin (2017, 2022). In her research, she focuses on urban morphology and spatial transformations of historical structures, in particular the issues of the post-war rebuilding of historic towns in the Silesia region and contemporary revitalisation processes, with a special attention paid to the market squares (Monika Adamska, Transformacje rynków średniowiecznych miast Śląska Opolskiego od XVIII wieku do czasów współczesnych. Przerwane tradycje, zachowane dziedzictwo, nowe narracje, (Oficyna Wydawnicza Politechniki Opolskiej, Opole, 2019)). She also reconstructs the image of Silesian towns on the basis of the 18th century topographic maps. Her research also covers the issues of spatial structure and morphogenesis of Frederician rural settlement patterns, with particular emphasis on the origin and changes of radially planned layouts.


BIBLIOGRAPHY

Adamska, Monika, Transformacje rynków średniowiecznych miast Śląska Opolskiego od XVIII wieku do czasów współczesnych. Przerwane tradycje, zachowane dziedzictwo, nowe narince. Oficyna Wydawnicza Politechniki Opolskiej, Opole, 2019

Araszkiewicz, Anna, Sobczyński, Marek, Professor Marek Koter Scientific way from cartography to political geography, (in:) Region and regionalism no 8/1/2007, University of Łódź, Governmental Research Institute Silesian Institute Society, Łódź, Opole, 2007


Bogdanowski, Janusz, Metoda jednostek i wnętrz architektoniczno-krajobrazowych (JARK-WAK) w studiach i projektowaniu, Wyd. PK, Krakow, 1999

Bogdanowski, Janusz, Łuczyńska-Bruzda, Maria, Novák, Zygmun, Architektura krajobrazu, PWN, Krakow, 1973

Bogdanowski Janusz https://suw.biblos.pk.edu.pl/search&query=bogdanowski&termId=1,2,79 (accessed on 02.06.2023)

Borowiejska-Birkenmajerowa, Maria, Kształt średniowiecznego Krakowa, Wydawnictwo Literackie, Krakow 1975

Borowiejska-Birkenmajerowa Maria, Kuśnierz Kazimierz, Motak Maciej, Rekonstrukcja rozplanowania krakowskiego zespołu miejskiego u schyłku XIV wieku, typescript, Muzeum Początków Państwa Polskiego w Gnieźnie, Krakow, 1991

Brykowska, Maria, (Ed.) Oskara Sosnowskiego świat architektury, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa, 2004

Böhm, Aleksander, O budowie i synergii wnętrz urbanistycznych, Wyd. PK, Krakow, 1981


Böhm Aleksander https://suw.biblos.pk.edu.pl/search&query=bohm&termId=1,2,79 (accessed on 02.06.2023)

Circulade https://en.wikipedia.org/wiki/Circulade (accessed on 03.06.2023)

Cęckiewicz, Witold, Witold Cęckiewicz Koncepcje, projekty, realizacje, IPU WA, Politechnika Krakowska, Krakow, 1994


Deptula, Magdalena, Proces kształtowania się zjawiska fringe belt w miastach polskich na wybranych przykładach, [The Process of shaping the fringe belt phenomenon on the example of several selected Polish cities] PhD thesis, typescript, Łódź, 2014

Deptula, Magdalena, Zjawisko Fringe Belt w strukturze morfologicznej miast polskich na przykładzie Radomia, Wydawnictwo Uniwersytetu Łódzkiego, Łódź, 2021

Dudzic-Gyurkovich, Karolina, Pokonywanie barier urbanistycznych związanych z układami transportu na obszarze Metropolii Barcelońskiej – wybrane problemy, [Overcoming urban barriers related to transport systems in areas of Barcelona Metropolis, selected problems], Krakow, Wyd. PK, 2019


Gyurkovich, Jacek Znaczenie form charakterystycznych w kształtowaniu i percepcji przestrzeni. *Wybrane zagadnienia kompozycji w architekturze i urbanistyce*, monografia nr 258, Wyd. PK, Krakow, 1999

Gyurkovich, Jacek, „Forma i kontekst”, *Czasopismo Techniczne, Architektura*, vol. R. 104, z.6 A, 2007, pp. 56-61

