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FEELINGS AND REASONS
IN THE ARCHITECTURE OF THE CITY.
A LESSON FROM TWO INNER CITIES

UCZUCIA I RACJE
W ARCHITEKTURZE MIASTA.
NA PRZYKŁADZIE DWÓCH ŚRÓDMIEŚĆ

Abstract

It is assumed that the approach presented in this paper could be applicable for comparative studies on the role of the architecture of nodal places centres in the development of the polycentric construction of the city. Following the concepts of rationality in urbanism, outlined by the author in his earlier papers, he focuses is on the connections between the historic centre and other articulations in polycentric urban form. In the model of the *urbanistic construction* of the city of Krakow, the interpretation of the logic of urban form includes structural and emotional factors affecting the architecture of the city.

Keywords: urbanism, architecture of the city, logic of urban form, inner city, urbanistic construction, polycentric city model

Streszczenie

Zakłada się, że prezentowane tu podejście może być przydatne w studiach porównawczych na temat roli architektury miejsc węzłowych w rozwoju policentrycznej konstrukcji miasta. Nawiązując do koncepcji racjonalności w urbanistyce, zarysowanej we wcześniejszych publikacjach autora, tym razem kładzie on akcent na powiązania pomiędzy centrum historycznym a innymi artykulacjami policentrycznej formy miasta. W prezentowanym tu modelu konstrukcji urbanistycznej miasta Krakowa interpretacja logiki formy uwzględnia zarówno strukturalne jak i emocjonalne czynniki architektury miasta.

Słowa kluczowe: urbanistyka, architektura miasta, logika formy urbanistycznej, śródmieście, konstrukcja urbanistyczna, policentryczny model miasta

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1. Introduction

Ultimately, we can say that type is the very idea of architecture, that which is closest to its essence.

In spite of changes, it has always imposed itself on the “feelings and reason” as the principle of architecture and of the city.

Aldo Rossi¹

Used as the motto, the above quotation from *The Architecture of the City* – the famous treatise written by Aldo Rossi – in a concise formula expresses not only strong ties of this author with rationalistic current, which in the 50. and 60. of the last century dominated in Milanese circles of architects and architectural critique, but also it reflexes probably the most individualistic feature of his theory: putting a strong emphasis the role of typological studies of urban form in historical analysis of the spatial structure of the city. We should add right away, however, that this is a form of analysis where Rossi demonstrates his mastership in combining rationalist and emotional elements of his argumentation and critique. It is worth mentioning that without these emotional components we could not consider the city as the object of art and – what is probably even more important – that thanks to these emotional layers, composed with the logic of urbanistic thinking, we can regard urbanism as the art of making cities in accordance with architectural principles.

Reading Rossi's treatise we can conclude, that he was studying the architecture of the city from the perspective which could be described as balancing the following – often apparent – contradictions:

- rational vs. emotional factors of decision making process affecting the construction of the city and urban form;
- permanence / stability of the structural elements of the city vs. continuous change of urban fabric throughout the historic process;
- “static” planning statements vs. the dynamics of urban development processes;
- holistic approach, which in urbanism is understood as the necessity to consider the architecture of the city in its totality vs. necessity to individualize attributes of a given structural unit of urban space / urban fabric;
- focus on artistic components of urban form vs. the assumption that critical analysis has to take into consideration a larger spectrum of urban development problems (e.g.: socio-economic questions, functional change, technological problems, etc.).

This perspective became one of the sources of inspiration while looking for the methodological formula appropriate for urban planning models. The results of these studies have been illustrated here as the model of the spatial structure of the Krakow's inner city.

2. Problem

The main point of this paper is that **we cannot make the spatial structure of our cities – and the relevant urbanistic strategies – more rational unless we make the efforts**

¹ A. Rossi, *The Architecture of the City*, MIT Press, 1984, p. 41.

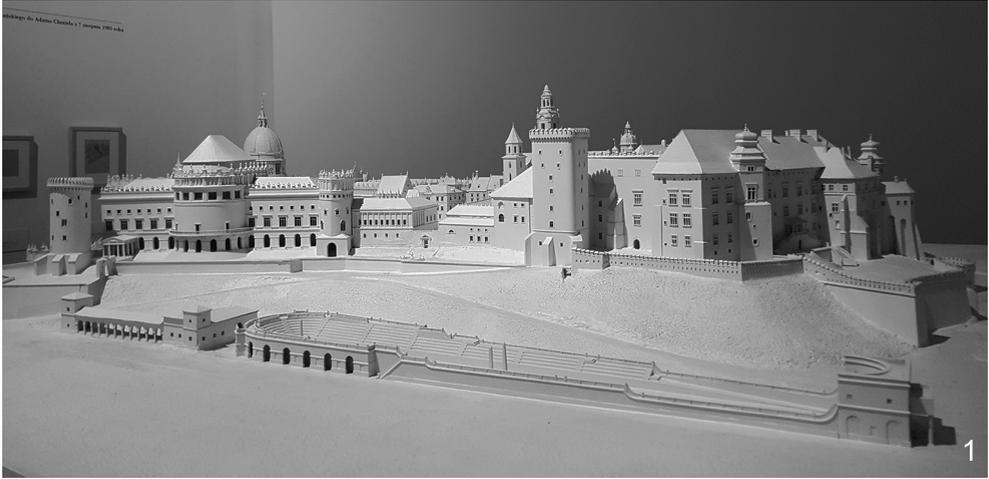
to understand better the processes underlying the logic of urban form. In this statement, there is a hidden assumption about rationality in urbanism (Zuziak, 2008, 2016). In the cases discussed here, the above assumption is particularly significant for the inner city form, understood as the spatial structure where typologically diversified urban fabric is dominated by the historic core and neighboring clusters of metropolitan activity nodes. Studies on the history of urbanism indicate, that this inner city form develops in the process of permanent confrontation of rational and emotional factors.

