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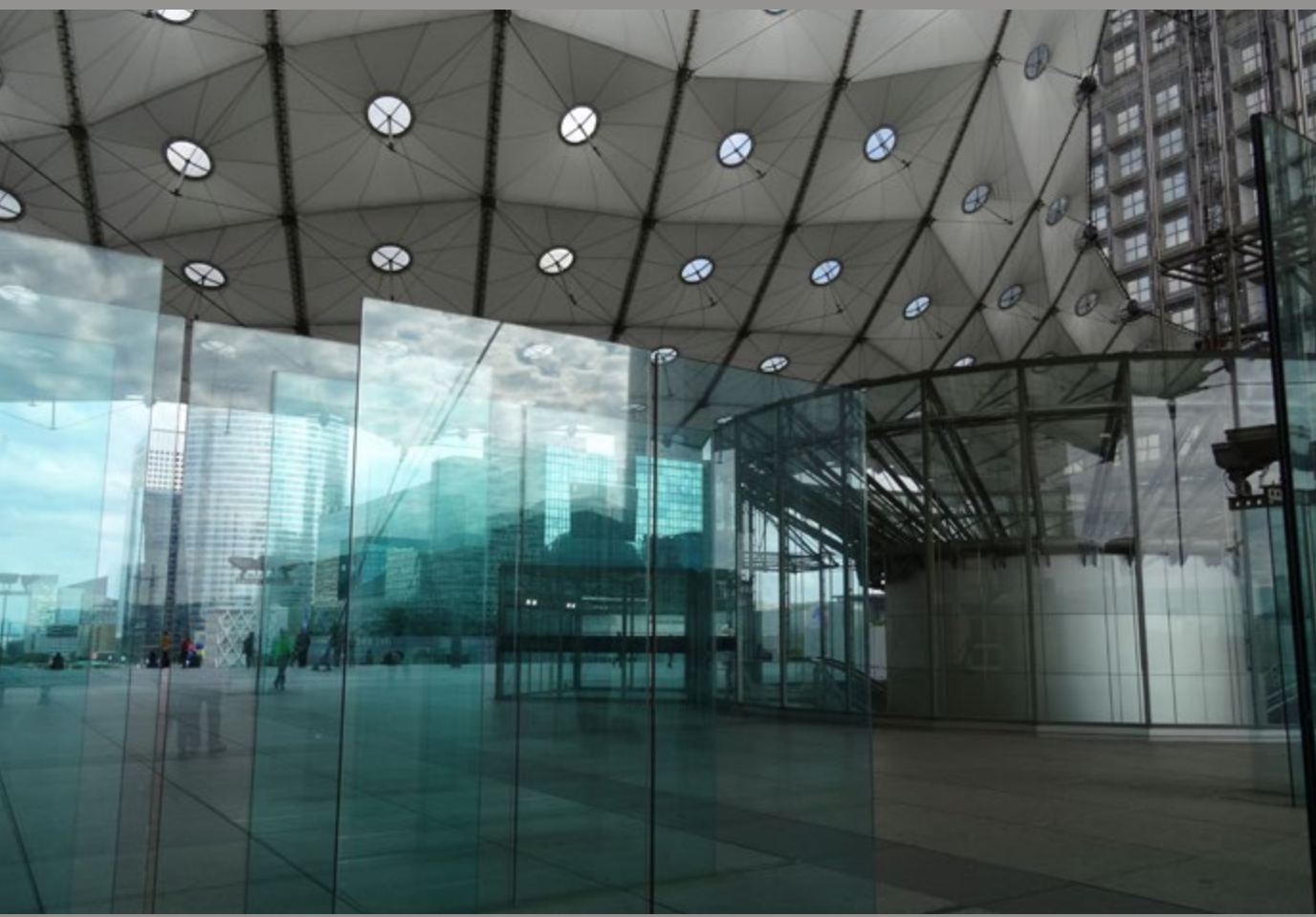

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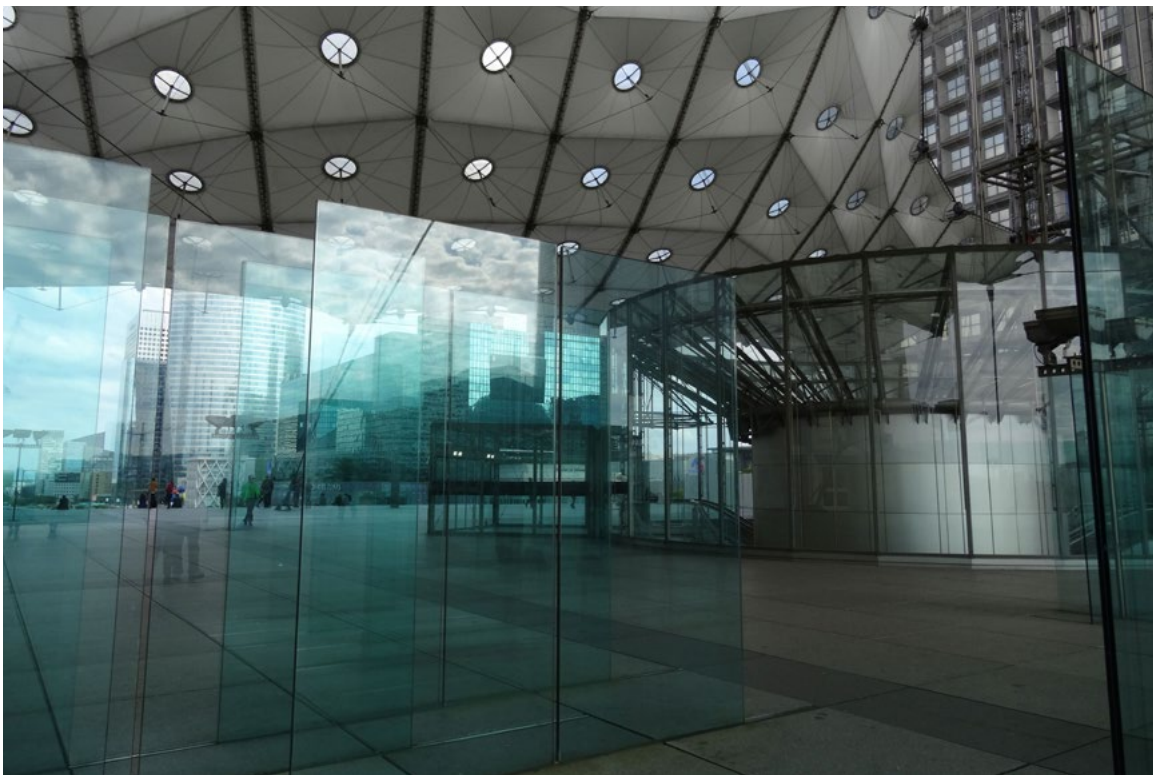

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Uncompleted project of the Central Municipal Park in Lublin

Kamila Lucyna Boguszewska
https://orcid.org/0000-0002-1513-2490
k.boguszewska@pollub.pl

Department of Modern Architecture, Faculty of Civil Engineering and Architecture, Lublin University of Technology

Summary: The areas of the former Royal Pond (Staw Królewski) in Lublin were the subject of many projects and architectural competitions. Over the years the concepts of development of this area have been changing, but both in the pre-war period and later, it was supposed to be green urban space accessible to the residents. The aim of the article is to outline the development plans of the city of Lublin (second half of the 20th century / beginning of the 21st century) concerning the implementation of the Central Municipal Park, which was planned in the area of the former pond. The works on this project, which was finally never implemented, have been carried out since the end of the 1950s. This name, used interchangeably with Culture Park (Park Kultury), appeared for the first time in the General Spatial Development Plan for the city of Lublin in 1957. The author, on the basis of conducted research, archival queries and comparative studies, analyses the ideas and solutions concerning the development of this part of the Bystrzyca river valley.

Keywords: Lublin, central park, culture park, Bystrzyca river valley

Introduction

The city of Lublin is the capital of Lublin Voivodeship with a population of over 300,000 people and an area of 147 square kilometres. Lublin is located in the Lublin Upland. The main river passing through the city is Bystrzyca, which is the left tributary of the Wieprz river. Its length is 70.3 km, from which 21 km passes through the urban areas. The river divides the city into two parts – a larger (in terms of area) western part with the left tributary Czechówka and a smaller – eastern part with the right tributary Czerniejówka [Autorskie Biuro Architektury Inwestprojekt, 2016].

It was the natural conditions on the communication route that led to the development of the settlement at the turn of the 5th and 6th centuries, and later to the location of the town. They were giving both military and economic advantage to the residents, which resulted in the development of crafts in the 16th century. It is assumed that already in the middle of the 14th century the river valleys of Lublin have been developed according to the plan. One of the aims of the development was to narrow the river valleys, which allowed to build dykes piling up flowing ponds, where mills were built. Since the second half of the 14th century, in the narrowing of the Bystrzyca valley bottom in the Kalinowszczyzna district, the Great Royal Pond was piled up, which in its heyday had an area of 130 ha and a length of 2.5 km (from Plażowa street to the dyke in Tatarska street). [Kociuba, 2019]

The Great Royal Pond used to exist in that site until the first half of the 19th century [Przesmycka, 2005]. The area was a natural floodplain. (Fig. 1)

Fig. 1. View of the city of Lublin by Hogenberg and Braun, Jerzy Braun; Hogenberg, Abraham, 1618, (NN Theatre archive)

During the interwar period, attempts were made to arrange this area. Ignacy Kędzierski wrote in the *Extracts from the Competition for a Development Sketch of the City of Lublin* that it is necessary to improve the conditions of the Bystrzyca and Czerniejówka rivers, which *"caused a lot of damage and trouble to the city during floods"*. The architect and urban planner, the author of *the development plan of the city of Lublin* emphasised the necessity of regulation of the rivers and construction of protective embankments together with boulevards. What is more, he called for liquidation of mills, which were responsible for damming up water and creation of an open-air pool. Already then it was noticed that these areas were not suitable for development due to the nature of the ground: *"the ground having 4 metres of depth, peat, water-bearing silt will not be a good construction ground or will require expensive foundations"*. According to Kędzierski's plans, these areas should in the future be designated as *"sports grounds, playgrounds, both for adults and children in the first place, there should be parks (zoos) and pomological gardens, as well as avenues and walking boulevards and other hygiene, entertainment and recreation places"*. [Kędzierski, 1925]

For this purpose, an urban design competition was announced, in which the first prize was awarded to Z. Ihnatowicz and K. Pigułowski. The outbreak of the Second World War made it impossible to carry out [Przesmycka, 2005].

Fig. 2. Ignacy Kędzierski, Perspective of development of a square on Tatary meadows in Lublin, 1925, (Archive of the City Hall)

After the war, there were again attempts to arrange this area. In the years 1959–1979, the Office for Spatial Planning in Lublin carried out a number of general and detailed studies on the spatial development plan of the Bystrzyca River in Lublin. The most important studies include the Spatial Development Plans of the city of Lublin from 1959 and 1961, Zemborzyce (1971) (1978), Spatial Development Study of the city of Lublin (1974),

the Basic Assumptions of the Spatial Development of the Lublin Urban Complex until 2000, and the conceptual and implementation plans of individual parks, which were supposed to be landscaped in the very centre of Lublin as green areas: in the Great Pond Valley – Central Park (1972–1973), Majdan Park (1973, 1977), Kalina (1973, 1977), Rusałka (1971), Wyścigi (1973, 1976), Zemborzyce-Bór (1976) and Dąbrowa (1978) [The Office for Spatial Planning in Lublin, 1979].

The state of research and methodology

Until now, the subject of green areas of the city of Lublin have not been fully investigated. Individual articles were focused only on greenery created before 1939. The aim of the article is to outline the city's development plans concerning the project of the Central Municipal Park located in the area of the former Royal Pond. The works on this never completed project have been carried out since the end of the 1950s. For the first time this name, used interchangeably with Culture Park *("Park Kultury")*, with the rank of a park of general city importance, appeared in the General Spatial Development Plan of the City of Lublin in 1957. It provided for the creation of a green area of 80 ha *"on the wetlands adjacent to the Old Town and the castle hill"*. [*Ogólny Plan Zagospodarowania Przestrzennego Miasta Lublin, 1957*]. Later, the idea had been developed in more detail until 1979, when the *Spatial Development Plan for the Bystrzyca River Valley in Lublin* was created, with the Central Park of almost four times the original surface – 317 hectares. In comparison with the plans from 1957, it was to be *"the central point of the city with a complex of installations and facilities for hosting mass events of general city importance"*. The strategic object (determining the park's functional and spatial plan) was to be a stadium for 70,000 people[1], along with a rich accompanying infrastructure in the form of exhibition and trade areas, children's gardens, and passive recreation areas [The Office for Spatial Planning in Lublin, 1979].

The article was based on archival queries, analyses of the records of the *General Urban Plans of the city of Lublin* from the years 1959, 1961, field studies (1974) and detailed plans for the realisation of the Central Park in Lublin (1979). The author carried out a number of comparative analyses concerning this type of "cultural objects" carried out in Poland and worldwide, which provided a basis for a reliable analysis of the uncompleted Lublin project against the general trends in the design of cultural and scientific parks.

"Green network" of the city of Lublin

The General Spatial Development Plan of the city of Lublin from 1957 emphasised that *"thanks to the city's three river valleys and upland areas which are not suitable for development due to large slopes, Lublin has very favourable conditions for the development of various green and sports areas"*.

At that time, there were 1.1 m^2 of parks and 0.9 m^2 of sports grounds per one resident of the city, which was considered insufficient. The concept of shaping the greenery layout was to provide the Lublin inhabitants with *"maximum fulfilment of their needs in terms of the role of greenery"*, i.e.: passive and active everyday recreation (allotment gardens), health function (through shaping the microclimate), and isolation from troublesome areas. For this purpose, it was proposed to create a composition of greenery based on the layout of river valleys, thus forming a network of green areas linked with building strips, which *"were to create green accesses to parks"*. It was planned to create floodplains with recreation and sports centres and forest parks in the immediate vicinity of the city (Abramowice, Zemborzyce, Stary Las in Wrotków), which would create a network of green areas enabling the inhabitants of the city to *"have a place of recreation"*.

Urban green areas are divided into 7 groups according to their structure. The first were parks of city-wide importance – People's Park (Park Ludowy), Downtown Park – Rusałka (allotment gardens), Culture Park (Park Kultury) and forest park located in the military training grounds. The total area of the arranged green areas was planned for 201 hectares, which was to increase the ratio of greenery area surface per capita to 8 m^2.

1 Currently, the Lublin Arena City Stadium, built from 2012 and opened in 2014, has a capacity of 15,500 seats, while the National Stadium in Warsaw, built between 2007 and 2011, has a capacity of 58,500 seats. Its predecessor, already non-existent 10th-Anniversary Stadium (Stadion Dziesięciolecia, arch. J. Hryniewiecki, M. Leykam, Cz. Rajewski), built between 1954 and 1955, had a capacity of 100,000 seats.

Apart from these assumptions, the system of green areas was to be supplemented by lawns and green squares (50 ha), dedicated gardens (the Museum at Majdanek, 54 ha – the area to be afforested), a designed botanical garden with the area of 20 to 40 ha connected with the ZOO, allotment gardens, cemeteries and protective greenery in the form of afforestation in the north-west part of the city as large groups of trees (the military training grounds in the north of Lublin) and the Old Forest (Stary Las) in the south of Lublin. The area between forest complexes was to be developed with fruit orchards and the strips of high trees along the exit roads. The green infrastructure was to be complemented by sports facilities (4.1 m^2 per capita was planned) including a sports hall designed as a concert hall, an archery track located in the planned Culture Park and a horse racing track in the Bystrzyca river valley [Pracownia Urbanistyczna M.Z.A.B. in Lublin, 1957].