Gzell S. *Wykłady o współczesnej urbanistyce*, Oficyna Wydawnicza Politechniki Warszawskiej, Warsaw, 2015

Hanzl, Małgorzata, “Culture as a Determinant of City Form. The Case of the Former Jewish District in Łódź”, *Cities in Transformation Research & Design: Ideas, Methods, Techniques, Tools, Case Studies*, Bovati M., Caja M., Fioridi G., Landsberger M. (Eds.), vol.1, EAAE Transactions on Architectural Education no57, Politecnico di Milano/eAAe/ARCC, (2014A), pp. 625-634


Hanzl, Małgorzata, *Jewish Culture and Urban Form. A Case Study of Central Poland before the Holocaust*, Routledge, 2022


*Karta Krakowska 2000a*, Wiadomości Konserwatorskie 7,8/2000, pp. 10-13

*Karta Krakowska 2000b* https://www.triestecontemporanea.it/pag5-e.htm (accessed on 17.01.2023)


Kosiński Wojciech https://suw.biblos.pk.edu.pl/search&query=kosi%C5%84ski&term id=1,2,79 (accessed on 02.06.2023)


Krasnowolski, Bogusław, „Lokacyjne układy urbanistyczne na obszarze ziemi Krakowskiej w XIII i XIV wieku”, Wydawnictwo Naukowe Akademii Pedagogicznej, Krakow, 2004
Kulesza, Mariusz, Morfogeneza miast na obszarze Polski Środkowej w okresie przedrozbiorowym: dawne województwo łączyckie i sieradzkie, [Morphogenesis of urban settlements in Central Poland in the pre-partition period: the former łączyckie and sieradzkie voivodeship], Wyd. UŁ, Łódź, 2001
Łoza, Stanisław, Architekti i Budownicowie w Polsce, Budownictwo i Architektura, Warszawa, 1954
Łukacz, Marek, „Geneza ukształtowania się najczęściej realizowanego typu kamienicy krakowskiej”, Wiadomości Konserwatorskie (2003) 14
Łukacz, Marek, „Średniowieczne domy lokacyjnego Krakowa”, Technical Transactions 7-A/2011
Malisz, Bolesław, Zarys teorii kształtowania układów osadniczych, Arkady, Warsaw, 1981
Miszewska, Barbara, Elementy struktury morphologicznej Wrocławia, Acta Universitatis Wroclaviensis, 438, Prace Instytutu Geograficznego Uniwersytetu Wrocławskiego, B 3; Wrocław, 1979,
Miszewska, Barbara, Struktura przestrzenna Wrocławia ze szczególnym uwzględnieniem morfologii miasta, (collection of publications constituting the habilitation thesis), Wrocław University of Wrocław, 1997.
Motak, Maciej, Osiedle Uczędnicze w Krakowie Urbanistyka i Architektura 1924-1942, IIed ed., Wydawnictwo PK, Krakow, 2022
Moudon, Anne Vernez, “Urban morphology as an emerging interdisciplinary field”, Urban Morphology (1997) 1, pp. 3-10
Ostrowski, Waclaw, Urbanistyka współczesna, Arkady, Warsaw, 1975
Ozimek, Paweł, Ozimek, Agnieszka, Analizy krajobrazu przy użyciu narzędzi cyfrowych, Wyd. PK, Krakow, 2015
Pawłowski, Krzysztof, *Urban Planning à la Française*, vol. 1, NID, Warsaw, 2020

Pawłowski Krzysztof, *Tysiąc lat doświadczeń i europejskich innowacji: Dopełnienie obrazu* [A thousand years of experience and European innovation Complete the picture], Universitas, Krakow, 2017;

Sobczyński Marek, *Trwałość dawnych granic politycznych Polski w krajobrazie kulturowym kraju (w świetle badań morfologicznych i użytkowania ziemi)* [Persistence of Poland’s former political borders in the country’s cultural landscape (in the light of morphological and land use studies)], (unpublished PhD thesis, Lodz University, 1986)

Sosnowski, Oskar, *Powstanie, układ i cechy charakterystyczne sieci ulicznej na obszarze Wielkiej Warszawy*, Wydawnictwo Zakładu Architektury Polskiej Politechniki Warszawskiej, Warsaw, 1930