It is also emphasized – mainly in the literature on urban marketing – that, in the time of highly competitive environment, cities have to reinvent themselves. Therefore, urban development strategies and respective operations of the public sector – as well as design strategies of architects and urbanists working for the private clients – are dominated by marketing techniques. As a result, the architectural arena of urbanism is almost saturated with special events, theme parks and spatial forms designed to seduce a potential client. In these strategies – like in sophisticated marketing games – designed form appeal mostly to the emotional side of the human nature. The question is, how can we combine this urban marketing strategies with the concept – or, rather, the concepts – of rationality in urbanism. In other words, this question is about the possibilities to combine two lines of argumentation in urbanism regarded as the architecture of the city: the logic of urban form and rationality of urbanistic strategies².

Rationality of planning and design decisions affecting urban change can be interpreted in the context of morphological, structural, functional and aesthetic aspects of urban space. In a sense, this type of rationality can be viewed as the logic of urbanistic construction: a geometric pattern interpreted as the network of urban projects linked and configured in accordance to urban strategies predominant for a given urban culture. From the public sector point of view, these configurations of projects differ in terms of potentials for inducing urban synergy (Zuziak, 2016). This mean, that – for a given urban policy – certain linkages between the clusters of projects can have a higher value as a strategic connector than the other urban corridors, and this type of evaluation can have a particular significance for assessing development potentials of urban corridors linking the main centre of the city with other city centres. The problem is, however, that this type of assessment has to take into consideration the above stated tendency that, in today urban practice the role of emotional components in the decision-making processes of urban policies is growing.

Our problem can be formulated as the following question: How to translate architectural theory of urban form – focusing on the inner city area – into the model of urbanistic construction applicable for up-to-date practice of urban planning and design? Such a specific task should be also included in a broader discussion on the reform of the planning system in Poland. It can be considered as one of the prerequisites for rebuilding basic logical connections between architecture and urbanism. These connections have to be identified while interpreting the logic of urban form of the inner city from the architectural point of view or – if you like – the logic of urbanistic construction understood both: as a physical structure integrating the fabric of the inner city, and intellectual framework explaining the structural logic of the development process which changes its form. The logic of these mechanism,

² Term: *urbanistic strategy* is used here for both: urban planning and strategies relevant for architectural and urban design.



regarded here as the nature of order in urban space, is expressed through the layout of urban projects. Sooner or later, this layout will develop in the pattern in which synergic connections will be articulated.

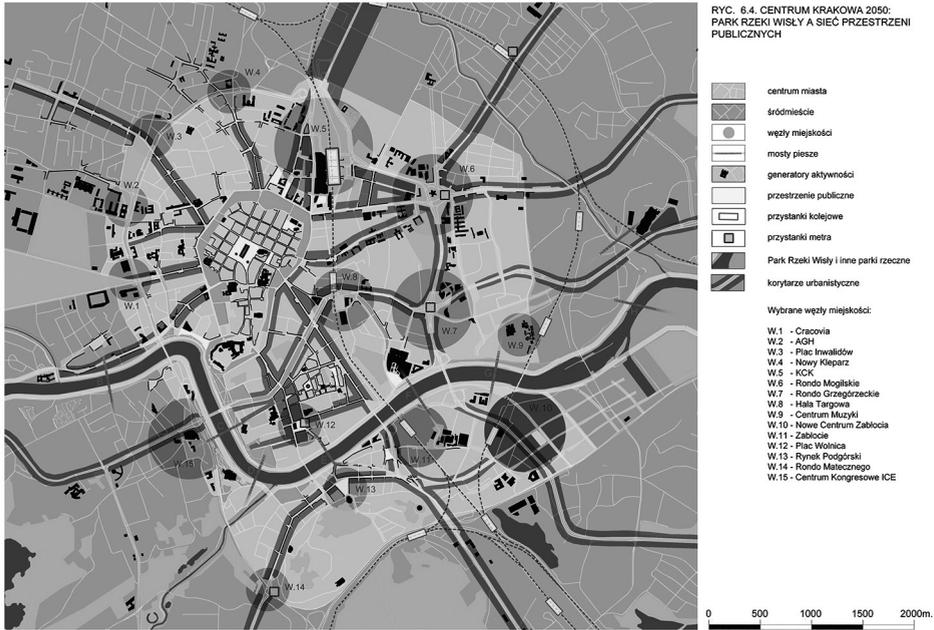
3. Assumptions

The underlying assumption of this paper is that the theory of the architecture of the city, outlined by Aldo Rossi, retains its explanatory potentials for the interpretation of structural changes in the metropolitan space of a contemporary city. On the ground of urbanistic theory we can still find arguments rationalizing the use of term: “*art of urbanism*” (Rossi, 1984; Monestiroli, 2009). In a sense, the justification of such an approach we can find in the definition of the architecture of the city. The author of this concept, Aldo Rossi, present his definition in a somewhat complicated manner. He writes: *By architecture of the city we mean two different things: first, the city seen as a gigantic man-made object, a work of engineering and architecture that is large and complex and growing over time; second, certain more limited by still crucial aspects of the city, namely urban artifacts, which like the city itself are characterized by their own history and thus by their own form. In both cases architecture clearly represents only one aspects of a more complex reality of a larger structure; but at the same time as the ultimate verifiable fact of this reality, it constitute the most concrete possible position from which to address the problem.* A. Rossi, 1984, p. 29.