The key document, which organised the state of knowledge in this field, was *the Spatial Development Plan of the Bystrzyca River valley from 1979*, which defined the basic assumptions for creating the landscape plan of the city of Lublin. At that time, the area of the study covered 3,664 hectares, of which 2,392 hectares were classified as the areas with the primary recreational function. The plan assumed the elimination of conflicting functions from this area. The main idea was to adopt the following postulates:

- The Bystrzyca river valley passing through the city has become the main element of the system of areas of ecological and functional importance connecting all existing and designed riverside parks (six of them) by means of a boulevard together with a bicycle path. It was assumed that these areas would be reachable within approximately 20 minutes (from Krężnica to Jakubowice). Sightseeing aspects were also very important – the height of the buildings was strictly defined (maximum of the height of trees) and protection of the Old Town panoramas with the accompanying historical complexes was adopted.
- It was assumed that all elements that might cause a conflict with the above-mentioned function would be eliminated from the area.
- It was proposed that *"the natural features of the environment should be maintained to the maximum possible extent"* and that biological areas should be enriched by *"improving water purity"*, creation of damps and construction of artificial reservoirs for viewing purposes.
- The main function of this area was to be the function of grassland taking various forms depending on the topography of the land and the city ventilation system [The Office for Spatial Planning in Lublin, 1979]. [Tab. 1].

Table 1. The greenery complexes designed along the Bystrzyca river, compiled by the author on the basis of *Spatial Development Plan for the Bystrzyca River Valley in Lublin*, Lublin, July 1979,

The name of the new designed park	The date of the elaboration / implementation of the project	The area	The designed function	Implementation
Zemborzyce complex	1971/1978, arch. B. Szymczak	2,404 ha	Sport and recreation function connected with the Zemborzycki lake and forest	Completed The reservoir of the surface area of 278 ha was designed in 1950s, constructed in 1960s and opened in 1974. Completed East part of Dąbrowa complex (the design of B. Szymczak) including allotment gardens of residents
Majdan Park	1973/1977, 1974 – arch. J. Lipiński	272 ha	The function of exhibition area, rifle range, allotment gardens	Not completed design of J. Lipiński. Only the bicycle path in the direction of Zemborzycki Lake was made.

Wyścigi Park	1973/1976 1975 – arch. B. Szymczak	243 ha	The function of equestrian sports with horse racing venue, equestrian club and additionally the function of amusement park in the areas of the former sugar factory	In the areas of the former sugar factory the stadium for 15.5 thousand people was built in 2008 – 2012.
Rusałka Park – People's Park (Park Ludowy)	1971 1975 – arch. B. Szymczak	160 ha	The function of park for teenagers with game tracks	Not completed, Reattempts to implement this project were made in 2016.
Central Park	1970–1972 1970 – arch. H. Matwiejuk	317 ha	The function of mass events of city-wide importance	Not completed, the works were started in 1970s: preparation of the grounds. Return to the concept of Central Park and recreation of the part of the Royal Pond in 2016.
Kalina Park – Hajdów	1973/1977 1974 – arch. Z. Wośko	268 ha	The function of recreation – open allotment gardens.	Not completed

Culture and science parks, their history and implementations

One of the new designed parks was supposed to be the Central Park – Podzamcze. This park was to be a landmark of the city of Lublin and was to fulfil the new roles attributed to cultural parks, also known as "social gardens".

This kind of municipal gardens of Soviet origin were particularly popular in Poland in the 1950s and 1960s, although the first people's park was created in Łódź during the interwar period (1924–1939) based on a design of Stanisław Rogowicz. The park with an area of 237 hectares was only partially completed. The architectural and didactic program of the garden [Ciołek, 1978] was not fully implemented.

In the USSR, culture and recreation parks were important places of upbringing the children in the spirit of communism. The first park of this type was built in Moscow as early as in 1928 (M. Gorky Central Park of Culture and Recreation). The author of the project was planner Konstantin Mielnikov, who designed part of the garden's architectural equipment. The park had an area of over 100 hectares. For the first time in the design of a park, areas for agricultural exhibitions, passive recreation space in the form of a pond and active – tennis courts, an amusement park or green space dedicated to children were foreseen. Its composition and fulfilled mass-political, cultural-educational and recreational roles were a model for other Soviet republics and large cities. In Soviet Russia, such parks were the equivalent of the 19th- and 20th-century, available to general public municipal parks that were very popular in Europe in the second half of the 19th century. However, unlike European municipal parks, Soviet culture parks were supposed to be a place where the *"new man"* was formed. The park's programme strictly defined and approved by the agitation and propaganda departments of the Central Committee and minor structures of the CPSU were *"a huge factory of human consciousness"*, where through the idyllic image of the park – a paradise, a place of recreation, relaxation in the form of folk games and festivals – systemic ideological education supervised by the communist party was conducted [Matyukhina, 2018]. Multi-hectare municipal gardens, most often located in the very centre of the city, usually well-connected with other districts, were to be a very strongly invested area, providing opportunities for entertainment and relaxation

in the form of libraries, open-air theatres, exhibition pavilions, etc., but also a place of mass education of the inhabitants not only in the field of culture, but above all of "political thought".

The most representative section of a park was usually the central avenue, which was used for marches, festivities and games. The special feature of this type of complexes was "mass character and collectivisation". The huge areas of forest parks were enriched with a very extensive sport infrastructure in the form of stadiums for many thousands of people, sport fields or swimming pool complexes being places of collective recreation, symbolising the progress and development of a communist state. In Poland, one of the best-known designs of culture parks is the Central Park of Culture in Warsaw – currently Rydz-Śmigły Park (1951), designed by the Landscape Development Studio of the city of Warsaw with an area of 243 hectares, and the Voivodeship Park of Culture and Recreation in Silesia, currently called General Jerzy Ziętek Voivodeship Park of Culture and Recreation, which construction lasted continuously from 1951 to 1975. The park was located in the centre of the Katowice agglomeration between Katowice and Chorzów. The area of one of the largest parks in Europe (600 ha), was covered in 75% by mining heaps and post-mining waste. The main designer of the park was eng. Niemirowski, and its great advocate and leading member of the Construction Committee – Jerzy Ziętek.

The park was designed on the basis of the existing topography of the area. It was divided into two functional zones: a forest park for passive recreation (222 ha), a walking and recreation part (130 ha), a sports part (42 ha) and a cultural and entertainment part with six functional sectors. The Park had a very rich architectural program in the form of, among others, the museum of the "Upper Silesian Ethnographic Park" (32 ha), planetarium and astronomical observatory (0.8 ha), ZOO (46 ha), botanical garden (43 ha), amusement park (26 ha), Silesian Stadium with over 83 thousand seats, tennis courts complex (2.1 ha), dance circle, swimming pool and canoeing marina (7 ha). During construction of the park according to the plan from the 1950s, 1,800,000 trees were planted, and in the 1960s, 2600 benches were available for guests [online, 2019].

Central Municipal Park in Lublin

The areas designated for the Central Municipal Park encompassed meadows, riparian areas, allotment gardens (Podzamcze), and buildings defined in the plan as so-called *"substandard homestead buildings"*. Until 1965, the works were supposed to start in this site. The first element of the new design was to be enclosing of the area around the Royal Castle and the newly designed N – S route on its west part with an insulating green belt, along with a project of a green descent to the park from the former Buczka Street, now Zamojska Street. The plan involved arranging slopes on Ruska Street and revitalising the hill of the former Jewish cemetery. The works was supposed to cover an area of 14 ha and to prepare for the construction of the planned municipal park of the city of Lublin [General Spatial Development Plan, 1957], [Pracownia urbanistyczna M.Z. A. B.N. in Lublin, 1957].

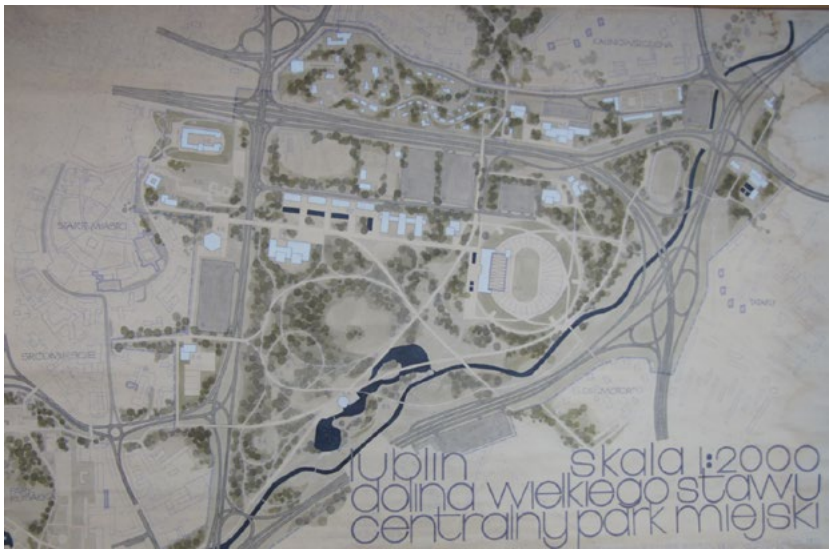


Fig. 3. The Great Pond valley, central city park, design from 1970, chief planner H. Matwiejuk (Lublin City Office Archive), 1 – culture and education sector (26.5 ha), 2 – sport sector (20.43 ha), 3 – park sector, 4 – tourist and catering services (3.11 ha), 5 – greenery maintenance base (0.99 ha), 6 – car parks (12.82 ha), 7 – service space, 8 – swimming pool complex.

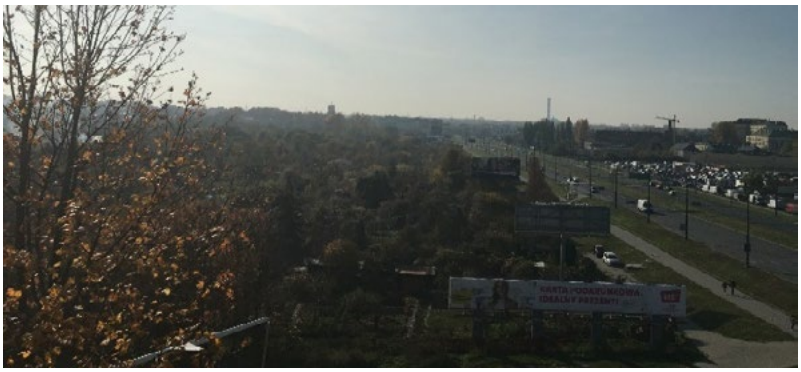
A  B 

Fig. 4. A – Great Pond valley – development study, perspective, 1985, scale 1: 2000, The Office for Spatial Planning in Lublin, chief planner H. Matwiejuk, 1970 (Lublin City Office Archive), B – Lublin, Bystrzyca valley, spatial development plan, basic plan, **B** – The Office for Spatial Planning in Lublin, S. Torc with a team, chief planner H. Matwiejuk, 1979, (Lublin City Office Archive)

The planned area of the Central Park was to be 317 hectares, while the net area of the recreation areas was to be 108 hectares. The planners assumed that the newly designed park would become the *"focal point of the city"*. The park space was separated from the north by the planned E-W route, which was (apart from the N – S and W – R routes) one of the arteries of the main structure of the city communication system outlined by *General Spatial Development Plan of Lublin from 1959* [Lubelska Pracownia Urbanistyczna 1959 – 2005, 2005]. From the south and east, the natural border was the Bystrzyca river bed and the never completed *"green route"* separating the Central Park from the Motor housing estate. This space was intended to be communicated through five new bridges and one footbridge crossing the road. The space of the Old Town was separated from the park by a north-south route. What is interesting, the project assumed that Czechówka River would flow under the plate, which was to supply the newly designed water garden by the Bystrzyca River (Fig. 3, Fig. 4A, Fig. 4B).

The Central Park was supposed to offer a very rich functional programme, among other things by providing equipment that was new for Lublin in the form of set of devices and facilities designed for mass events of city-wide significance. The main object of the park was to be a stadium for 70,000 people, an exhibition and commercial area, a children's garden and passive recreation areas. The whole area was divided into sections. The most important and representative part was to be the "culture and education" section (26.5 ha) connected with the Old Town through a footbridge, further expanded by a wide avenue. A number of cultural facilities such as an open-air theatre, green exhibition areas and a youth club were planned there. Along the pedestrian route, exhibition areas were designed with the necessary infrastructure in the form of pavilions and cafés, as well as a palm house with an aquarium and open space dedicated to outdoor exhibitions. In terms of composition, the main east-west axis of the Central Park, which was the main pedestrian route going directly to the sport sector (20. 43 ha) was supposed to connect it with Lublin's Old Town. The central point of the whole complex was the stadium with a hall and facilities for 70,000 spectators (11.7 ha). The northern part of the park was designated for the facilities providing services to the entire complex in the form of parking lots as well as the greenery maintenance site. Krausse's historical mill located in the north-eastern part of the area was supposed to be adapted for the function of a museum of industry and the former Jewish cemetery – a 'kirkut' – on the northern side of the E-W route for an open-air museum, which would complete the programme of the newly designed culture park. The greenery was organised in the form of an English landscape park of forest character. In the garden area there were foreseen numerous recreational clearings which would be used, among others, as children's gardens or amusement parks. From the south and east, the area of the Central Park was bordered by the Bystrzyca and along the river 18-hectare boulevard was designed. Next to the boulevard, the planners have envisaged a lake park, which included an artificially created water reservoir of an irregular shape and an adjacent cocktail bar with the gastronomic function (Fig. 5, 6).

A



B

Fig. 5. A – View of the Great Pond Valley from the side of Unii Lubelskiej Avenue; in the background panorama of Lublin, author's own photography, 2019, **B** – View of the Great Pond Valley from the side of Bystrzyca river, in the background panorama of Lublin, author's own photography, 2019

A

B

Fig. 6. The Great Pond Valley, the area originally intended for the Central Municipal Park, now used for allotment gardens, source: Lublin geoportal, accessed in December 2019

The Central Park project has never been implemented in this form. This was due to economic factors and changes in the spatial development policy of the city. However, there were concepts for the restoration of the Great Royal Pond (2016) together with the park. The original name (Central Park) was also reinstated.

In 2016, the Special Development Department of the city of Lublin prepared the *Local Land Development Plan of the Ecological System of Protected Areas of the city of Lublin for selected areas located in the river valleys – Podzamcze district III.* The plan assumed the recreation of the Great Royal Pond in the area between Unii Lubelskiej and Tysiąclecia Avenues. This site, which is part of the Ecological System of Protected Areas (ESOCH) of the city of Lublin, was inscribed on the List of Modern Cultural Property as a natural phenomenon with cultural potential just like the Bystrzyca river valley and the space of the newly designed Rusałka Park. The plan revived the idea from the 1970s to create these two parks – the Rusałka Park and the Central Park, with the Royal Pond as its central point. The new designed pond was to receive a picturesque coastline in the form of meanders, bays, two islands with viewpoints in the form of mounds described in the plan as hills and numerous places emphasising the city panorama.