Uchwała nr XLII/544/12 Rady Miasta Krakowa z dnia 4 kwietnia 2012 r. w sprawie zatwierdzania „Planu ochrony Parku Kulturowego Stare Miasto w Krakowie”, 2012 [accessed on 05.03.2023]

Uchwała nr XXIX/757/19 Rady Miasta Krakowa z dnia 20 listopada 2019 roku w sprawie utworzenia „parku kulturowego pod nazwą Park Kulturowy Nowa Huta”, 2019 [accessed on 12.06.2023]


Wiśniewski, Mirosław, Wiśniewska, Weronika, *Od wielkiej rewolucji po nowe tysiąclecie, Urbanistyka „a la francaise” vol.2*, Universitas, Krakow, 2018


Zachariasz, Agata, *Zielony Kraków dla przyjemności i pożytku Szanownej Publiczności*, Wyd. PK, Krakow, 2019

Zachariasz, Agata [https://suw.biblos.pk.edu.pl/search&query=zachariasz&termId=1,2,79](https://suw.biblos.pk.edu.pl/search&query=zachariasz&termId=1,2,79) (accessed on 02.06.2023)
TRADICIJA I MREŽA ISTRAŽIVANJA URBANE FORME U POLJSKOJ

Anna Agata Kantarek

Ovaj članak nudi pregled istraživanja urbane forme u Poljskoj. U okviru istorijske geografije ovu tradiciju danas nastavljaju geografi sa Univerziteta u Łodzi gde godinama profesori Mark Koter i Mariuš Kuleša primenjuju metodologiju istraživanja engleske škole. Ovo istraživanje predstavlja deskriptivan pristup, dok istraživanja u oblasti arhitekture i urbanizma imaju tendenciju da budu preskriptivna. Sprovode se, i nastavljaju da se sprovode na raznim arhitektonskim univerzitetima, kako u oblastima istorije i zaštite i konzervacije spomenika, urbanizma, prostornog planiranja, tako i pejzažne arhitekture.

KLJUČNE REČI: POLJSKA, URBANA MORFOLOGIJA, URBANISTIČKA KOMPOZICIJA, URBAN DIZAJN

ISTRAŽIVANJA URBANE FORME U BRAZILY I PORTUGALIJI: OD OŠTEG PREGLEDA DO FOKUSA NA BELO HORIZONTE, BRAZIIJU I PORTO

Vítor Oliveira, Staël Pereira Costa, Frederico de Holanda

Godine 2010. osnovana je Mreža urbane morfologije na portugalskom jeziku (PNUM) pod okriljem Međunarodnog seminara o urbanoj formi (ISUF). Tokom poslednjih 12 godina, PNUM je dao doprinos promociji urbane morfologije u Brazilu i Portugalu, podstičući saradnju između različitih istraživača u obe zemlje. Ovaj rad se sastoji iz četiri dela. Prvi deo ima institucionalnu prirodu, bavi se poreklom PNUM-a, glavnim razvojem i osnovnim karakteristikama. Drugi deo identifikuje osnovne morfološke studije koje su sproveli istraživači na portugalskom jeziku, čineći evidentnim uticaj ovog intelektualnog nasleđa u stvaranju PNUM-a. Široka raznolikost sadašnjih morfoloških istraživanja u Portugalu i Brazilu (sa značajnim razlikama između regiona sever, severoistok, centar-zapad, jugoistok i jug) istražuje se u trećem delu. Konačno, rad se bavi nekim fundamentalnim pitanjima koja istražuju autori ovog rada: i. definicijom urbane morfologije kao oblasti znanja; ii. odnosima između fizičkih i društvenih dimenzija naselja; iii. izazovima nastave o urbanoj morfologiji kao interdisciplinarnoj oblasti; iv. inovativnim doprinosima razvoju dominantnih pristupa u ovoj oblasti; i, konačno, v. odnosima između naučnog istraživanja i prakse.

KLJUČNE REČI: URBANA MORFOLOGIJA, URBANA FORMA, PNUM, ISUF, INTELEKTUALNO NASLEĐE