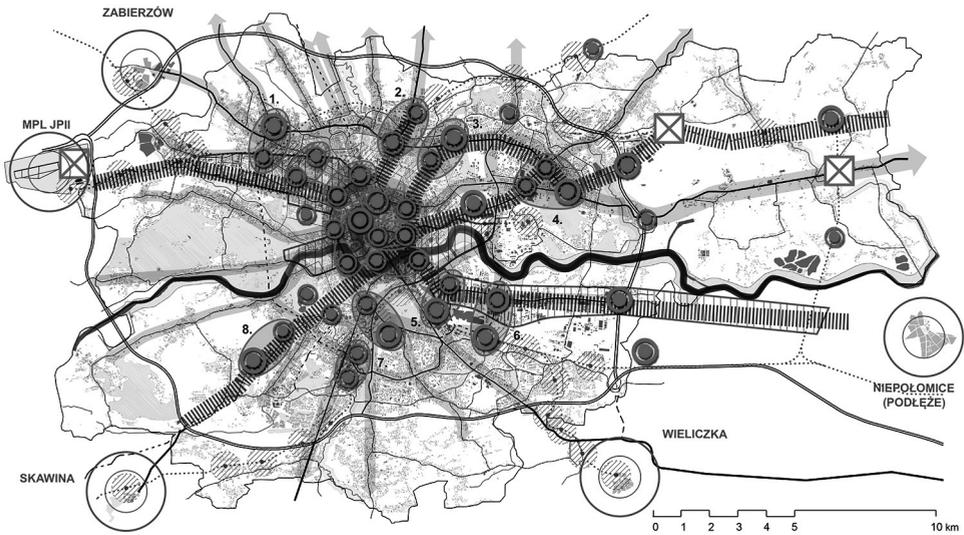
The main assumption of the project, referred to in this paper, is that – like in Newtonian *models of gravity and potentials*, applied in urban traffic engineering, – there are certain mutual impacts between the elements of urbanistic construction of the city. The identification of these interrelations can be helpful while looking for the potential *structural connectors* – i.e. spatial development links connecting urban projects with strong development potentials. Treating selected projects as structural elements of the city – the elements which make the architecture of the city – we are opening the way to new questions. They are all related to the idea to combine the problem of architectural typology – so strongly emphasized by Aldo Rossi – with the concept of modelling urbanistic construction of the city regarded as a referential matrix for urban development strategies and operations. The first question is about the role of the inner city and city centres in contemporary metropolitan city.

We also assume that between elements called by Rossi as *primary elements* we can identify functional and spatial interrelations which can be “deciphered” in the geometry of urbanistic construction of the city. These features can be interpreted in the categories often identified with the logic of urban form. Particular attention is payed to interactions between the nodal places which jointly fulfill two preconditions: a) they satisfy definition of the *nodes*

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- III. 1. Krakow „Acropolis” – the model of the visionary development of Wawel Hill proposed by Stanisław Wyspiański and Władysław Ekielski; photo of the model exhibited in the National Museum Krakowa on the exhibition devoted to Stanisław Wyspiański; photo: Z. K. Zuziak
 - III. 2. International Congress Centre, Katowice Zone of Culture – one of the strategic elements of the potential Silesian Acropolis; photo: Z. K. Zuziak
 - III. 3. Public space between the building of the National Orchestra of Polish Radio (NOSPR) and the Silesian Museum, Katowice Zone of Culture, photo.: Z. K. Zuziak



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Ryc. 6.1. KONSTRUKCJA URBANISTYCZNA KRAKOWA 2050: ŚRÓDMIEJSKIE UKŁADY BIPOLARNE



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of urbanity, and b) the clusters of these nodes make the inner city spatial layouts connecting an historic city with new concentrations creating the sub centres of metropolitan city.

Our next assumption regards the logic of urban form interpreted in terms of the relations between the transport system and the land use patterns. This means that, in this particular approach, as particularly significant features of urban space, we recognize the logic of spatial and functional relations between the physical elements of the transport of the transport system and the mobility patterns – from the one side – and the other elements of the land use, and respective spatial structures – from the other.

4. Archetypes

Establishing logical relations between the architecture of the city and the planning model of the spatial structure of the inner city – particularly, its urbanistic construction – calls for a morphological definition of the selected places. This refers to the places which play a significant role in urbanistic composition. At the same time, it can be argued that – among various relations reflecting the significance of the centre of the city – the ones recognized in urbanism as urbanistic composition are crucial for the architecture of the city. Obviously, discussing these compositional issues, we are having in mind the kind of spatial order which is defined not only by aesthetic criteria or – speaking more broadly: the artistic ones – but also other criteria which are recommended by the theory of architecture and urbanism.