Regarding the communication routes, the area of the Central Park was connected with the city by footpaths designed from the side of Unii Lubelskiej Avenue, Tysiąclecia Avenue, Kąpielowa Street and boulevards on the Bystrzyca River. In the eastern part of the area covered by the study, a green service area with a river marina was planned, while in the northern part, the former idea of creating commercial and parking spaces in the form of green car parks accessible from Tysiąclecia Avenue was revived. The buildings of the former Krausse's mill have been designed for commercial functions, and an access road to the entire complex from Tysiąclecia Avenue was also designed. The green belt from the side of Unii Lubelskiej Avenue was supposed to provide insulation as an area of arranged greenery. The naturalistic character of the park was to be emphasized by planting vegetation *"constituting the biological structure of the river valley, which was supposed to be an intermediate role for the designers to strengthen the river banks and enable free movement of air masses"*. The plan was to *"carefully shape and maintain the greenery typical for the native ecosystems of the river valleys in such a way as to preserve the panoramas and views of the historical urban and architectural complex which is a Monument of History and the historical buildings of the Krausse mill complex"*. [Local Land Development Plan of the Ecological System of Protected Areas of the city of Lublin for selected areas located in the river valleys – Podzamcze district III., 2016]. (7A)

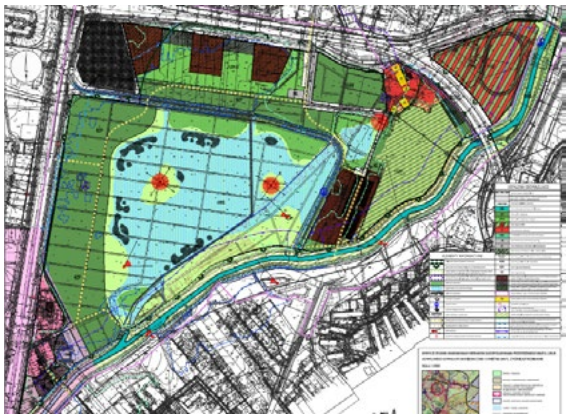
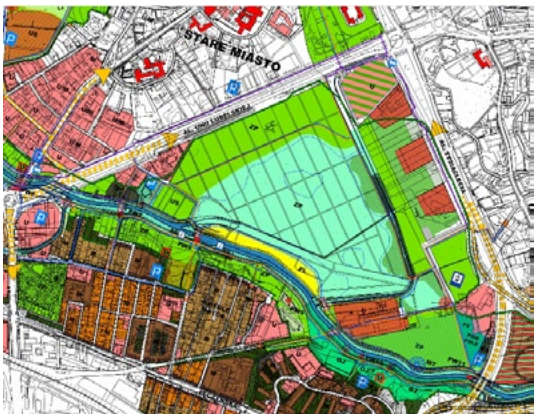
A  **B** 

Fig. 7. A – Fragment of the Local Land Development Plan of the Ecological System of Protected Areas of the city of Lublin for selected areas located in the river valleys – Podzamcze district III, Lublin 2016, source: Lublin City Office, **B** – Fragment of the Concept – illustrative map – the map shows the different coloured markings of the development of individual areas in the Bystrzyca river valley, source: https://lublin.eu/mieszkancy/srodowisko/rewitalizacja-doliny-bystrzycy/koncepcja-zagospodarowania-doliny-bystrzycy/ source: Lublin City Office

The plans of the city were not appreciated by the users of Family Allotment Gardens located in the area designated for the construction of the Central Park. This would have been related to the liquidation of three gardens: "Robotnik" (2.71 ha) founded in 1963 and used by 68 families, "Młynarz" (7 ha) founded in 1971 and used by 124 families and ROD Podzamcze (34 ha) considered to be the oldest allotment garden in this area created in 1948 and intended for 571 families [M. Domagała, 2016]. As a result of the protests, the town decided to abandon this idea. The project was changed and as a result of the redesigned concept, it was decided to leave the existing green area and its use. It was proposed to build a municipal beach in the Bronowice housing estate, including a part of the allotment gardens in the area covered by the plan. This area would serve as the *"Bystrzyca Salon"* equipped with the necessary sanitary and catering infrastructure and would be a place of passive and active recreation for the residents of Lublin. Krausse's mill would enter the *"Historical-natural trail of water mills on the Bystrzyca river"*, which according to the assumptions of the authors of the concept would *"resemble no longer existing milling industry, using the energy of flowing water"*. Autorskie Biuro Architektury Inwestprojekt- Partner 6, 2016] (7B).

Summary

The area of the former Royal Pond in Lublin was the subject of many projects and architectural competitions. Over the years, the development plans for this area have been changing, but both in the pre-war period and later, the area was to be a green urban space that was available to its residents.

In the 2nd half of the 20th century, projects inspired by the idea of culture parks with a very rich functional programme started to appear in the development plan of the area. At the beginning of the 21st century, the city of Lublin had again made an attempt to return to the concept of the Central Park, but with a strong emphasis on the history of the place and the reconstruction of a part of the Great Royal Pond. Currently, the process of creating a Local Spatial Development Plan for the area is still ongoing. The area of the former Royal Pond, located in the very centre of the city (near the old town and castle hill), is an area of enormous potential and natural and ecological values, which are noticed both by the inhabitants and the city of Lublin. This is because it is one of the most important elements of the ESOCH system being the foreground area of old-town skylines which are under protection.

At present, the area is almost entirely occupied by family allotment gardens – a fenced enclave and an effective barrier separating the Bystrzyca river valley (with boulevards and a bicycle path) from the Old Town. The impeded communication and availability are quite significant problems in making the area accessible while lacking the necessary infrastructure. The projects and tasks as well as the participatory approach of the city of Lublin in the preparation of the development plan are a good forecast for the future and proof that the area is important in the whole system of greenery of Lublin. It shows that in the future it will become more accessible and open to the inhabitants of Lublin while respecting its former and current developments.

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Sustainable logistics – a direction of counteracting development problems in cities on the example of Oświęcim

Krystyna Paprzyca
https://orcid.org/0000-0003-0112-1456
kpaprzyca@gmail.com, kpaprzyca@pk.edu.pl

Katedra Kształtowania Środowiska Mieszkaniowego, Instytut Projektowania Urbanistycznego, Wydział Architektury, Politechnika Krakowska

Summary: The technical infrastructure is one of the essential elements of the system associated with the idea of sustainable development. Urban transport is one of the components of technical infrastructure, and its quality and intensity are often a consequence of "urban sprawl". The phenomenon of uncontrolled spread of the city is currently encountered in many urban centres. It increases the length and time for travels and therefore transport costs. This phenomenon can also have many other negative consequences: – excessive use of land for communication purposes, – the increase of exhaust emission, – the increase in costs related to the use of the car, – the increase of noise on the streets, – increased number of road accidents, – social costs which include lack of exercise, sedentary lifestyle etc. There are various solutions proposed worldwide, the aim of which is to reduce the number of kilometres travelled by car. Such activities are possible due to all initiatives related to changing lifestyles that are introduced and supported by local government units in cities and municipalities. The goal of all actions aimed at efficient urban transport is to create an economically effective system that also reduces the nuisance to the environment. The problems related to the redesigning of existing streets are focused in particular on safety and limiting traffic. The efficient urban transport system is integrated with the issues related to the close neighbourhood and multi-model solutions connected with the choice of means of transport, as well as the high quality of public spaces and the quality of life of residents. The article discusses the above course of action on the example of the city of Oświęcim.

Keywords: sustainable development, sustainable city management, sustainable urban design, sustainable urban transport

Introduction

Technical development, urbanization and lifestyle changes, in small towns and cities in Poland have brought many disadvantageous phenomena such as uncontrolled development, poor housing conditions, inefficient communication system, as well as unemployment, poverty, social pathologies, lack of neighbourhood ties, etc.

Half a century ago, an outstanding Austrian architect – urbanist Roland Rainer formulated the "criteria of a residential city." Unfortunately, he did not realize that the issue of "the quality of urban space " will be the subject of endless discussions that take place between specialists of various fields. Based on the analysis of the development of European cities from the 1960s and 70s of the last century Reiner wrote about the damage caused by the areas of housing estates – the so-called bedrooms.

As a result of the political transformation that took place in Poland in 1989, the country underwent great social and economic changes. They were also reflected in transformations related to urban space and the form of architecture. The processes that had a particular impact on the urban space included: property rights that contributed to the liberation of the free market as well as the free circulation of real estate and mortgage loans or changes related to the investment system.

These processes resulted in the degradation of urban space, as well as the inefficient communication system. Many cities in Poland have suffered from the chaotic implementation of new housing complexes

Sustainable development in the cities

The principles of sustainable development that concern the management of the space have been applied, in order to secure adequate living conditions for a man not only today but also for future generations. [1, 2, 8]

The idea of 'sustainable development' means striving to harmonize, balance and coordinate three factors: social development, economic development and the environment.

There are many documents that relate to the policy of sustainable development.

- 1987 The Brundtland Report (World Commission on Economic Development, was the first global attempt addressed to the problems of sustainability.
- 3–14 June 1992 "The Earth Summit" "Environment and Development" conference of the United Nations in Rio de Janeiro,
- 1994 The Alborg Charter, which was created under the influence of the first European conference, also addressed the subject of sustainable development,
- 3–14 June 1996 the United Nations Conference on Human Habitats, HABITAT II, in Istanbul, Konferencji Narodów Zjednoczonych w Sprawie Osiedli Ludzkich HABITAT II, w Istanbul.

The document which set the directions related to the principles of sustainable development was Agenda 21 adopted at the 2nd Conference called "Environment and Development" organized by the UN in Rio De Janeiro in 1992. Its assumptions facilitated the formation of a document created in 1999, which also referred directly to the architecture and which defined the final assumptions of the Agenda – "Agenda 21 on sustainable construction". [1, 6, 8]

All of these reports underline the importance of promoting sustainable development and improving the quality of life and the environment of the European cities.

Cities are the first economic and spatial unit that has an environmental impact. Hence, achieving sustainability at the urban level is a decisive factor.

The tasks related to sustainable development should include, among others:

- sustainable city management,
- sustainable urban design
- sustainable construction,
- sustainable urban transport. [13]

Sustainable city management is essential when striving for a high quality healthy urban environment. It is related to the aspects of energy use, greenhouse gas emissions, water consumption and treatment, waste, noise, air quality, transport and sustainable construction [13].

Sustainable urban transport focuses on growing problems in relation to the urban spread and the increase in transport intensity. According to the data, the length and time devoted to travel, traffic congestion, energy consumption, noise emissions, as well as increasing social and individual transport costs are growing. These problems are the cause of many negative consequences for the urban environment:

- excessive use of land for communication purposes,
- streets congestion, which adversely affects their mobility,
- promotion of a sedentary lifestyle, which in turn leads to diseases and an increase in the cost of benefits
- an increased number of road accidents. etc. [13].

As a consequence, it became popular to promote a model of a compact city, also called a city of short distances. [7, 10]

This concept promotes the use of a relatively high density of buildings and functional diversity in a given area. Great attention is paid to the efficient public transport system, which may lead to the resignation of car communication. The compact urban layout is always conducive to walking and cycling.

The technical infrastructure is one of the most important systems associated with a compact, modern, sustainable city. Various solutions are promoted in cities around the world, the aim of which is to reduce the number of kilometres travelled by car. It is achievable through the promotion of lifestyle changes.

Road infrastructure in cities

The development of public transport is one of the priorities in transport policy adopted by the European Union. The goals include the reduction of CO_2 emissions and the improvement of the living conditions in cities. The tasks are aimed at encouraging the use of public transport. These rules were formulated in the Regulation (WE0 1370/2007) in the field of public services as well as rail and road passenger transport. In Poland, this subject is regulated by the Act on Public Collective Transport of December 2010, which defines the role of local government units in the process of shaping public services in collective transport. The main obligation within the framework of planning is the adoption of plans for sustainable development of public mass transport, which is an act of local law. [16 p. 5, 6]

The aim of transport policy is to create conditions for efficient, economically effective movement of people and goods, that limits the negative environmental impact. It can be achieved by ensuring balance in the use of passenger cars and public transport. It is also about introducing facilitations for bicycle and pedestrian traffic while meeting the requirements of reducing the adverse effects of transport for the environment.

While developing communication plans in the Netherlands and many Western European countries, particular attention is paid to the problem of appropriate connections to different places inside and outside of the city. These models are aimed at choosing the best possible access to specific places, by promoting public transport (bus, tram), as well as cycling or walking. [3, 4, 5]

Interdisciplinary activities designed for managing the city's logistics should also be reflected in urban development. Parking buffers, also known as park and go parking, which are usually located at the main entrances to the city are needed. Such car parks limit the entry of passenger cars and others to the centre. It is one of the tools necessary to solve the limitations of parking spaces in the central zones of the cities: both in places designated in the main street, as well as in car parks.

Such actions will bring the desired effect only together with the introduction of efficient and effective collective communication connecting destinations with car parks.

In the Netherlands, since the early 1970s, cities planned to reduce the speed through the concept of residential streets with priorities for cycling or pedestrian spaces, and playgrounds for children. (Ministry of Housing Physical Planning and Environment 1983)

There are some obstacles in urban areas that are associated with the improper use of roads, excessive speed, and a high number of "extended" parking.

In order to improve the quality of the urban environment, in the Netherlands and in many European cities, the demand for parking spaces for residents of a given district is precisely described. For example, in 1997 in renewed Schilderswijk district of Hague, it amounted to 0.8 parking spaces per flat, while in the old buildings this coefficient amounted to 0.5 parking space per flat.

There are also parking spaces for parking during the day and at night. (in the day about 50% of the number of inhabitants require parking spaces, free from the needs of shops and other functions). [3, 4, 5]

The limitation of traffic is also associated with a decrease in noise. The maximum load approved by the Ministry of Health and Hygiene in 1997 (Vollsgezondheid en Milieuhygiene) was 70 + 5 db. [3, 4]

It is now necessary to conduct some kind of modernization of previously planned urban layouts.

In order to counteract these problems, it is crucial to develop a comprehensive traffic management strategy, which foresees the minimization of individual communication for collective transport.

To establish this strategy, certain objectives should be adopted:

- establishing zones of diverse communication solutions,
- defining the main groups of users,
- defining the principles of organization and traffic management solutions,
- determination of the impact of these principles on the functioning of the city's transport system and directions of its development
- indication of improving the system in the field of road communication. [6, 9, 11]

The plan for sustainable transport development – Oświęcim

The Oświęcim county was created in 1920 and is one of the oldest self-government units in independent Poland. It is a sub-region of Western Małopolska, characterized by a relatively strong economic position and high standard of living and education of its inhabitants. It has over 800 years of history. [16 p. 11]

Oświęcim is the capital of the county, located in the Małopolska voivodship. It is situated in close proximity to important economic regions: the Kraków agglomeration, the Upper Silesian Industrial District, and the city of Bielsko-Biała. Counties bordering the Małopolska voivodship and Śląskie voivodship are characterized by the highest population density in the country and high transport parameters (length of public roads, length of the public transport lines, usage of public transport, etc.) [16 p. 10.]

The city of Oświęcim is inhabited by around 40,000 people and it is an important industrial centre, dominated by the chemical industry, followed by the mechanical and electromechanical industries, and the production of building materials. As a result of the political transformation that took place in 1989, there was an increase in the competitiveness of many industries, including chemical ones. The restructuring processes of the plant led to a decrease in the areas that were occupied by the chemical industry – first Zakłady Chemiczne in Oświęcim, and later Dwory Chemical Company. Problems that arose as a result of the decline in employment in chemical plants, related to the redundancies of the town's inhabitants and the surrounding areas, were counteracted by mines located close to the city: Brzeszcze, Piast, Libiąż, and the vicinity of the Economic Zone in Tychy, with Fiat Factory.

In response to these negative phenomena, slowing down the growth of the city, local governments began to develop initiatives which were focused on the formation of new jobs, and on the expansion of local entrepreneurship. As a result, the Municipal Economic Activity Zone (MSAG) appeared, which occupies the terrains of former Chemical Plants (today Synthos) as well as the Oświęcim Business Incubator. [14, 15]

The favourable investment climate of the city of Oświęcim is not without a significance for the growth of its income, which in turn affects the quality of public services and economic progress.

The indicator of change in the number of inhabitants in the area of Oświęcim is similar to the rate of change in the number of residents throughout Poland (+0.84%) The increase in population in areas nearby the city shows that the process of suburbanization can be observed also in Oświęcim. It is a generator of increased demand for efficient collective transport, which will connect the city centre with newly established settlements located in the periphery. [16 p. 18.] An adverse demographic tendency observed in the region is the ageing of the inhabitants, that is people in the post-working age, which has an impact on the reduction of the offer of public transport.

Other indicators that may show growing dynamics of the city's development are the remuneration index, which in 2012 amounted to 87.3% of the national average. [16 p. 22]

According to statistical data, over the period of 2009 – 13 [16 p. 28], the number of private cars increased by over 15%. However, the automotive indicator does not have to translate into an increased number of journeys made with private cars.

Investments related to road transport are a priority because they translate into the quality of life of both residents and people coming to the city. The most important undertakings that have been comprised in relevant municipal spatial development plans include, among others, improving access for disabled people by lowering curbs, slipways, special places for handicapped people, modernizing and developing urban street networks, extending them and equipping them with roadsides, bays, and proper pavements drainage, modernization of intersections, improvement of signage, creation of a car park system and parking bays, which will be connected with the collective transport, construction of bicycle routes and places for leaving bicycles and many other activities. Improving the attractiveness of public transport (vehicle standard and their aesthetics). [12, 13, 14]

There are many other very important investments planned, which in a meaningful way will improve the quality of life and residence.