The interpretation of compositional relations between the city centre and the more important architectural articulations in the inner city space implies also that in design strategies their authors have to read out the ideas imbedded into the form of the city centre in the context of the anthropological idea of the polis. In cultural anthropology of the city these ideas are usually interrelated. The logic of forms which build the architecture of the city cannot be captured unless we try to conceptualize cultural patterns analysed by – among others – Joseph Rykwert in his famous book on the anthropology of urban form³. Discussing cultural archetypes of urban form he provides an analysis of form – symbols relations in an exemplary fashion which is inspirational for further studies on the archetypal forms city centres.

³ J. Rykwert, *Idea miasta. Antropologia formy miasta w Rzymie, w Italii i w świecie starożytnym*, MCK, Kraków 2016.

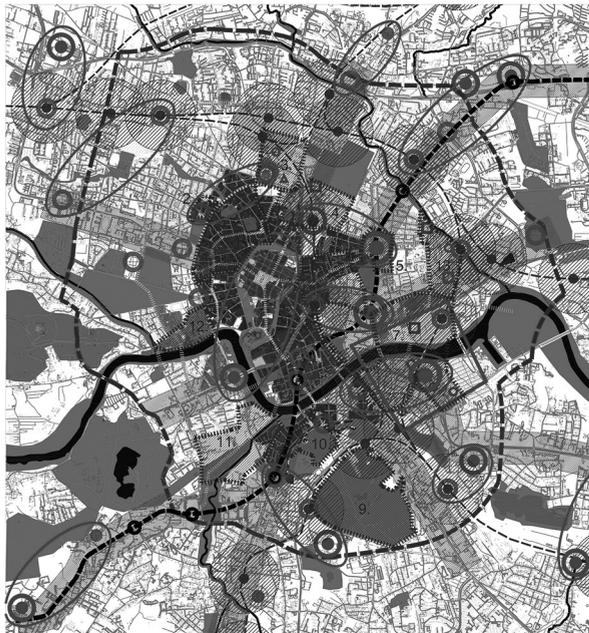
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- Ill. 4. Urbanistic construction of the City Centre of Krakow, 2050 – The Vistula Riverfront Park and the network of public spaces. Source / Źródło: *Konstrukcja urbanistyczna Krakowa. Rola śródmieścia a korytarze rozwoju*; Autorzy opracowania: Z. K. Zuziak i D. Ogrodnik z Zespołem, Autor ryc.: A. Sarga. Opracowanie wykonane dla Biura Planowania Przestrzennego Urzędu Miasta Krakowa; Kraków 2018; Credit rights.: Urząd Miasta Krakowa, Kraków, lipiec 2018
- Ill. 5. Urbanistic construction of the City of Krakow 2050 – Inner City bipolar clusters. Source: *Konstrukcja urbanistyczna Krakowa. Rola śródmieścia a korytarze rozwoju*; Autorzy opracowania: Z. K. Zuziak i D. Ogrodnik z Zespołem, Autor ryc.: A. Derlatka. Opracowanie wykonane dla Biura Planowania Przestrzennego Urzędu Miasta Krakowa; Kraków 2018; Credit rights.: Urząd Miasta Krakowa, Kraków, lipiec 2018



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Ryc. 6.3. KONSTRUKCJA URBANISTYCZNA KRAKOWA 2050. ŚRÓDMIEŚCIE A WĘZŁY MIEJSKOŚCI I KORYTARZE RADIALNE. WARIANT REKOMENDOWANY.



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In the architectural theories of the city there are two most important archetypes of the urbanistic form of the city centre: *Akropolis / Capitol* and *Agora / Forum*. This tradition, however, calls for a more contemporary reaction: demands new artistic concepts in which the form of public space would comply with the new ideas relevant for the architecture of a polycentric city. In this case, similarly to Aldo Rossi, Antonio Monestiroli takes the architectural approach to the problem of urbanistic consequences of the methodological approach regarding the city as an artistic composition of artefacts⁴. Following typological and morphological questions put forward by Aldo Rossi, Monestiroli argues that: *Today, the reversal of the metropolitan development trend from a monocentric city to a polycentric one, possible thanks to new infrastructural technologies, put this subject high on agenda. The dispersion of the city centre calls for a morphological definition of its selected places*⁵. Monestiroli recognizes that this morphological task brings us back to the *canonic question* about the role of the cultural archetype in architecture and urbanism. Therefore, on the same page he writes: *Accepting the fact that the squares of the historic city can be divided into two most important types of architectural places: the type of Agora, as the place set aside, and the type of Acropolis, as the place of relations between the elements distinguished from the outside – the architects of the Modern Movement were following – in these few examples implemented – the type of Acropolis. This mean that they had preferred to define places composing it with well exposed elements, each of them having its own identity. In this type, the character of the place is defined by the compositional relations between these elements*⁶. And this theme of urbanistic composition is perhaps the best point to start with our discussion on specific relations between the cultural archetypes of the city centre architecture and urbanistic construction. As an example, we can take the architecture of the early XX century Krakow because at that period the former capital of Poland was again, an attractive environment for architecture. Under the Wawel Hill the artistic life flourished and the city became a centre of artistic avant-garde for the artists from all the regions of partitioned Poland (Fabiański, Purchła, p. 65). It is also worth mentioning, that in Krakow art of around 1900, the excellent examples of *Art Nouveau* architecture interact with experiments to introduce into conservative city architecture of early modernism as well as to develop original architectural formula of national style⁷.

In the context of the above remarks on the architectural archetype of Acropolis, the idea, proposed by Stanislaw Wyspiański, to develop Wawel Hill as the *National Acropolis* (phot 1)

⁴ A. Monestiroli, *Tryglif i metopa*, Kraków 2009, p. 71.

⁵ *Ibidem*, p. 71.

⁶ *Ibidem*, p. 71.

⁷ See: M. Fabiański, J. Purchła, *Historia architektury Krakowa w zarysie*, WL, Kraków 2001.

III. 6. Urbanistic construction of the City of Krakow 2050 – Inner and nodes of urbanity and radial corridors of development. Source: *Konstrukcja urbanistyczna Krakowa. Rola śródmieścia a korytarze rozwoju*; Autorzy opracowania: Z. K. Zuziak i D. Ogrodnik z Zespołem, Autor ryc.: A. Derlatka. Opracowanie wykonane dla Biura Planowania Przestrzennego Urzędu Miasta Krakowa; Kraków 2018; Credit rights.: Urząd Miasta Krakowa, Kraków, lipiec 2018

III. 7. Urbanity nodes the inner city of Krakow and potential metropolitan projects; More important nodes: 1. KCK, 2. Polsad Node, 3. Mogilski Node, 4. Grzegórzecki Node, 5. Heroes of Ghetto Sq., 6. Podgórski Sq., 7. ICE, 9. Wolnica Sq., 11. Grzegórzeckie Sq., 14. Source: Maniecki, M.: *Configuration of strategic urban projects in the inner city of Krakow*

can be regarded as the exceptional manifestation of artistic phenomena which accompanied cultural revival of the former capital of Poland. In this particular case, the genius of Wyspiański, supported by architectural talent – and experience – of Władysław Ekielski, prove that in the architecture of the city – like in poetry, or in music – the concept of urbanistic and architectural form, having symbolic codes deeply rooted in classical tradition and strong connotations with patriotic emotions, derives from the artistic vision – saturated with romantic feelings and references to the links between Polish culture and the tradition of classical antiquity.

Another significant place – the node of urbanistic construction that could be used as the best example deserving the discussion on the architectural potentials imbedded into the archetypical idea of *Acropolis* – is the Zone of Culture in the inner city of Katowice. This place should be considered as the beginning of a new metropolitan centre and – at the same time – an urbanistic space where the *Silesian Acropolis* could be created. On the axis WE: from the famous “Katowice Saucer” – through attractively formed public spaces of the International Congress Centre (phot. 2), and the National Symphonic Orchestra Polish Radio, and further on towards Silesian Museum (phot. 3) – the new spatial layout was built which – as a whole – arises somewhat ambivalent feelings. The architecture of each buildings is widely recognized as being of high value. In this case we can talk about outstanding works; some of them are even acknowledged as iconic examples modernism and neomodernism in Polish architectures. But when we evaluate this architectural complex in terms of urbanistic values, the Katowice Zone of Culture leaves much to be desired. It is no doubt, that this is an example of unfinished urbanistic composition. In this case two urgent tasks of urban policy – at least – should be taken by the City Office: a) to work out a programmatic concept defining the land use structure of a new culture center that would satisfy the development ambitions of Upper Silesia and Zagłębie Region, and b) to develop a new concept of urbanistic composition which – satisfying artistic and functional criteria – would create a high quality public spaces of the Silesian Metropolis well integrating the new centre with the other centres of urbanity of the Katowice downtown. If this happens, this cluster of urbanity nodes will become one of the most significant central places of Katowice–Krakow Metropolitan Region. And in the scale of the city of Katowice this strategic project will act as the leverage – or catalysts – of the downtown revitalization process.

5. Construction

The idea of ***urbanistic construction***⁸ is understood as the system of physical elements of urban space which – thanks to their mutual connections – integrates different types of land uses and diverse morphological units, creating the logic whole and the physical

⁸ Term: *urbanistic construction* was defined previously in the research and study project worked out by the research team from the University of Technology, Krakow. The authors' team: Gyurkovich M., Szarata A., Zuziak Z. K., (i inni). The title of the project: *Model of the spatial structure of the city of Krakow. Planning perspective*. The project was divided in two stages / chapters: Chapter One: *The Assumptions of the Model of the Structural Changes in the Land Use of the city of Krakow* (December, 2016–2017) and Chapter Two: *The Vision* (July, 2018). Then, the research was continued in the year 2018, by the team chaired by Zbigniew Zuziak, as the separate project devoted to the model of the urban construction of the Inner City of Krakow and its role in the development of the urban construction of the city.

framework of an urban composition. The values of this compositions are assessed in functional and aesthetic terms. *Urbanistic construction* can also be regarded as functional and spatial *skeleton* supporting urban fabric and giving to the urban form the marks of charm and logic. The main elements of urbanistic construction are the *nodes of urbanity* and the *corridors*, which stands for the *corridors of urban development*⁹. *The corridors* play the role of “structural links” – significant connections between the nodes. In other words, they play (or one should rather say: they should play) the role of functional and spatial links between strategic urban projects defined in the scale of the city.