Conclusion

Continuous use of a car in our country, instead of walking or cycling or using public transport means that people are completely addicted to cars. As a consequence, we suffer from numerous diseases. According to the data from 2001, the average American family travels nearly as many kilometres as the perimeter of the Earth. The saddest part is that these distances are achieved by getting to work, school or doing shopping. According to the studies carried out by the National Institute of Health, obesity and other effects of an inactive lifestyle contribute to a 5-year reduction in life expectancy per one American. And the rest of the world, including Poland, goes in the same direction. This American pattern related to lifestyle will probably continue in the future.

Governments and economies should act as soon as possible to introduce the most energy efficient technologies that contribute to reducing not only the costs of car driving but also to reduce environmental pollution. The only cost-effective method associated with climate change, improvement of public health and a better sense of well-being, and related to the transport sector, is to reduce the kilometres travelled by American families

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Pensions and hotels at the tourist and sports trails of the Giant Mountains

Anna Wojtas-Harań
https://orcid.org/0000-0002-8434-7348
anna.wojtas-haran@pwr.wroc.pl
Department of Housing, Industrial Architecture, Interiors, Rural Planning, Landscape and Visual Arts K6, Faculty of Architecture, Wroclaw University of Technology

Abstract: A characteristic feature of the first guesthouses and hotels in the towns located in the Giant Mountains was their location in close connection with nature. Usually, the developments from the turn of the 20th century freely blended in with a green space amongst immeasurable mountain landscape or a romantic park layout as well as sports and recreation areas. Sports venues such as toboggan runs, bobsleigh runs, ski jumping hills, ski lifts, ski runs, tennis courts, swimming pools and ice rinks were situated in a way giving the impression of a compositional and functional whole with villas and guesthouses. They were placed within larger green spaces with a wide view of the Giant Mountains range from one side or the Jizera Mountains on the other, in direct contact with forest nature and fresh air. The tourist and residential developments were supposed to be an elegant background for sporting events with the mutual use of all natural values of the landscape. Over time, a change in the needs and expectations of tourists and athletes resulted in the fact that some sports areas lost their original purpose or were re-developed. In this situation, guesthouses and hotels lost their attractive neighbourhood. Apart from many other reasons, the harmony between developed areas and open, green areas was disturbed.

Keywords: sports venues, guesthouses, hotels, green areas, sports stations

Introduction

Attractiveness of holiday and resort towns depends largely on values of the natural environment. The mountain landscape as well as natural or arranged by a designer's hand greenery, add charm to summer, winter resorts, and spas. This reference to obvious truths seems purposeful in the discourse about recreational areas in the Giant Mountains. In some places the Giant Mountains are still wild, quiet, threatening, and beautiful. They can be admired or experienced in a more tangible way. They are also an area where it is possible to 'get away from the world' and 'switch to nature'. How long will they remain 'in harmony with nature'?

A strong relationship between tourism, recreation and the natural environment has been evident since the beginning of the development of these activities. It was reflected in the way of erecting guesthouses, hotels, villas, hostels and in land development. These structures were built in the most beautiful places of the landscape with a possibility of direct benefiting from advantages of the natural environment.

Relations were gradually changing. Tourism was separated from unpredictable natural conditions. Mountains are treated subjectively and equally with sports equipment. Natural values of many places have become secondary. Resorts, which were once comfortable and safe enclaves for experiencing the natural environment, have become centres with infrastructure and development methods identical to those of the city. At present, seasonality is a feature that distinguishes them from other forms of urbanization [Diener 2005]. Several times a year, resorts rife with guests in order to become frozen in other months offering deserted blocks of flats.

The Giant Mountains resorts have their own history in a trend of the global change. They flourished at the end of the 19th century and in the 1st half of the 20th century, in the period after the Second World War in the 1960s, 1970s and 1980s. Nowadays, their values are being rediscovered. Post-war and the late 1980s poverty

limited the expansion of developments in the Giant Mountains. A wave of experiments connected with the search for the most appropriate solutions to tourist resorts did not omit the Sudetes. Concepts for recreational development were created. However, many plans have not been implemented to this day and many concepts have been abandoned.

At present, spontaneously developing tourism and recreation is based to a large extent on a somehow decapitalized old infrastructure or modernized and rebuilt. New investments make the most of the acquired area. A sometimes saved 'patch of greenery' occasionally manifests local features of nature. This trend is changing the face of resorts.

Objectives of the research

The purpose of our study is:

- selection of development features which make up the quality and attractiveness of the Giant Mountains resorts;
- seeking solutions which will save the landscape, despite the pressure to meet the leisure industry requirements.

Method

The method of observation and case study was adopted.

Examples of properties from the most popular tourist resorts and at the same time ski resorts were selected, i.e. Szklarska Poręba and Karpacz.

The resorts of Szklarska Poręba and Karpacz were known for their healthy high-mountain climate and greenery, which was connected with natural conditions of the terrain.

Szklarska Poręba (Schreiberhau) was defined as a climatic alpine spa and winter sports station. It was a diversified extensive town concentrated in the valley of the River Kamienna.

The upper part of Karpacz (Brückenberg-Wang) was valued for its perfect, spa, and sports climate [Reichs 1938], thanks to its forests and location.

However, tourism development brings about the landscape transformation and air pollution. At present, more and more compact large-scale developments are beginning to take control not only of the centres but also enter the areas of forests, meadows, mountain peaks of the Jizera Mountains and the Giant Mountains.

Unusual locations were recalled, where in the scenery of the highest range of the Sudetes, surrounded by stylish architecture, supporters of winter and summer sports activities introduced a welcome revival. The choice was determined by the need to emphasize values of architecture which had always been the context of sporting events but is currently dying under the flood of developing resorts and is rebuilt as well as distorted also as a result of changing customs.

The form, architectural detail and land development were analyzed to obtain empirical conclusions.

State of the research

Architecture and spatial development of the Sudeten region were discussed in a variety of approaches, in particular when analysing the set of features shaping the regional development [Biesiekierski 1999, Suchodolski 1996, Trocka-Leszczyńska 1995] as part of research on the type of developments connected with tourist and spa services [Suchodolski 2005, Balińska 1991].

An important pretext for developing the document [Szymanski-Störtkuhl 1999] from 1999, which presented the history of the Giant Mountains culture, was the cooperation between the District Museum in Jelenia Góra and the Association of Interregional Cultural Exchange in Berlin and the Kreuzberg Museum in Berlin. It included a brief description of houses which belonged to artists, writers, scientists and intellectuals residing in Szklarska Poręba. The dissertation was based on German literature, i.e. descriptions of Alfred Koeppen's

houses and landscapes from the beginning of the 20th century as well as dissertations by artists and experts of culture. According to the assessment of Jerzy Ilkosz and Beate Szymanski-Störtkuhl, '... architectural traces, primarily houses owned by artists [who lived and worked in the Giant Mountains] did not arouse any interest so far' [Szymanski-Störtkuhl 1999, p. 104].

The history of the region is dealt with by archivist of Jelenia Góra Ivo Łaborewicz and historian Przemysław Wiater [Łaborewicz 2010], who in 2010 prepared a publication devoted to the history of Szklarska Poręba. It presents, among other things, archival photos of selected buildings and sports venues.

Krzysztof R. Mazurski [Mazurski 2012], Tomasz Przerwa [Przerwa 2012], Jacek Potocki [Potocki 2004, Potocki 2009], Julian Janczak [Janczak 1988, Janczak1976–1985], Tadeusz Steć and Wojciech Walczak [Steć 1962] et al. also dealt with the subject of sport, tourism and architecture in the Sudetes.

The topic of sports complexes greenery from the interwar period in Lower Silesia was taken up by Sebastian Wróblewski [Wróblewski, 2016], who discussed sports venues connected in particular with summer recreation.

Regarding limited access to the state of preservation of archival materials of winter sports, and thus objects related to sport, Tomasz Przerwa made the following statement: 'queries which were conducted in German facilities did not bring any positive results, a partial success was recorded only in the branches of the State Archives in Wroclaw [Przerwa 2012, p. 9].

A valuable source of information are press publications, namely pre-war tourist and sport periodicals as well as tourist folders, postcards and maps.

Sports venues as green areas

Sports terrains constitute an important link among greenery – 'pulsing with a characteristic calm rhythm of everyday life and great tensions of public holidays' [Wejchert 1955].

A characteristic feature of the first tourist facilities in the Giant Mountains was their location surrounded by greenery. Mountain shelters were usually situated in the most attractive corners of nature. When designing guesthouses, hotels and other tourist facilities, natural and scenic values of newly appropriated nature were taken into account. Buildings were constructed on large plots of land, often naturally undulating and away from roads. Landscape gardens were designed around buildings. Ideal were English park layouts, in which naturalness, coherence with the landscape as well as a romantic and sentimental atmosphere played the most important role in the arrangement. One of the natural layouts was the park near the house of Carl and Gerhart Hauptmann in Szklarska Poręba. Natural plant and rock formations, which were supplemented with imported tree and bush seedlings, were preserved here. Great attention was paid to the viewing axes towards the Giant Mountains massif. The shape of glades and free loose plantings gently complemented the annexed area.

Sports and recreational areas were also situated around the development, i.e. ski and toboggan and bobsleighs runs, ski jumping hills, ski lifts, tennis courts, swimming pools and ice rinks.

Most of these venues were of an outdoor character, contributing to a favourable balance of green spaces in the housing estate [Wintersport 1914]. They mostly used natural predispositions of the area, i.e. topography, water, vegetation, with only minimal interference in the environment. It was not exclusive to the Giant Mountains. In many famous mountain regions, the sports function was boldly introduced into the interiors of buildings, districts and housing estates using existing roads, squares, meadows, streams and ponds. An example can be Semmering resort in Austria, which is comparable to Szklarska Poręba and Karpacz. It was once called the Austrian St. Moritz, due to, among other things, the number of winter sports practiced there. The first toboggan runs were marked out along the streets. Sports venues were built near tourist facilities. They formed parks for sports and entertainment with large complexes of greenery. Thus, a bobsleigh track, a ski jumping hill, an ice rink, a ski lift and park areas were adjacent to Erzherzog Johan Hotel [Vasko-Juhasz 2016 p. 333]. At Panhans Hotel [Vasko-Juhasz 2016, p. 218] there were, among other things, toboggan runs and a swimming pool. Südbahnhotel [Vasko-Juhasz 2016, pp. 313–318] offered an experimental experience park, i.e. toboggan runs, tennis courts, children's playground, riding schools, cricket and golf grounds and space for gliding. Individual recreational areas were separated by a network of paths and roads. When composing layouts, the principles of the 18th-century landscape parks, which introduced freedom and romanticism, were in force. The naturally occurring rock and plant formations were cared for and juxtaposed with garden architecture. Nowadays, the

complex does not exist in its original shape. There are traces of roads, little walls, groves, ponds and stone carvings. The mysterious atmosphere of the place, which used to turn into a winter sports paradise, also remained. Similarly, in Szklarska Poręba or Karpacz we can find fragments of structures and grooves in the ground of the existing in the past sports facilities. Resorts, in the early years of their tourist and sporting activities, functioned as almost the ideal of contemporary Alpine resorts. Sports zones penetrated deep into the town centre. People were skiing and sledging along mountain trails, forest vistas, but also down the streets and squares. Tourists used streams and rivers high in the mountains and inside the town in order to skate, play curling and hockey or to swim. Strategic points near sports routes were guesthouses, hotels and mountain shelters. Some of them even gained historical significance. Selected examples are presented below.

Stops on sports trails

Śnieżynka Hotel in Szklarska Poręba Fig. 1

Fig. 1. Śnieżynka Hotel in Szklarska Poręba 2013 (photo by the author)

Śnieżynka Hotel, which was once called the Pearl of Szklarska Poręba, is a large building located on a large plot of land. The first postcards with the image of the building come from the late 19th century. The facility performed the function of a hotel, guest house, sanatorium, high-class leisure centre. It was originally designed on the plan of combined rectangles. The two-storey central body with a two-storey attic dominated asymmetrically over the remaining one and two-storey structures. The southern façade overlooking peaks of the Giant Mountains opened onto the garden, pond, stream and sports grounds. A tripartite arrangement of verandas and dormers was flanked by twin towers. Horizontal cornice stripes of the particular storeys, window arched frames, boarded gables and parts of turrets above the eaves line, a wooden veranda structure contrasted with the brightly plastered façade. The geometric shapes of the compact gable roof were softened by pediments and dormers with decorative finials.

In the 20th century, the building underwent modernization and was developed. From a 40-room hotel, it became a 60-room centre with extensive social spaces such as concert, conference and club halls as well as observation terraces. The central body's façade was almost twice as much widened by absorbing one of the side buildings. The whole was harmonized with the formwork of tops of the attic storeys. The storeys were gently suspended along with exposed ceiling beams. The change generally deprived the building of its original subtlety which was characteristic of architecture of Swiss hotels popular at that time. The new image strives to

minimize detail while preserving traditional building forms, which makes the building blend in with the existing surroundings despite its large scale.

Initially, the centre offered mainly summer sports attractions such as tennis courts on the grass in the idyllic hotel garden. Bednarz stream swamp near the hotel was an additional advantage, which offered water recreation in summer and ice skating in winter. At the beginning of the 20th century, the holiday house was advertised as a 'winter sports station'. This term was created due to the interesting neighbourhood of, among other things, a bobsleigh track which ended its course vis-a-vis the front of the southern façade[1], surrounding ski and toboggan runs, including horned sleighs (including the toboggan run from the Pod Łabskim Szczytem Shelter and a ski route from Hala Szrenicka and Szrenica) [Schreiberhau 1915], ubiquitous gentle slopes – ski meadows. Nearby, on the bank of Kamieńczyk Stream, there was a ski jumping hill. As one of the few tourist facilities, the centre housed garages. It was a gesture of respect towards enthusiasts of trips, car and motorcycle races. According to pre-war folders, the facility was a station – the seat of an automobile club. The place was accurately chosen because in the 1930s Szklarska Poręba was considered to be the centre of car tourism in the Giant Mountains [Wohnungs 1929]. Friendly harmony between road and tourist trails was praised [Wohnungs 1939].

Once the place glorified for its idyllic atmosphere, clean air and views of the surrounding mountain ranges, now it has transformed into a rather busy area, i.e. a farm buildings square, a grouping of apartment blocks and a large supermarket store. Around the place where the bobsleigh track once ended, there is a summer toboggan run now. However, in the thickening of high greenery, in the mess of fences and service containers, the layout of the former rest house, which once harmonized with the neighbouring sports areas, is lost. There is also no trace of the golf course – the sport that was played in green areas south to the pond [Wohnungs 1939].

Fig. 2. Holiday House Słoneczko in Szklarska Poręba 2013 (photo by the author)

In the neighbourhood, however, a guesthouse has survived, the former Holiday House called Słoneczko Fig. 2 [Prospectus 1915], in a similar style to the original hotel building. It can be assumed that the hilly golf area, as well as the pond, picturesquely matched the guesthouse. At the beginning of the 20th century, it had 16 rooms with verandas and balconies. It was a quite often duplicated type of a guesthouse from the late 19th century. The rectangular body is broken by added three-storey avant-corpses (from the south with balconies and twin from the north with verandas). The whole is covered with a gable roof. The boarded attic zone, lace carving of the wooden structure of verandas and gables, horizontal divisions of cornices, window bands and wall cladding in the corners, and the indispensable stone pedestal diversify the simple body. It is now difficult to find relationships with recreational areas outside the property enclosed by the fence.

1 In 1910 a bobsleigh track was created next to Śnieżynka Hotel (then Lindenhof Hotel) – at present Turystyczna Street – Lindenhof-Bobbahn (length 1620m with a level difference of 150 m) ironically nicknamed a meadow slide [Przerwa 2012, p.247].