The urbanistic construction can also be regarded as the expression of the long term development dynamics of the city¹⁰ as well as the potentials and symbols / indicators of its cultural identity (understood as rather more permanent set of spatial features). Such an approach to the question of urban construction is based on the assumptions that there is a spatial logic of relations between the above stated three layers of the model. In the analytical part of the research study, the focus is on the logic of urban form. It means that spatial attributes of urban form are interpreted through the relations between transport system, land use patterns and urban morphological types of urban fabric.

The *node of urbanity* is defined here as the place, or a cluster of places which – because of their accessibility and other values – are having key significance for the urban life associated with the notion of urbanity. The meaning of this term covers much broader area than such basic urbanistic concepts as: city centers, district centers and the like. The identification and the typology of *the nodes of urbanity* poses several question of methodological nature. For example, the nodes of urbanistic construction as well as nodal points in urban network, understood in more sociological term – we should be looking for an analogy with, or references to, such theoretical schools / approaches as: urban morphology, more contemporary versions of the central place theory adopting the Christaller’s regional model to an urban scale, certain transportation models explaining interrelations between mobility patterns and urban form as well as network interpretations of polycentric metropolitan structures based on new sociological¹¹ and anthropological¹² concepts. Another main elements of the *urbanistic construction* are the *urban development corridors* and *green corridors* as well as *blue-green corridors*. Together with the *nodes of urbanity* and mobility nodes they define the geometry of public space.

From the architectural point of view, the most important feature of the urban construction of the city is the characteristics of the network of public spaces from which this construction is made of – i.e.: geometric, morphological, architectural and functional features of this network. In such an approach, the problem of determinants of urban form can be reduced to two categories of questions. The first one refers to the structural nature of the relations: centre – sub-centres, interpreted mainly from as the geometric logic of this type of network.

⁹ Obviously, defining this model the author was inspired by the most famous typology of the structural elements of the city defined by Kevin Lynch in his “classical” book: *The Image of the City*.

¹⁰ This type of urban dynamics is understood here as urban structural change defined with reference to the major land use structural units (Urban Structural Units) as well as to functional linkages (urban corridors) and nodal places (mobility nodes and the nodes of urbanity).

¹¹ E.g.: M. Castells, *The Rise of the Network Society. The Information Age*. Blackwell, Cambridge MA, Oxford UK, 1996.

¹² E.g.: U. Hannerz, *Exploring the City. Inquires Toward an Urban Anthropology*. Columbia University Press, 1980.

The other group of questions concerns the planning and design strategies influencing the architecture of this space.

6. Model

The model of urbanistic construction proposed for the city of Krakow was conceptualized as a planning tool of the spatial policy. As it was pointed out earlier, the model accentuates the role of synergic relations between urbanistic construction and strategic urban projects. In other words, among various decisions affecting the synergic relations between particular development factors, a significant role is played by the synergic attributes of *urbanistic construction*. This means that – in order to achieve synergic effects in a given spatial policy – we should analyze the logic of potential connections between *strategic urban projects* and *urbanistic construction*. The configuration of *strategic urban projects* should be examined vis a vis development potentials of *urbanistic construction*. This refers to the synergic potentials of the *nodes of urbanity*, the *nodes of mobility*, and *urban development corridors*. In case of the latter ones, we have in mind the development corridors which create structural relations between the nodal places where the strategic urban projects are located.

The model of *urbanistic construction* of the city was developed as the result of the two years research project on the spatial structure of the city of Krakow¹³. The main objective of the project was to build a relatively simple planning model in which the basis of geometric interpretation of urban change is defined by the nodes and corridors of development. Understood as the research and conceptual, procedures resulting in a planning notation, the model is focused on the *urbanistic construction* of the city¹⁴. This notation accentuates characteristic attributes of the structural elements of the city significant for its integration. It is assumed that such a formula of interpretation enables also better visualization of the urbanistic space in terms of its balance. While defining the *urbanistic construction* of the city of Krakow the following main questions were put forward:

- Which urban corridors and nodal places designate the existing urban construction of the city of Krakow?
- How to develop major urban corridors linking three cities: 1) these parts of the city of Krakow which “naturally” developed around its historic core, 2) Southern Krakow historically, and geographically, connected with a historic Town of Podgórze (urban areas on the right side of the Vistula River banks and 3) structural urban units of the City of Krakow which are identified with the Historic Town of Nowa Huta?
- Which existing nodal places concentrating diverse urban activities can develop as the major nodes of urbanity and thus are significant for the polycentric structure of the city of Krakow?
- How the existing model of the downtown Krakow will affect the polycentric pattern of the city?

¹³ The project was commissioned by the Planning Office of the Municipality of Krakow.

¹⁴ In the two first stages of the research project this structural characteristic was also supplemented by the functional and morphological analysis.

How to define the pattern of green corridors and what consequences for the new model will have the principle that the Vistula River Park should play the role of a major “*green skeleton*” / “*green civic spine*” in the new urban construction of the city?

The method of modelling urbanistic construction of the city of Krakow includes the following research and conceptual procedures:

- historical analysis of the structural spatial changes taking place after the WWII examined in the context of planning statements respected made in land use plans;
- identification of structural elements of the urban space;
- the assessment of the above elements in terms of their more development potentials;
- the analysis of structural links between these elements;
- delimitation of the city centre and the downtown area;
- development of alternative models for the inner city / the downtown and the designation of the preferred alternative;
- identification of the action areas for the inner city (the downtown area) and for the Vistula Riverfront Park;
- the identification of key urban projects in the above mentioned projects.

In the *urbanistic construction* of the city we can notice the cluster of the nodal places building the polycentric structure of the city. In the configuration of these places a particular attention is paid to *the nodes of mobility* which determine the role of the city in metropolitan networks. The typology of the *nodes of urbanity* is accompanied by the analysis of the relations between the historic centre and the new city centres. In the hierarchy of these centres three ranks / levels were singled out. The historic centre stands at the top of this hierarchy. New nodes of urbanity were divided into two groups: the II-d one and the III-d one, according to their rank in the spatial and functional structure of the city¹⁵.

The results of the historical analysis of the urban structure¹⁶ indicate that in the last 50 years of the XX century we can distinguish at least two periods and two directions towards which the “gravity centre” of the spatial layout of the city of Krakow was moving to. The first period – more or less from the late 40. until 90. – is dominated by an intensive development on the corridor – parallel to the Vistula River and perpendicular to the historic axis of Krakow development on the NS axis¹⁷ – heading east, towards Nowa Huta.

¹⁵ In the group II there are such centres as: Zablocie Centre, Historic Town of Nowa Huta and Bronowice Centre. The examples of the centres of the III-d category are e.g.: the Olsza-Pradnik Centre, Bonarka Centre, Red Maki Centre, Plaszow Centre (close to the railway station Plaszow), Centre close to Tauron Arena, office centres at the Armii Krajowej Alee, 29-November Alee and Opolska Street office centre and also new concentrations of services developing along Zakopianska Street, and in the area designated by the streets: Ujastek and Mrozowa (near by the Steel Mill) and new commercial centre proposed in the area close to the station Krakow-Prokocim (known also as the Rybitwy centre)

¹⁶ The comparison between the planning statements in the documents defining the spatial policy of the city in the period of 1910–2014. This analysis was the subject of the third stage (year 2018) of the project on the structural model of the city of Krakow.

¹⁷ This axis leads along The Kings Road linking The Royal Castle with The Main Market Square. – and further on – towards Matejko Square.

In the second period (after 1990 – until the present time), the geography of the inner city development directions is not so obvious. Although the direction towards Nowa Huta is still an important one, we can also observe that “the gravity centre” of the urbanistic layout moves also toward South-East direction, this is mainly the result of the revitalization of such inner city areas as Kazimierz, Zablocie, and – recently – also Old Podgorze. This direction is also strengthened by the new developments along the corridors designated by the Klimeckiego Street, and – further on – towards an important node where this direction crosses with S7 road. Around this mobility node the development of new economic activities named as Krakow East is observed. Also important is the development direction towards the International Airport JPII in Balice. This tendency is reflected by the relatively new concentration of the office buildings along the Armii Krajowej Alee, as well as various development projects (mainly residential) in the area around the railway stop Krakow–Bronowice and commercial developments around the mobility node called Ofiar Katynia Junction (ill. 5 and ill. 6).

The system of green areas is commonly regarded as one of the most (if not – the most) important for the environmental quality of urban life. Therefore, planning and urban design decisions regarding this sub-system of *urbanistic construction* and – what is even more important – their implementation decide upon the rationality of the whole spatial system of Krakow. This statement regards – in particular – the spatial policy principles for the Vistula Riverfront Park, and other river parks planned, as well as the “green wedge” in the western part of the city and the green area of the Krzemionki hills (ill. 5 and ill. 6).

7. Downtown¹⁸

The northward skyscrapers were no longer clustered in groups now, but were sporadically dispersed towers, rising here and there on the city fabric like the skyscrapers of Houston or Fort Worth. This new generation of high rises, built mostly in the late eighties and nineties, differ from their predecessors by their thinness and small footprint – they are sometimes known as “pencils” – as well as by their pattern of single use, since they are primarily residential.

Joseph Rykwert, 2002, p. 217.

Obviously, the most important component of the downtown Krakow is its centre. The term: *city centre* is identified with the historic core of the inner city (*historic centre*)¹⁹ and the structural unit the city encompassing an historic city and its “collar” – the area which is delimited as the concentration of the inner city clusters composed of the nodes of urbanity. In our model significant role is played by the linear concentrations of the inner city functions providing radial links between the historic centre of the city and other nodes of urbanity (ill. 4). This mean that, in this instance, historic centre plays the role of the *keystone* of *urbanistic construction* of the city. This thesis is supported by the of many (if not: the majority)

¹⁸ For several reasons, American word: *downtown* is used here as a synonym of the term: *inner city*.

¹⁹ In Krakow this historic core is constituted by the “urbanistic monuments” : The Old Town, Royal Castle – and other architectural monuments of the Wawel Hill, and The Old District of Kazimierz. These morphological units have been placed on the List of World Heritage.

of European cities – paradoxically, even in case of these models which are categorized as polycentric. Adjacent to the Old Town, and close to the Krakow Transport Centre, a new commercial complex has developed. Originally designed as a new city centre²⁰, it forms a bipolar layout together with another office and public centre located near to the Mogilskie Roundabout (Ill. 5).