Villa Józefina in Szklarska Poręba Fig. 3 [Schreiberhau 1929]

Fig. 3. Villa Józefina in Szklarska Poręba 2013 (photo by the author)

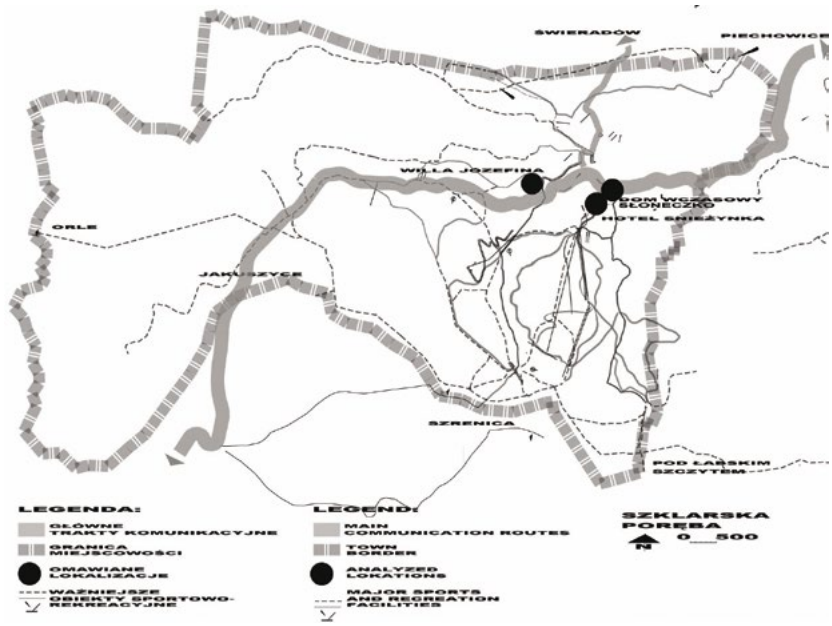

Fig. 4. Szklarska Poręba 2017 (illustration by the author)

In the place of the present Villa Józefina in Szklarska Poręba, a small one-storey inn with an attic was constructed at the end of the 19th century. It was advertised as a haven for hikers, porters and mountain carriers. A typical rectangular building with a centrally located two-storey porch, in a rim construction with prominent quoins, was covered by a gable roof with substantial eaves.

In the 20th century, the building was extended by adding an elongated one-storey gastronomic pavilion and then in 1911 magnificent three-storey cubature with an attic in the place of the inn was constructed. The main building was founded on a rectangular projection divided by avant-cropses. The lower annexes adjoined the building and were hidden behind the front façade. The brightly plastered ground floor contrasted with the horizontal formwork of the first and second storeys and the vertical formwork of the gables. The particular storeys were separated by a frieze with a rhythmic arrangement of protruding ceiling beams. The ground floor windows were crowned with arches and on the upper floors rectangular window openings were characterized by a small division of quarters. Against the background of hardly perceptible ornamentation, a corner

bay window on a polygonal projection stood out – like a tower in the front façade. The mountain hotel offered 40 rooms, game rooms, a reading room, a large garden, terraces, etc. The object was famous for its station of horned sleighs. It was also recommended as an ideal place for all types of winter sports. It was located on the tourist trail which led to Kamieńczyk Waterfall and then to Hala Szrenicka, the Giant Mountain Ridge along the road to Jakuszyce. Here, there were also sleigh runs (horned sleigh as well), including a two-track, collision-free and the most favourite route, namely Hala Szrenicka – surroundings of Kamieńczyk Waterfall – Szklarska Poręba. From here it was not far to the sports complex at Kamieńczyk Waterfall, which consisted of ski jumping hills, a bobsleigh track, a shooting range, cross-country ski runs and downhill runs, lifts. The investments made and development plans were connected with favourable snow conditions in this region. The track of popular car and motorcycle races was also situated nearby [Wiater 2017]. The hotel had thirteen garages and a petrol station which both met expectations of motor sports enthusiasts.

The building underwent thorough remodelling, maintaining its historic image. However, the hotel, which was deprived of an attractive neighbourhood of sports grounds, became a roadside apartment building. None of the sports facilities mentioned here exists anymore and they have not been replaced by other modern ones.

Orlinek Hotel in Karpacz Fig. 5 [Suchodolski 2014, pp.128–129]

Fig. 5. Orlinek Hotel in Karpacz 2016 (photo by the author)

In 1913, on an extensive mountainous glade in the vicinity of Karpacz, a mountain hotel was constructed. It was a two-storey building with a two and three-storey facility attic. The elongated body, asymmetrically divided by transverse structures of varying heights, was connected with Buda Pod Wąsem mountain shelter which existed probably since the 18th century (in 1923 the shelter burned down) by means of a long, low, one-storey shed. This connector, which was incorporated into the slope, constituted a sports and recreation building – a bowling club with a visible timber framing structure of walls and gable roof beams. Later, it was enclosed with multi-pane windows and wooden panels with woodcarving. The hotel building, with 200 beds, duplicated a traditional repertoire of forms, adapting to the historical development, despite a disproportionate scale, i.e. a steep gable roof, dark brown formwork of the attic and dormer storeys, loggias, verandas, white plaster of lower storeys, arched window openings and door basements. An unconventional, but often used solution was a polygonal corner bay window in the exposed front façade and a decorative motif made of stylized leaves, covering the entrance opening along with equally decorated gates. However, rich wall ornaments were found in the interiors of the building, namely in dining rooms, restaurants and cafes.

The building elegantly dominated in the extensive forest glade, at the same time standing out against the background of the monstrous range of the northern slopes of the Giant Mountains. Tourist and sport routes, which descended from the highest parts of the mountains, crossed in this place. Tracks which spirally ran to the centre of Karpacz started here. A large tourist and sports complex was created along with facilities and tracks such as a ski jumping hill, a bobsleigh track, ski runs (from the mountain shelter Nad Małą Łomniczką, from the mountain shelter Pod Śnieżką and from the mountain shelter Strzecha Akademicka), toboggan runs (one trail

that was long – Silesian Road and a network of other and shorter ones which led to Karpacz), tennis courts, a small water reservoir which was used extensively in winter and summer. In winter, the sloping meadow in front of the hotel turned into a great ski and sledge slope. Ski courses, ski and toboggan competitions were organized there. In the summer season, tennis tournaments which were modelled on famous resorts, were organized.

Fig. 6. Restaurant by Łomnica reservoir in Karpacz 2015 (photo by the author)

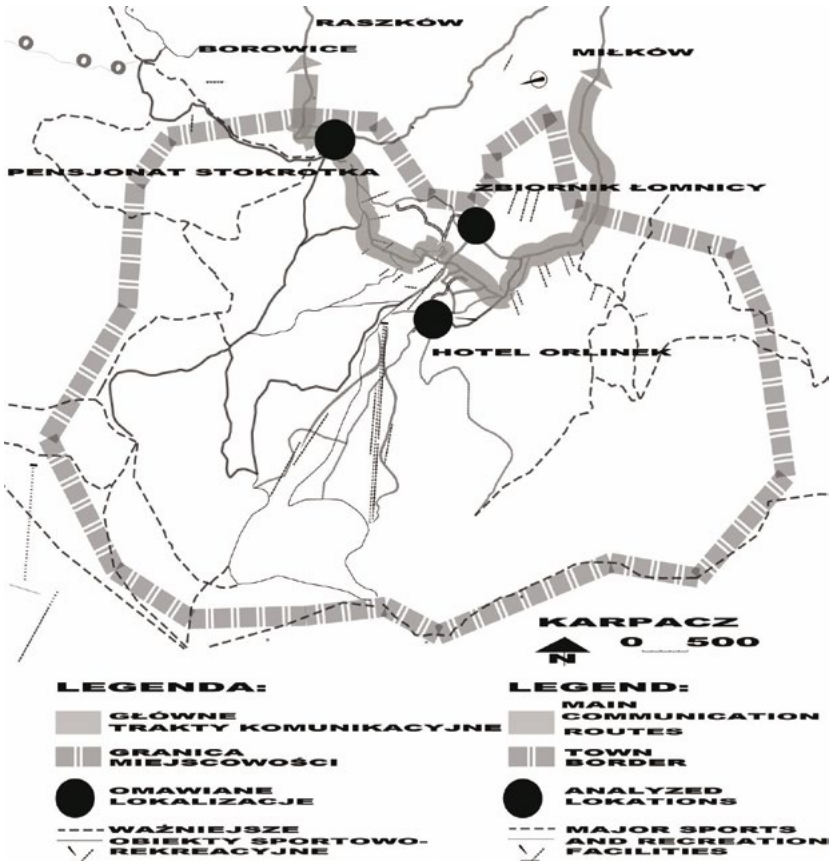

Fig. 7. Karpacz 2017 (illustration by the author)

The hotel, which was rebuilt many times, is now closed and the ski jumping hill, which was replaced with a new one, i.e. Stanisław Marusarz, has not been functioning since 2010. The bobsleigh track left recesses in the ground in some places. However, the sports grounds above the hotel, in the vicinity of Strzecha Akademicka mountain shelter and Kopa, have survived in a changed form. In 1960 a chairlift to Kopa was opened here for

tourist and sport traffic. It was the first rope lift in the country and the longest chairlift in the world at that time. It was 2278 m long and covered a land difference of 528 m. At present, it is the oldest lift in Poland. Over the following years, the sport infrastructure was supplemented by constructing six cable lifts and one gondola lift. In 2011, the youngest Biały Jar Station was established. It was realized, as if against the trend that locates ski investments high in the mountains. It was even successful to place the lower station close to the centre of Karpacz. The only cross-country trail from the upper cableway station to Kopa is advertised, towards Dom Śląski and Lucna Bouda mountain shelters.

Stokrotka Guesthouse, which is also worth mentioning, [4, p. 131] was added to Buda Chlebowa Shelter on the pass near Czoło above Karpacz in 1895. It was always a strategic and scenic location, which was crossed by numerous ski and toboggan routes, i.e. the route from Karpacz to the then Borowice (and further to Przesieka and Czerwoniak, Raszków and Miłków), the ski run next to Husycka Górka towards Łomnica reservoir, the toboggan track along Karkonoska Street to the centre of Karpacz and further to Miłków and the other leading to Miłków along the forest path and the slope of Strzelec Mountain. The trails from Wielki Staw area from the shelter of Prince Henry, the shelter of Bronek Czech, the shelter of Strzecha Akademicka and other parts of Równia pod Śnieżką converged or looped here. At present, only the 2,500 cross-country skiing loop near the guest house is used in winter.

One of the most interesting places near sports tracks is a restaurant Fig. 6 [Suchodolski 2014, p. 133] with several beds on the banks of Łomnica reservoir in Karpacz – once a mountain shelter from 1915 il. 5. A one-storey wooden structure building with an attic crowned with a gable roof and a large open veranda (later glazed), with a small scale gently blended into the natural environment of the wild and winding River Łomnica in this place. Sport life was vibrant on the dam lake in Łomnica. In winter, hockey, curling, ice skating were practiced on the ice rink, whereas in summer a harbour for boats and kayaks was organized. Nearby, just behind the restaurant, there was the finish of the bobsleigh track. There was a cross-country ski trail here and the sledge run curved here. Nowadays, these sports are not practiced. A much larger gastronomic facility was constructed in the place of the historic building.

Summary

Analysing the form and location of tourist facilities such as guesthouses and hotels in the Giant Mountains at the turn of the 20th century, it should be concluded that many of them made up comprehensive layouts. They consisted of characteristic architecture, integrating landscape, a large reserve of green areas, including sports ones. Buildings had features of native architecture with features of Swiss hotel architecture. They were integrated with elements of the landscape in which mountains were of special significance. Multifunctional centres offered a high quality of created space without settlement boundaries, remaining in balance with the surroundings, unscathed for such desirable tourist attractiveness. Thus, these places were permanently remembered because of their beauty and pleasure of practising sports or recreation.

On the basis of the Karpacz spatial development (zoning) plan from 1922, it can be concluded that the location of sports and green areas was anticipated by taking into account aesthetic aspects as well. Sports tracks penetrated smoothly into the designed layout of construction plots separation in accordance with the location of contour lines. Larger structures were not located accidentally because they emphasized selected sites or characteristic forms of landform. Scarps were marked, even the smallest ones on private properties! Newly designed plots duplicated large areas of the existing construction plots. The distance between developments was kept.

At present, the surroundings of Śnieżynka Hotel and Słoneczko Guesthouse have been occupied by residential and commercial development. Postcards from the 20th century which depict the above-mentioned buildings with active vacationers are intriguing. Orlinek, Stokrotka and Villa Józefina lost their statute for strategic hotels and sports and tourist guesthouses along with the liquidation of sports tracks and venues. Disturbingly empty spaces in their surroundings can become attractive for developers.

It is worth quoting the reflection of architect Laurent Chappis, who was one of the first to settle the French Alps for the needs of a flourishing tourism and sports movement. 'It is important that those who come to the mountains see the mountains first, not architecture and urban planning overlooking the mountains. We must be very humble'.

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Rola ornamentu w kształtowaniu przestrzeni architektonicznej na przykładzie dekoracji sztukatorskich przypisanych warsztatowi Giovanniego Battisty Falconiego (cz. 2)

Beata Klimek
https://orcid.org/0000-0002-4664-283X
b.klimek@pollub.pl

Katedra Konserwacji Zabytków, Wydział Budownictwa i Architektury, Politechnika Lubelska

Streszczenie: W artykule przedstawiono rolę jaką pełnią wybrane rodzaje ornamentów sztukatorskich w kształtowaniu przestrzeni wnętrz przez nie zdobionych. Opisano charakterystyczne rodzaje ornamentów występujące w sztukateriach w XVII w. w Małopolsce. Dekoracyjny i wieloraki ornament jest podporządkowany rodzajom sklepień zdobionych wnętrz. Do zilustrowania tych powiązań posłużono się ornamentami stosowanymi w dekoracjach sztukatorskimi przypisanymi warsztatowi Giovanniego Battisty Falconiego.

Słowa kluczowe: ornament, sztukaterie, warsztat sztukatorski, Giovanni Battista Falconi

Uwaga metodyczna

Niniejsza publikacja „Rola ornamentu w kształtowaniu przestrzeni architektonicznej na przykładzie dekoracji sztukatorskich przypisanych warsztatowi Giovanniego Battisty Falconiego." Cześć 2 stanowi kontynuacje części 1 „Rola układów kompozycyjnych w kształtowaniu przestrzeni architektonicznej na przykładzie dekoracji sztukatorskich przypisanych warsztatowi Giovanniego Battisty Falconiego"

Wstęp

Bogaty i zróżnicowany ornament dekoracji sztukatorskich warsztatu Falconiego podporządkowany jest zwykle tektonice sklepień, którą równocześnie podkreśla. Wyjątkowo tylko przy zdobieniu niektórych sklepień krzyżowych i kopuł zastosowano ornament, jako element podziału. Jedynie w nielicznych wnętrzach bogactwo i zróżnicowanie motywów ornamentalnych, oraz sposobów ich opracowania zaciera i czyni mniej czytelną tektonikę sklepień, jak to ma miejsce np. w baszcie zamkowej Baranowie i refektarzu w eremie w Rytwianach.

Przy sklepieniach kolebkowych ornament często zbudowany jest symetrycznie względem osi sklepienia. Każde takie przęsło czy pole kompozycyjne zdobią podobne motywy ornamentalne, one rytmizują sklepienie na zasadzie powtarzalności, czy przemienności pewnego zestawu ornamentalnego, jak na przykład w nawie głównej kościoła w Rytwianach.

Wśród wielości typów ornamentu trzy – kartusz, arabeska i figura ludzka, kiście owoców zawieszone na wstęgach – są motywami przewodnimi dekoracji sztukatorskiej w działalności warsztatu Falconiego i pełnią równocześnie istotne funkcje w poszczególnych schematach kompozycyjnych.
Figura ludzka służy najczęściej zasadniczemu podziałom kompozycji, laurowy wałek podkreśla często ten podział poprzez akcentowanie szwów sklepiennych, a kartusz wypełnia wydzielone w ten sposób pola będąc w ich centrum i podporządkowując sobie resztę motywów ornamentalnych.

Nie można jednak uważać pewnych typów ornamentu, na stałe związanych z określonymi układami kompozycyjnymi, występują one, bowiem we wszystkich schematach kompozycyjnych. Podobnie nie da się stwierdzić, by konkretnych dekoracjach lub jedynie w określonym czasie warsztat Falconiego stosował repertuar ornamentalny tylko dla nich charakterystyczny. Ornament stosowany przy komponowaniu poszczególnych dekoracji różnił się jedynie w sposobie opracowania i pewnych detalach, ale nie w zasadniczym wyglądzie i pełnionej funkcji. Nie sposób omówić wszystkie motywy ornamentalne występujące w dekoracjach przypisanych przez historyków sztuki warsztatowi Falconiego, wyszczególnione zostały jedynie te najbardziej istotne i najczęściej stosowane.

Motywy abstrakcyjne

W grupie tej spotykamy się z ornamentem cekinowym i „zawijanym", a także ornamentem geometrycznym reprezentowanym przez astragal, wole oczka. Jednak wśród motywów tej grupy wyróżnia się kartusz. Z tym motywem wiąże się najczęściej ornament zawijany i ornament chrząstkowo-małżowinowy, który w odróżnieniu od pozostałych może być pomocny przy datowaniu dekoracji sztukatorskich.

Kartusz jest najbardziej popularnym motywem opisywanych dekoracji sztukatorskich, towarzyszy im od pierwszych realizacji z lat 40-tych do ostatnich z lat 60-tych. Na początku suchy wykonany jakby z blachy w późniejszych dekoracjach plastyczny i mięsisty, zwinięty w duże precyzyjnie modelowane woluty często wzbogacone o groteskowe maski. W dekoracjach tych pełnił on trojaką funkcje.

Przede wszystkim jest pierwszoplanowym dopełnieniem niektórych układów kompozycyjnych. Kartusz, jako motyw przewodni dekoracji pojawia się głównie w tych sztukateriach, które powiązane są ze sklepieniami kolebkowymi, o podziałach ukośnych, wypełniając ich pola lunetowe i między lunetowe (Rytwiany nawa główna i kaplice boczne). Usytuowany pośrodku nich podporządkowuje sobie inne detale ornamentalne, które mu towarzyszą.

Popularny jest również w tych układach kompozycyjnych, które wiążą się z wnętrzami czterościennymi o sklepieniach krzyżowych i kopułach (Kraków, Łańcut, Baranów Sandomierski, Krosno, Podkamień, Lublin). W układach tych komponowany dośrodkowo, towarzyszy ramom centralnym lub jak w kopułach wypełnia wyznaczone mu pola. W wielokrotnie kartusz jest motywem dzielącym kopułę.

Kartusz jest również samodzielnym motywem, w tym wypadku najczęściej stanowi ramę dla przedstawień heraldycznych wtedy towarzyszą mu postacie aniołów, puttów, które go podtrzymują (Niepołomice, Krosno, Podkamień, Lublin) w końcu kartusz bywa częścią innego, zasadniczego motywu ornamentalnego – najczęściej, na przykład w kościele Łowiczu, towarzyszy wici roślinnej, której bieg przerywa urozmaicając jej dukt.

Przez całą I poł. XVII w. wystrój wewnętrzny kartusza przebiera formy sercowe, czasami bardzo spłaszczone, trójliścia pojedynczego lub zwielokrotnionego i w kilku wypadkach lancetowate zakończonego oraz zniekształconego owalu. Przez cały wspomniany okres jego rama jest zazwyczaj niezbyt szeroka i zwarta, tylko w kaplicy w Niepołomicach kartusz połączony jest z innymi detalami ornamentalnymi ma rozmyty kontur zewnętrzny.

Od początku dolną szeroką podstawę ramy kartusza wzbogacano podwieszonymi do niej pękami owocowymi i girlandami oraz wyrastającą z nich wicią roślinną. Od tego momentu po bokach kartusza pojawiły się również putta, które z jego ram wyrastają lub o nie podpierając się, równocześnie trzymają kartusz. Ramy kartusza formowano dwojako. Ornament zawijany zbudowany jakby z ostro ciętych listew, czasami wzajemnie się przenikających, tworzy ramę kartusza, która wielokrotnie ma ażurowe, geometryczne wycięcia (Lublin) lub też modelowany jest płynnie, łagodnie i wtedy wystające, jakby na zewnętrz ramy jego elementy są zwinięte ciasno rulon (Rzeszów, Krosno). Pojawia się drugi typ kartusza, którego ramy albo całkowicie zbudowane są z akantu (jak w kaplicy Niepołomicach) albo też są proste, czasami wewnątrz sfalowane lub kanelowane lub uzupełnione od zewnątrz akantem (pojedynczymi jego liśćmi lub wicią).

Ryc. 1. Kraków, kościół ss. Piotra i Pawła, sklepienie kaplicy pw. Męki Pańskiej

Ryc. 2. Łańcut, zamek gabinet w baszcie północno-zachodniej.

Ryc. 3. Krosno, kaplica Oświęcimów pw. Najśw. Marii Panny i św. Stanisława

Ryc. 4. Rzeszów. Prezbiterium kościoła Bernardynek (później Pijarów)

Ryc. 5. Krosno, kaplica Oświęcimów pw. Najśw. Marii Panny i św. Stanisława

Ryc. 6. Lublin, kaplica Janusza Tyszkiewicza Łohojskiego pw. św. Krzyża

Ornament figuralny

Motywy figuralne pełniły funkcję elementu dzielącego w kompozycji sztukatorskiej. W kaplicy w Niepołomicach figury wyrastają z pojedynczych liści i z wici akantu natomiast w kaplicach Podhorcach, Lublinie wtopione są w jego meandryczny splot. Kojarzone są z kartuszami, a także z pękami i girlandami owocowymi, które podtrzymują lub unoszą jak np. w Niepołomicach, w Krośnie. Wielokrotnie wsparte są o konsole, a na głowach dźwigają kosze „wiklinowe" z owocami (Krosno, Rytwiany). Liczne są także przedstawienia główek anielskich uskrzydlonych czy (jak w Łowiczu, Podkamieniu, Lublinie) kobiecych w chustach, które zazwyczaj pełnią funkcje połączeń wiążących inne detale ornamentalne, np. kartusz z ramą, pęki owocowe i girlandy z kartuszami czy ramami lub też motywy te wspierają, unoszą wspomniane detale.

Ryc. 7. Lublin, kaplica Janusza Tyszkiewicza Łohojskiego pw. św. Krzyża

Ryc. 8. Podhorce, kaplica pałacowa pw. Matki Boskiej Bolesnej

Ryc. 9. Łowicz, nawa główna Kolegiaty pw. Wniebowzięcia Najświętszej Marii Panny i św. Mikołaja.

Ryc. 10. Lublin, kaplica Janusza Tyszkiewicza Łohojskiego pw. św. Krzyża.

Ryc. 11. Klimontów, prezbiterium kościoła kolegiackiego pw. św. Józefa

Ryc. 12. Krosno, kaplica Oświęcimów pw. Najśw. Marii Panny i św. Stanisława

Ryc. 13. Niepołomice, kaplica Lubomirskich pw. św. Karola Boromeusza

Ryc. 14. Rzeszów, nawa główna kościoła Bernardynek (później Pijarów)

Ryc. 15. Podhorce, kaplica pałacowa pw. Matki Boskiej Bolesnej

Ryc. 16. Podkamień, kaplica Cetnerów pw. św. Dominika

Ryc. 17. Zamość, kaplica Zamoyskich pw. Przemienienia Pańskiego

Ryc. 18. Lublin, kaplica Jana Symeona Olelkowicza Słuckiego pw. św. Stanisława Kostki

Ornament roślinny

Najczęściej występującymi motywami roślinnymi są: pęki i girlandy owocowe, rogi obfitości, liść laurowy, arabeska, wić roślinna i pojedyncze liście akantu tworzące rozety, palmetowe obrzeża szwów sklepiennych, akant (najczęściej w formie wici) kampanule, festony, wieńce kwiatowe i owocowe,
Pęki owocowe najczęściej zawieszone są na kawałku materiału u góry przewiązanego w kokardę lub o rozdzielonych, osobno przymocowanych końcach, w dole przechodzącego formę chwościka. Po bokach pojawiają się dwie pary wijących się wstążeczek. W dekoracji wieży zamku w Łańcucie występują pęki owocowe w liczbie kilku, zawieszonych jedne pod drugimi na tym samym kawałku materiału.

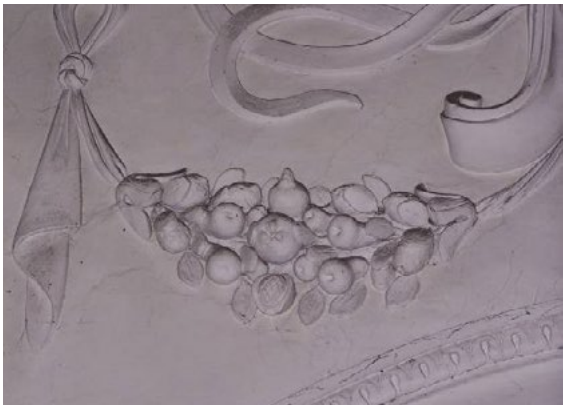
Ryc. 19. Zamość, kaplica Zamoyskich pw. Przemienienia Pańskiego przy kościele kolegiackim

Ryc. 20. Lublin, kaplica Jana Symeona Olelkowicza Słuckiego pw. św. Stanisława Kostki

Ryc. 21. Podhorce, kaplica pałacowa pw. Matki Boskiej Bolesnej

Ryc. 22. Niepołomice, kaplica Lubomirskich pw. św. Karola Boromeusza

Ryc. 23. Rytwiany. Nawa główna kościoła pw. Zwiastowania Najśw. Marii Panny



Ryc. 24. Łowicz, prezbiterium kolegiaty pw. Wniebowzięcia Najświętszej Marii Panny i św. Mikołaja

Girlandy owocowe podobnie jak pęki najczęściej podwiązane materiałem z obu końców związanym w kokardę. Owoce, z których ułożone są pęki i girlandy są w przeważającej części pochodzenia południowego. Są to granaty, cytryny, kiście winogron, z rodzimych owoców najczęściej pojawiają się jabłka i gruszki (Kaplice w Podkamieniu i Krośnie). Z biegiem lat owocom coraz częściej i w większej ilości towarzyszą liście i kwiaty.

Ryc. 25. Krosno, kaplica Oświęcimów pw. Najśw. Marii Panny i św. Stanisława

Ryc. 26. Podkamień, kaplica Cetnerów pw. św. Dominika

Arabeskę najczęściej tworzy wić meandrycznie zwinięta, zdobiąca fryzy, ściany tarczowe i gurty sklepienne bądź buduje szeroka bordiurę dla centralnych ram kompozycji – w tych wszystkich wypadkach komponowana jest zazwyczaj horyzontalnie. Znamy jednak wertykalne zakomponowanie wici roślinnej jak w prezbiterium w Klimontowie czy w podłuczu kaplicy Podkamieniu i u dominikanów w Lublinie. Wić akantową często wkomponowane są motywy figuralne, tworzące wespół z nim formę groteski, także realne przedmioty, muszle, kartusze, pojedyncze liście akantu, rozety a także spinane były przewiązkami, festonami.

Ryc. 27. Krosno, kaplica Oświęcimów pw. Najśw. Marii Panny i św. Stanisława

Ryc. 28. Klimontów, prezbiterium kościoła kolegiackiego pw. św. Józefa

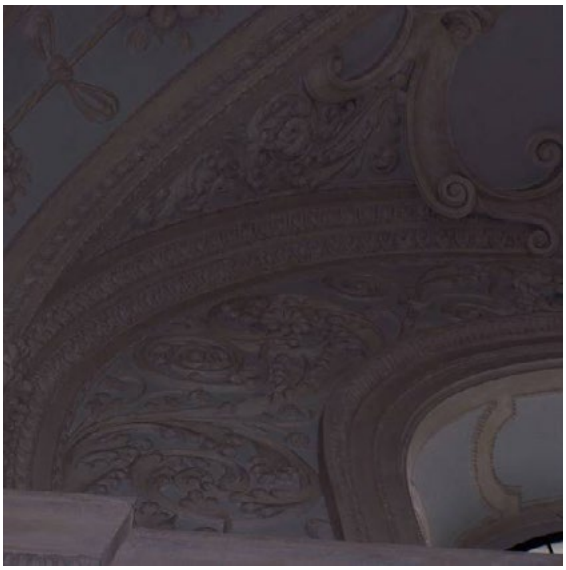
Ryc. 29. Podhorce, kaplica pałacowa pw. Matki Boskiej Bolesnej

Ryc. 30. Niepołomice, kaplica Lubomirskich pw. św. Karola Boromeusza

Ryc. 31. Łowicz, prezbiterium kolegiaty pw. Wniebowzięcia Najświętszej Marii Panny i św. Mikołaja

Ryc. 32. Podkamień, kaplica Cetnerów pw. św. Dominika

Ryc. 33. Rytwiany. Kaplica przy kościele pw. Zwiastowania Najśw. Marii Panny



Ryc. 34. Rzeszów. Prezbiterium kościoła Bernardynek (później Pijarów)

Motywy wzorowane na realnych przedmiotach uzupełniają najczęściej wiodące w danej dekoracji typy ornamentu, szczególnie roślinnego. Są to wstążki, kokardy, chwosty, przepaski itp. A także narzędzia Męki Pańskiej unoszone przez anioły (Kaplica Św. Krzyża w Lublinie). Osobną grupę wśród tych motywów stanowią panoplia. Odnajdujemy je w dekoracjach – nowowiśnickiej, zamojskiej, krośnieńskiej i podhoreckiej, prezentują się w nich okazale. Wkomponowane w płyciny są panoplia wojenne – tarcze na tle różnej broni, bębny proporce i różnych rodzajów broni, zbroi w kaplicy Zamościu Panoplia, niektóre motywy figuralne oprócz pełnionych funkcji zdobniczych ilustrują też pewne wątki treściowe, które zazwyczaj rozwijane są poza dekoracjami sztukatorskimi.

Ryc. 35. Krosno, kaplica Oświęcimów pw. Najśw. Marii Panny i św. Stanisława.

Ryc. 36. Podhorce, kaplica pałacowa pw. Matki Boskiej Bolesnej.

Ryc. 37. Zamość, kaplica Zamoyskich pw. Przemienienia Pańskiego

Ryc. 38. Zamość, kaplica Zamoyskich pw. Przemienienia Pańskiego

Podsumowanie

W przeciwieństwie do układów kompozycyjnych w przypadku ornamentu nie ma tak wyraźnego punktu przełomowego, zwrotnego ornamentyki sztukatorskiej. Jest to związane z dominacją pewnych zestawów ornamentalnych oraz sposobem ich opracowania, które po pewnym czasie ulegają stopniowej zmianie. Większość układów kompozycyjnych dekoracji sztukatorskich, ma charakter przede wszystkim roślinno-abstakcyjno-figuralny, w dekoracjach sztukatorskich dominuje ornamentyka wzorowana na realnych przedmiotach, zespolona albo z motywami roślinnymi albo figuralnymi. Niektóre charakterystyczne dla Falconiego motywy ornamentalne są odmienne w początkowych dekoracjach w detalach i modelunku w końcowych bardziej plastyczne i dynamiczne. Kartusz zawijany początkowo twardo modelowany, jakby na wzór manierystyczny, bardzo szybko jego sploty zawijane stają się miękkie. Równocześnie z kartuszem zawijanym wstępują mięsiste pęki i girlandy owocowe.

Panoplia znane nam z połowy lat 40-tych, na początku modelowane w płaskim reliefie w latach późniejszych stają się bardziej rozbudowane.

Postacie figuralne na początku najczęściej pełnią funkcje kompozycyjne, są ciągle odległym echem figur manierystycznych, a dopiero później zaokrąglają się, są bardziej przysadziste, tracą swój jakby linearny, graficzny modelunek na rzecz płynnego jakby bardziej malarskiego. Postacie wyrastające początkowo z wici roślinnej, po 1640 r. z akantu są z ornamentem roślinnym początkowo dość luźno związane, potem zaś jakby organicznie z niego wyrastają tworząc wespół z nim ruchliwe, urozmaicone i plastycznie opracowane sploty groteskowe.