Urbanistic corridors, extending radially out from the historic core of the city towards the nodal places situated at the outskirts and outside of the inner city, will constitute a structural matrix of public spaces. The improvement of the attractiveness of these public spaces should be included into the priorities of the spatial policy of the city. In this way, the planning model of the urbanistic construction of the city of Krakow – and its inner city, in particular – becomes a one of its basic tools providing an intellectual foundation of the spatial planning statements. This refers both to the principles of public spaces building in the areas having particular significance for the urbanistic heritage and to the corridors integrating the downtown with the other areas recognized as key areas in the urban development strategy (ill. 5 and 6).

The analysis of the inner city development corridors (*downtown corridors*), and the inner city clusters of nodal places, leads to the following conclusions:

- Although the inner city of Krakow presents the highest concentration of urbanity clusters, in morphological terms, as well as functional area, the downtown Krakow cannot be regarded as a homogenous structure. This structure is polycentric and polarized. Apart from the city centre, other main activity clusters are concentrated along major development corridors and selected nodes of urbanity which can be regarded as potential sub centres of the downtown Krakow.
- Historic centre of Krakow is still performing the functions of the main city centre; the Main Market Square – as well as other public squares of the Old Town and the squares of other historic districts of the city like: Kazimierz, Kleparz (historically known as Cracovia Florence) and The Old Podgórze, major commercial streets are still functioning as the vital public places of the Krakow downtown.
- To some extent, we can talk about the downtown character of the historic part of Nowa Huta – the one which was originally planned as a new town. Because of significant cultural heritage values, this area possesses relatively high potential for the development of the inner city functions, although – at present situation – this is rather a hidden potential.
- From the environmental point of view, a particular attention is payed to the system of public green – especially to the green-blue corridor of the Vistula Riverfront Park and the “green wedge” in the western part of the city and the green area of the Krzemionki hills.

²⁰ The history of this strategic project was the subject of several articles of the author; e.g.: Z. Zuziak, *Wielkoprzestrzenne projekty inwestycyjne w strefach śródmiejskich w strefach śródmiejskich, Wielkoskalowe Projekty inwestycyjne jako czynnik podnoszenia konkurencyjności polskiej przestrzeni, pod red. T. Markowskiego*, Biuletyn Komitetu Przestrzennego Zagospodarowania Kraju PAN, Warszawa, 2004, Zeszyt nr 210, (s. 39–68); Z. Zuziak, *O tożsamości urbanistyki*, Wyd. PK, Kraków, 2008; and others.

8. Resumé

The concept of an *urbanistic construction*, outlined here, has two sources of inspiration: it refers to the famous theory of *the architecture of city* devised by Aldo Rossi, and reflects a methodological concept of modelling contemporary changes in urban spatial structures for urban planning purposes. The latter one was tested in the research projects for the city of Kraków. In both these approaches the cultural significance of architectural perspective in urbanistic studies of spatial changes and design concepts is strongly emphasized. These changes are conceptualized in various typological categories used by urban scholars for describing processes and the images identifying the contemporary city, its cultural roots and prospects for the future. These conceptualization, in turn, should also be adopted by the architects designing in urban scale.

Semantically, the term: *urbanistic construction* seems to be an appropriate one, because it carries a suggestion that in the time of *polarized* and *deconstructed* space of the city, urbanistic profession should play a more profound role in the integration of fragmented – and often isolated piece of urban fabric. A particular attention was paid to structural changes in the inner city. In the project discussed in this paper the author emphasized the role of *strategic connectors*. They can induce the synergic effects of interrelations between urban projects linked by these elements of urbanistic construction.

Summing up the part of this text which refers to structural relations between urbanistic form of the inner city and the architecture of the city – understood in accordance to the Rossi's theory – the following questions and thesis could be proposed for further discussion:

Is the concept of modelling, presented here, promising enough to be recognized as the basis for a comparative research and studies on urban form of the metropolitan inner cities in Poland?

In the city of Krakow we can talk about a sort of dualism – in a sense that the spatial model of this city is monocentric and polycentric – at the same time. It is also quite likely that this kind of structural feature could be also attributed – as a common denominator – in other metropolitan cities having an attractive, in terms of cultural values, historic core of the city.

Modelling the urbanistic construction of the city – and analyzing the role which is played in this construct by the historic city centre – can contribute to the implementation of planning and design strategies aiming to achieve synergic effects between strategic urban projects functionally related with the functions performed by the inner city centres.

The author assumes that there are good reasons for undertaking interdisciplinary research projects on the urbanistic construction of selected metropolitan cities in Poland. The concept of modelling could be regarded as the starting point for the discussion on the methodological assumptions of such a project. In further stages the focus should be on the questions of parametric assessment of development potentials attributed to the inner city nodes of urbanistic construction and on the elaboration of appropriate techniques for the evaluation of potential synergic relations between these places and respective urban projects. Apart from the above issues, in the project agenda we should also include compositional analysis of the architecture of the inner cities. There are many arguments indicating that – apart from socio-economic aspects and technological dimensions of the *urbanistic construction* – it is an aesthetic interpretation of cultural values attributed to this type of construction – which, at the end, has a strong impact on our perception of urbanistic space and the identity of a real urbanism – the one that could aspire to the name: *the art of building cities*. But – one can ask – does such a discipline exist at all? Is it still real to make such a postulate, or it is rather utopian a point? Even so, we have to remember that there is no urbanism without utopia, after all!

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