Wysunięta, przez dotychczasowych badaczy przedmiotu, hipoteza co do włoskiego pochodzenia ornamentu stiukowego, wydaje się w całej rozciągłości potwierdzić. Ornamentem zdecydowanie włoskim jest w całości ornament roślinny, a także ten odwzorowany z realnych przedmiotach. Wśród ornamentyki figuralnej – uskrzydlone główki, nagie putta, maszkarony oraz popiersia są zdecydowanie włoskimi, podobnie jak ornament geometryczny podkreślający podziały sklepienne (astragal, wole oczka). Z wszystkimi tymi detalami spotykamy się już w sztuce antycznej, a przede wszystkim nowożytnej – Rzymu. Również wspomniany zestaw owoców – południowych – jakie pojawiają się w pękach i girlandach potwierdza włoski repertuar ornamentalny. Wydaje się, ze bez względu na włoskie nazwisko sztukatora, repertuar ornamentalny dekoracji sztukatorskich był inspirowany przez manierystyczno-barokowe sztukaterie Rzymu, oraz północno -włoskie okolic Mediolanu i pogranicza włosko-szwajcarskiego. Sztukaterie północno włoskie i z pogranicza szwajcarskiego stały się wzorem dla sztukaterii nie tylko tych powstałych terenie Małopolski, ale prawie dla większości wczesnobarokowych dekoracji sztukatorskich Europy. Mają one podobnie jak Polsce charakter abstrakcyjno-figuralny. Motywami przewodnimi tychże dekoracji są: postać ludzka, najczęściej anielska i kartusze zawijane kształt kartusza północnowłoskiego, jego rama zawijana modelowana miękko wypustkami w rulon nacinany, zdobiony cekinami, podtrzymywany przez putta, a także typ pęków i girland owocowych, mięsista wić roślinna postacie w charakterystycznych rozciętych szatach wsparte o konsole i pilastrowe formy.

Po roku 1640 ornament staje się bardziej mięsisty jakby zaznaczający tektonikę sklepienia, którą jednak podkreśla bezpośrednio poprzez akcentowanie schematów kompozycyjnych dekoracji sztukatorskich, które

z kolei do wspomnianej tektoniki nawiązują. W ornamencie sztukatorskim tego okresu literatura przedmiotu widzi formy wyrosłe w różnorodnych i czasami sobie przeciwstawnych kręgach artystycznych. Mówi się oczywiście o dalej trwających wpływach włoskich, ale nie wyłącznie północnowłoskich, lecz również związanych z Rzymem, a szczególne z twórczością G.L. Berniniego.

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Przebudowa Potsdamer Platz jako przykład współczesnego kształtowania przestrzeni publicznej

Anna Szafranek
a.szafranek@pollub.pl
Katedra Architektury Współczesnej, Wydział Budownictwa i Architektury, Politechnika Lubelska

Streszczenie: Celem artykułu jest zaprezentowanie przestrzeni publicznej, jaką jest Potsdamer Platz, wykreowanej w miejscu o charakterze historycznym i symbolicznym dla Berlina. Przestrzeń ta została zaprojektowana zgodnie z aktualną wiedzą budowlaną i wyobraźnią architektów tak by umożliwić realizację potrzeb współczesnego człowieka. Interesujące może być również odniesienie i porównanie wybranych form zaspokajania potrzeb w przestrzeni publicznej miast w przeszłości do prezentowanego w niniejszym artykule ukształtowania Potsdamer Platz oraz jego bezpośredniego otoczenia. Zaprezentowany rys historyczny dotyczy starożytnej agory i średniowiecznego miasta. Tak nieco rozszerzony temat pozwala na pełniejsze uwypuklenie zmian zachodzących w sposobie kształtowania przestrzeni publicznej. Można się również pokusić o poszukiwanie odpowiedzi na w sposób naturalny nasuwające się pytanie o kierunki zmian w przestrzeni publicznej w przyszłości.

Słowa kluczowe: przestrzeń publiczna, Berlin: Potsdamer Platz – Sony Center-Kulturforum, zaspokajanie potrzeb człowieka w przestrzeni publicznej, agora i rynek średniowieczny.

Wstęp

Place publiczne jako formy przestrzeni publicznej istniały od początku powstawania miast. Wraz ze zwiększającą się ilością mieszkańców zamieszkujących wspólny obszar, nasilały się wzajemne kontakty tych mieszkańców, zarówno te formalne jak i nieformalne. W sposób naturalny pojawiały się ogólnodostępne miejsce, gdzie mieszkańcy mogli przebywać. Miejsca te umożliwiały zaspokajanie różnorodnych potrzeb od banalnego zainteresowania co się dzieje w najbliższym otoczeniu do wywierania wpływu politycznego na funkcjonowanie lokalnej społeczności. Historycznie, w kolejnych stuleciach, wraz z rozwojem miast następowało będące następstwem tego rozwoju poszerzenie granic obszarów miejskich. Rozbudowywały się formy zarządzania i administrowania osadzone w konkretnych warunkach polityczno-ustrojowych swojej epoki. Zmianom towarzyszyły przekształcenia w przestrzeni placów publicznych w ich sferze architektonicznej. Różnorodne funkcje placów publicznych takie jak: handlowe, społeczne (spotkania, rekreacja), reprezentacyjne (gmachy publiczne), komunikacyjne (skrzyżowanie dróg) kształtowały się już od starożytności i umożliwiały realizację potrzeb mieszkańców miasta.

Przestrzeń publiczna jest szczególną formą obiektu architektonicznego wyodrębnionego w przestrzeni miasta. Unikatowość przestrzeni publicznej polega na tym, że budynki tworzące przestrzeń wspólną, użytkowaną zarówno przez jednostki, grupy czy zbiorowości, pozwalają na zaspokojenie potrzeb biologicznych, kulturowych i społecznych. Wallis (1990) zaznacza, że budowle, które nie zaspokajają potrzeb kulturowych nie są zaliczane do architektury. Jest to oczywiście spojrzenie z punktu widzenia socjologicznego i może być ono kontrowersyjne dla architektów. Budynki stają się narzędziami w kształtowaniu przestrzeni wspólnej odpowiadającej za zaspokojenie potrzeb mieszkańców. Potencjał placu publicznego w aspekcie możliwości zaspokojenia potrzeb mieszkańców przekłada się na jego atrakcyjność. Empiryczne badania nad wyodrębnieniem czynników czyniących daną przestrzeń atrakcyjną dla użytkowników wykonano w USA (Whyte W.H. 1979). Cechę atrakcyjności rozumiano jako odbieranie miejsca, które jest lubiane, gdzie ludzie chętnie przebywają, miejsce o uroku i sile

przyciągania. Badania w sposób pośredni nawiązywały do psychicznych potrzeb zaspokajanych w tej szczególnej przestrzeni jaką jest plac publiczny. Współczesnym przykładem przestrzeni publicznej jest będący przedmiotem niniejszego artykułu zespół budynków w Berlinie przy Potsdamer Platz, na który składają się Sony Center oraz Kulturforum. Przestrzeń publiczną wykreowaną w tym miejscu można śmiało określić jako atrakcyjną. Świadczą o tym choćby liczby zwiedzających: około 80 tysięcy turystów dziennie, zaś w przestrzeni wokół placu pracuje 8 tysięcy osób. (Jałowiecki, Szczepański 2010). Potsdamer Platz w Berlinie jest przykładem nowoczesnej formy kształtowania przestrzeni publicznej. Wynika to między innymi z tego, że został zaprojektowany przez najwybitniejszych współczesnych architektów i przy zastosowaniu najnowszych środków i materiałów stosowanych w budownictwie. Wizje wybitnych architektów, wraz z ogromnymi środkami finansowymi przeznaczonymi na ich realizację przełożyły się na powstanie nowoczesnej przestrzeni ukierunkowanej na zaspokajanie potrzeb rozrywkowo- kulturalnych oraz stworzenie środowiska o twórczym potencjale.

Potsdamer Platz w Berlinie i Sony Center

Rys historyczny i specyfika miejsca

Miejsce, na którym znajduje się Potsdamer Platz jest zlokalizowane w centrum Berlina. W tym miejscu w poprzednich wiekach krzyżowały się trakty handlowe. Miejsce było dogodnie usytuowane dla kupców i podróżnych. Wyróżniającym się obiektem była Brama Poczdamska, która z czasem stała się znakiem i symbolem tego miejsca. Rozbudowywane, wyposażane w infrastrukturę (w 1903 – stacja metra, i 4 lata przed II wojną światową stację S-Bahn), nabierało coraz większego znaczenia dla mieszkańców jak i wizytujących gości. W pierwszych dekadach dwudziestego wieku funkcjonował tam Hotel Esplanade, który wyróżniał się na mapie kulturalnej epoki prezentując wydarzenia i osobistości świata kultury. W tamtym czasie na scenie hotelu gościły takie postaci jak Charlie Chaplin czy Greta Garbo. Obie wojny nie oszczędziły hotelu. Zniszczono sam budynek, jak i przy okazji istniejący już ośrodek kultury i życia artystycznego o zasięgu międzynarodowym. Po II Wojnie Światowej dodatkowo powstałe uwarunkowania polityczne dopełniły podziału miasta Berlin i samego Potsdamer Platz. Wspólna część Potsdamer Platz rozdzielona została na dwie części betonową, trzy i półmetrowy zaporą, z wieżyczkami strażniczymi obsadzonymi żołnierzami, mającymi pozwolenie na strzelanie do osób próbujących przekroczyć mur. Mur berliński podzielił fizycznie i społecznie miasto i ludzi mówiącym tym samym językiem i tworzących dotychczas tą samą społeczność lokalną. Obalenie muru berlińskiego w 1989 r. i zjednoczenie Niemiec otworzyło nowe możliwości również dla kreowania wspólnej przestrzeni publicznej miasta. Zmiany polityczne i fizyczne (rozebranie betonowej przegrody) otworzyły nowe możliwości. Obszar Potsdamer Platz wraz z przyległym Alexander Platz jako miejsca historycznie ważne dla Berlina mogły zacząć istnieć jako przestrzeń wspólna dla mieszkańców dotychczas zamieszkujących w dwóch odrębnych rzeczywistościach politycznych, gospodarczych i kulturalnych. Rozpoczęło się nowe życie tego miejsca.

W roku 1990 atrakcyjny duży i rozległy plac, położony w samym w centrum Berlina stanowił wyzwanie dla najlepszych i najbardziej uznanych architektów z Europy i świata. Udział w kształtowaniu wizji i projektowaniu przestrzeni architektonicznej mieli między innymi: Renzo Piano – włoski architekt, Helmuth Jahn – amerykański architekt niemieckiego pochodzenia czy Hans Kollhoff niemiecki architekt, znany z wznoszonych wieżowców. W przebudowie Potsdamer Platz i organizacji na nowo tego miejsca zaangażowały się dwie wielkie korporacje międzynarodowe: Sony oraz Daimler Chrysler (obecnie Daimler AG). W projekcie wykonanym z ogromnym rozmachem, nakreślono bardzo nowoczesne rozwiązania ale też uwzględniono przeszłość miejsca tętniącego kiedyś życiem i rozmachem. Nawiązaniem do przeszłości było uwzględnienie w projekcie wyróżniającego się od początków XX wieku na mapie kulturalnej Europy hotelu Esplanade. Działania wojenne zniszczyły budynek i zdawało się, że bezpowrotnie zakończyły złoty blask poprzedniej epoki. W czasie współczesnej przebudowy Potsdamer Platz postanowiono oddać klimat Belle Epoque, eksponując fragmenty hotelu. Zrekonstruowanym i odnowionym elementem hotelu jest część Sali Cesarskiej wraz z kominkiem, wyeksponowane dla każdej osoby wchodzącej do Sony Center od ulicy Potsdamer Strasse (Ryc. 1).

Ryc. 1. Hotel Esplanade – fragmentu ściany hotelu. W tle „parasol" Sony Center. Źródło: A. Szafranek 2018.

Ryc. 2. Wejście do Akademii Sztuki w roku 2019 przed wyborami do Parlamentu Europejskiego. Źródło: A. Szafranek 2019.

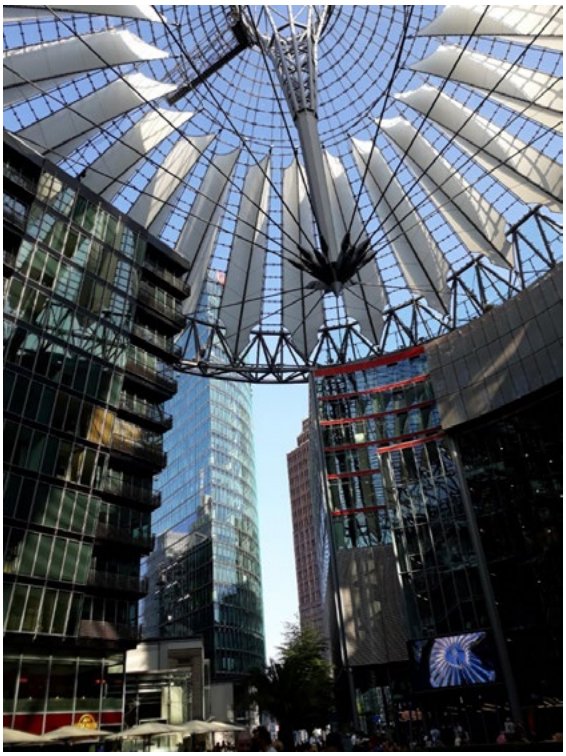
Wrażenia wejścia w klimat minionej epoki są wzmacniane wieczorem, kiedy kolorowa gra świateł dodatkowo wydobywa detale i nastraja emocjonalnie do zanurzenia się i poznania przeszłej specyfiki tego miejsca. Fragment muru Sali Cesarskiej stymuluje poznawczo, zachęca do poznania i odrobienia lekcji z przeszłości związanej z tym miejscem. Kolejny aspekt to zaspokajanie potrzeby bycia w miejscu jedynym, unikatowym i zarazem historycznie doświadczanym. Przeprowadzone i opisane wyżej założenie architektoniczne wyzwala psychologiczne poczucie uczestniczenia w ciągłości kultury oraz sprzyja budowaniu tożsamości mieszkańców. Dla świadomych turystów i przyjezdnych czy bywalców w tej przestrzeni, rozszerza horyzonty poznawcze i uruchamia sieć powiązań europejskich. Pozwala kształtować świadomość, że uczestniczenie w kulturze nie jest oddzielane granicami czy przynależnościami narodowymi. Jako inny przykład budowania powiązań europejskich i tworzenia wspólnoty wykraczającej poza ściśle lokalne uwarunkowania można wskazać wystrój frontonu Akademii Sztuki w Berlinie przed wyborami do Parlamentu Europejskiego w 2019 r. Wyartykułowane tam hasło przewodnie brzmi: „Europa to my" i jest wypisane w językach wszystkich krajów tworzących Unię Europejską (Ryc. 2).

Nowoczesne Sony Center

Fragment Hotelu Esplanade przywołujący życie kulturalne dawnej epoki wprowadza do centralnego miejsca opisywanej przestrzeni publicznej, którym jest Sony Center przykryte spektakularnym „parasolem". Konstrukcja „parasola" zbudowana została ze szkła i stali i została zaprojektowana przez architekta Yann Kersalé, nazywanego niekiedy artystą światła choć on sam nie lubił tego określenia. (Ryc. 3).

Francuski twórca zaprojektował symulację zachodów słońca poprzez zmianę koloru światła następującą co 21 sekund. W czaszy parasola zmieniające się światło przechodzi z kierunku wschodniego ku zachodniemu. Zastosowanie elementów szklanych i metalowych pozwoliło na wykorzystanie efektu gry światła naturalnego i sztucznego. Poniżej czaszy parasola na kilkunastopiętrowych ścianach budynków otaczających i wyodrębniających część centralną placu wyświetlane są reklamy firmy Sony. Kolorowe zmieniające się światła reklam odbijają się w kopule zbudowanej ze szkła. W tak wykreowanej przestrzeni architektonicznej odbywa się spektakl

światła. Zaspokaja to psychologiczną potrzebę urozmaicenia, pobudzenia zmysłu wzroku i swoiste uczestniczenie w zabawie kolorami. Zabudowa architektoniczna Sony Center w całości została sfinansowana przez firmę Sony, która również decydowała o całościowym architektonicznym wizerunku tego miejsca. Jest to plac o kształcie owalnym otoczony kawiarniami, restauracjami z otwartymi przestrzeniami zwróconymi ku centrum. Każde z tych miejsc gastronomicznych odznacza się nieco odmiennym stylem: kolorem i formą krzeseł, kształtem stolików, czy ubiorem obsługi. Spożywanie posiłku, wypicie kawy jest nie tylko czynnością zaspokajającą głód, potrzebą z grupy podstawowych ale staje się czynnością społeczną. Klienci lokali uczestniczą również w życiu społecznym i kulturalnym odbywającym się w całej przestrzeni placu. Miejsce w centrum zajmuje fontanna, która przyciąga odwiedzających. Szum wody i wilgoć rozpraszana przez spadającą wodę decyduje o atrakcyjności tego miejsca dla ludzi, nie tylko w upalne letnie dni. Drewniane ławki okalające fontannę stanowią dogodny punkt obserwacji dla turystów i ciekawskich, którzy są obserwatorami ale też są obiektem spojrzeń gości okolicznych kawiarni. Atrakcją placu jest również pianino usytuowane w jego centrum w bliskiej odległości od fontanny. Na pianinie mogą grać wszyscy chętni i odwiedzający często z tej możliwości korzystają (Ryc. 4).



Ryc. 3. Sony Center – widok ogólny. Źródło: A. Szafranek 2019.

Ryc. 4. Popisy małych i odważnych „artystów" z Azji. Źródło: A. Szafranek 2019.

Instrument muzyczny pełni co najmniej dwie funkcje. Pozwala w sposób bierny, poprzez słuchanie, uczestniczyć w muzycznych popisach mniej lub bardziej biegłych artystów ale również jest okazją do aktywnego uczestnictwa w życiu społecznym toczącym się w obrębie placu. Podkreślenia swojego znaczenia poprzez wyjście z tłumu (bezimiennej zbiorowości) i zaprezentowanie siebie, poprzez grę na pianinie. W obrębie Sony Center funkcjonują również liczne sklepy, kompleks kin oraz w tym miejscu organizowane są wydarzenia artystyczne, kulturalne, rozrywkowe i rekreacyjne np. okresowe lodowisko działające w sezonie zimowym.

Zaspokajanie potrzeb

Każdy z użytkowników tej publicznej przestrzeni może tu odnaleźć i realizować swoje potrzeby w obszarze stworzonymi poprzez obiekty architektoniczne tworzące kompleks zabudowy Potsdamer Platz i Sony Center.

Dla jednych użytkowników tej przestrzeni specyfika tego miejsca może być odniesiona do elementu historycznego, dla innych – nowoczesność wyrażona w formie zastosowania współczesnych materiałów pozwalających na wznoszenie lekkich konstrukcji z metalu i szkła, przykładem może być „parasol" zwieńczający i osłaniający całą przestrzeń placu Sony Center.

Dla innych użytkowników tego miejsca przyciągające są wrażenia sensoryczne przeżywane w tym miejscu: szumu wody – fontanny połączonej z dźwiękami pianina, smak dobrej kawy. Widoki ludzi o rysach azjatyckich, europejskich, różnojęzyczny tłum, którego słowa czy zdania wpadają do ucha ze swoją odmiennością brzmienia. Miejsce to porusza wszystkie zmysły dostarczając przyjemności i ponadto buduje świadomość poczucia bycia kimś wyjątkowym poprzez fakt obecności w takim miejscu. Zespalają się różne zaspokajane potrzeby, łączą się i nie muszą być poddawane akademickiej analizie w danym momencie aby poczuć wyjątkowość miejsca i siebie w tym miejscu. Wykreowana przestrzeń uruchamia ciąg skojarzeń poznawczych, ale też emocjonalnych i psychicznych. Możliwość zaspokajania różnorodnych potrzeb decyduje o atrakcyjności miejsca.

Potsdamer Platz w Berlinie i Kulturforum

Przedłużeniem Sony Center jest kompleks kilku budynków określanych mianem Kulturforum. Obejmuje kilka muzeów takich jak: Gemäldegalerie (Galeria Malarstwa), Kupferstichkabinett (Muzeum Druków i Rysunków), Kunstgewerbemuseum (Muzeum Rzemiosła Artystycznego), i Filharmonię. Każda z tych instytucji stanowi unikatową propozycję dla osób zainteresowanych daną dziedziną sztuki, w tym malarstwem znanych mistrzów, sztychami bądź rysunkami wykonanymi ręką Humboldta, Sandro Botticelli, Dürera, Andy Warhola, rzemiosłem artystycznym czy muzyką.

Lokalizacja budynków muzeów jest rozszerzoną ofertą dla tych, których zainteresowania koncentrują się na potrzebach poznawczych, rozwojowych w dziedzinie sztuki i kultury ale nie tylko.

Słowo muzeum tradycyjnie kojarzy się z ekspozycją wyrobów materialnych z przeszłości. Na obszarze Kulturforum, w przestrzeni pomiędzy budynkami tworzone są okresowe prezentacje współczesnych problemów m.in. ekologicznych.[1] (Ryc. 5).

Ryc. 5. Roślinny z podłączonymi „kroplówkami" (2018 rok). Źródło: A. Szafranek 2018.

1 W tym samym czasie w budynku muzeum prezentowano okresową wystawę pokazująca hodowle zwierząt – produkcję mięsa na masową skalę. Można było zobaczyć zdjęcia drobiu, zwierząt hodowlanych trzymanych w klatkach w warunkach sztucznych stworzonych tylko ze względu na cel hodowlany i następnie proces uboju i przetwarzania żywności. Te obrazy zostały skontrastowane z alternatywnym ekologicznym, przyjaznym dla natury sposobem wytwarzania żywności i odżywiana ludności.

Forma ekspozycji – przedstawienie roślin prawie jak pacjentów ze szpitala, wzbudza zainteresowanie i zatrzymuje uwagę oraz pobudza do myślenia na temat kondycji natury i skutków działań człowieka. Wywołuje refleksje o poczuciu odpowiedzialności i wspólnotowości ludzi w obliczu dobra jakim jest nasza planeta i ograniczony zakres jej zasobów. U osób świadomych głębi zagadnienia wyzwala myśli o przemijalności i o sensie istnienia nas samych. Według koncepcji Sujak (2009) potrzeba sensu zajmuje najwyższą pozycję wśród innych i stanowi zwieńczenie szczytu piramidy potrzeb. Wyrażana w formie pytań np. jaki jest sens mojej obecności, egzystencjalne pytanie po co jestem, filozoficzne zagadnienie mojego bytu i tego kim jestem w tym obecnym świecie, czy mam tylko prawa czy też obowiązki. Jeśli TAK – to jakie? Potrzeba sensu nabiera szczególnego znaczenia w obliczu limitu naturalnych zasobów ziemi. Człowiek i jego sposób korzystania z dóbr naturalnych decyduje o stopniu ich zachowania w obecnej formie i ilości bądź o zmniejszeniu tych zasobów.

Mur Berliński

Wspomniany wyżej Mur Berliński jako betonowa zapora, o długości 156 km trwał przez 28 lat i przegradzał miasto na dwie części: Berlin Zachodni i Wschodni. Wzniesiony w 1961 roku, w szczególnej sytuacji politycznego podziału Europy na dwa wrogie bloki stał się symbolem dramatu zarówno pojedynczych ludzi (oddzielenia rodzin czy śmierci dla zdesperowanych pragnących przedostać się do Berlina Zachodniego) jak i podziału zbiorowości. Mur był granicą, której przekroczenie wymagało pozwoleń i wiz. Jesień, roku 1989 była świadkiem historycznych wydarzeń. Demokratyczne przemiany w Polsce i masowe demonstracje w Niemczech Wschodnich przyczyniły się do ogłoszenia przez rząd NRD możliwości przekraczania granicy tylko na podstawie dowodu. Ta informacja wywołała coraz większe zgromadzenie ludzi przy przejściach. Tłum stawał się coraz większy. Służby graniczne zdecydowały się przepuszczać ludzi bez sprawdzania dokumentów. W krótkim czasie coraz więcej przejść było otwieranych a następnie mieszkańcy przystąpili do niszczenia muru. W 1990 roku wprowadzono unię walutową i rozpoczął się fizyczny demontaż muru. Pozostawiono kilka fragmentów jako pomniki pamięci. Fragment muru znajduje się również przy wejściu do Potsdamer Platz (Ryc. 6).

Ryc. 6. Fragment Muru Berlińskiego wyeksponowany przy wejściu do Sony Center. Źródło: A. Szafranek 2018.

Najnowsza historia wita wchodzących do przestrzeni wykreowanej współcześnie. Przypomina o wydarzeniach sprzed kilkudziesięciu lat jak i dramacie ludzi. Jest też symbolem zwycięstwa racjonalności nad autorytarną ideologią. Współcześnie Potsdamer Platz poprzez metro, S-Bahn i komunikacje miejską jest miejscem skomunikowanym z innymi częściami miasta. Szybko i łatwo można dojechać do tego atrakcyjnego miejsca, gdzie możliwe jest wielostronne zaspokajanie potrzeb psychicznych jednostkowych i społecznych.

Odniesienie do funkcji placów publicznych w przeszłości

Starożytne Ateny

Klasycznym miejscem, które można potraktować jako miejsce publiczne jest agora w Starożytnej Grecji. W poprzednich epokach domostwa były skupione wokół jednego budynku (wodza, przywódcy danej społeczności), jak opisują archeolodzy. Osiedla nie posiadały wyodrębnionego obszaru wspólnego. Przykładem mogą być Mykeny – 3,5 tysiąca lat p.n.e. Jakościowo, nowy model osadnictwa z wyodrębnionym obszarem dla wszystkich mieszkańców pojawia się później, w Atenach w V wieku p.n.e. To co wyróżnia to miasto w planie urbanistycznym, to wspólna przestrzeń dla mieszkańców.

Agora, słowo to obecnie jest używane w znaczeniu jako miejsce zgromadzeń, rynek, główny plac. Etymologia słowa agora wywodzi się od greckiego słowa «για να ακούσετε» co w języku greckim znaczy tyle co „słuchać". Trzymając się ściśle tego znaczenia słowa, agora bezpośrednio odnosi się do słuchania, rozmowy. Wskazuje na spotkanie ludzi zaangażowanych w dialog. Pośrednio wskazuje na dominujący rodzaj aktywności – kontakty społeczne mieszkańców w tym wyodrębnionym terenie polis miasta – państwa. Rozmowy, wymiany myśli to początek rozwoju polityki i demokracji. Ateny, dotychczasowe jedno z wielu miast polis, zaczyna pełnić rolę centrum kultury dla świata greckiego. To w tym mieście, około 500 roku p.n.e. można było zobaczyć Sokratesa spacerującego po niewielkim placu i zadającego pytania napotykanym ludziom. Czworokątny plac, niebrukowany o powierzchni około 4 ha, stał się świadkiem wymiany słów i idei takich jak „demokracja", „polityka", „logika", „filozofia", „etyka", „metoda", idea", „system". Miasto i jego ulice były miejscem spotykania się ludzi i rozwijania dociekliwego myślenia opartego na racjach rozumowych, logicznych. Agora – plac zgromadzeń ludowych stał się miejscem rozstrzygania losów społeczności greckich. Była ona nie tylko miejscem, jakbyśmy współcześnie powiedzieli, kuluarowych rozmów politycznych, ale też miejscem podejmowania decyzji przez Zgromadzenie Ludowe – Eklezję najwyższą władzę w państwie. Agora stanowiła miejsce codziennych spotkań mieszkańców Aten.

Agora stanowiła centrum architektoniczne miasta. Przestrzeń wokół agory lub w jej bliskości zabudowana była budynkami użyteczności publicznej istotnymi dla funkcjonowania państwa. Sąd, heliaja,budynek w którym mieściło się półtora tysiąca osób, beleuterionu – gdzie zbierała się Radu Pięciuset, świątynie, teatr. Budynki były usytuowane w niedalekiej odległości od siebie, dystans można było przejść pieszo. Drogi przecinały się na placu. Obiekty wzniesione wokół placu wpisywały się w całość funkcjonowania miejsca i odpowiadały formie zarządzania państwem. Idea tworzenia państwa zarządzanego przez lud (reforma Klistenesa 594 p.n.e.) wymogła konieczność powstania placu do spotkań i obrad. Demokratyczne formy zarządzania, zgodnie z koncepcją Klistenesa, wyłoniły ciało zwane Radą Pięciuset. Reprezentowała ona po 50 przedstawicieli z 10 obszarów na jakie zostało administracyjnie podzielone terytorium Aten. Rada Pięciuset obradowała w osobnym budynku zwanym beleuterionem o budowie amfiteatralnej, co gwarantowało dobrą akustykę.

W otoczeniu agory znajdował się teatr. Miejsce prezentacji przedstawień od tragedii do komedii oraz ironii i satyry politycznej. Widownia usadowiona na kamiennych siedzeniach, wznoszących się półkoliście wokół sceny zapewniała widoczność i słyszalność. Siedzący nawet na najwyższym ostatnim rzędzie teatru słyszeli słowa wypowiadane na dole. Ateńczycy wykorzystali uwarunkowania akustyczne kamiennej budowli i w pewnym okresie, do teatru przeniesiono obrady Zgromadzenia Narodowego.

Agora była miejscem spotkań indywidualnych, dyskusji, i działań politycznych w demokratycznie zarządzanym państwie. Raz do roku zgromadzenie podejmowało decyzje o ostracyzmie (wydaleniu osoby na 10 lat), która zdaniem obywateli zbyt zagrażała demokracji i jej władza mogła stać się jednowładztwem, tyranią.

Rozwój demokracji odzwierciedlał kształtowanie się agory i wywoływał zmiany w architekturze, powstawaniu nowych budynków, dostosowaniu już istniejących do potrzeb w danym czasie. Sennet (1996) podkreśla jak ważne znaczenie miało miasto, „polis" dla mieszkańców. „Dla Ateńczyka greckie słowo „polis" – miasto takiego Ateńczyka jak Perykles, oznaczało stokroć więcej niż tylko miejsce na mapie; oznaczało miejsce, gdzie ludzie osiągają jedność" (s. 30). Taki pogląd jest wynikiem uczestniczenia w demokratycznych rządach i poczuciu współdecydowania o losach kraju i jego mieszkańców. Fizycznym miejscem, gdzie dochodziło do spotkań, wymiany poglądów, tworzenia wspólnoty była agora.

Średniowieczny rynek

Późne średniowiecze to bardzo korzystny okres w historii rozwoju miast. Kształtuje się wtedy autonomia miast, to znaczy decyzje np. przy wyborze przywódcy podejmowane są przy współudziale obywateli, władze miasta są odpowiedzialne za wewnętrzny porządek prawny i regulacje prawno-administracyjne. Miasto jest wolne, gdyż władza nie pochodzi z zewnątrz.

We wczesnym okresie średniowiecza w Europie miasta były niewielkie, ponad 95 % wszystkich miast do *1500 roku* liczyło około dwóch tysięcy mieszkańców (Clarget 1992, za: Jałowiecki, B., Szczepański, M., 2010). Doskonalenie technik produkcji żywności sprawia, że liczebność ludności miejskiej wzrasta. Na podstawie szacunków (por. Wiesiołowski 1997, str. 233) pod koniec XV wieku na przykład miasto Poznań liczyło około 10 tysięcy mieszkańców. Miejscem centralnym zarówno w topografii miasta jak i miejscu życia wspólnotowego dla społeczności mieszkańców staje się rynek. Miejsce to pełniło istotne funkcje: jako centrum handlu i życia społecznego.

Rynek w średniowiecznym mieście to przede wszystkim miejsce handlu lokalnego i dalekosiężnego. Zabudowa rynku była całkowicie podporządkowana przestrzeni targowej. Ukształtowanie rynku, a więc usytuowanie poszczególnych parceli kupców i rzemieślników podporządkowane było pozycji w hierarchii społecznej zawodów i zamożności. W centrum placu znajdowały się parcele krojowników sukna i w kierunkach odśrodkowych mniej zamożnych handlarzy i kupców: kramy szewskie, jatki chlebowe i mięsne czy budników. W bocznych uliczkach znajdowały się wyspecjalizowane targi np. solny, tandeta (targ różnych używanych przedmiotów). Mieszkańcami ścisłego centrum rynku byli przede wszystkim kupcy.[2]

Materialna baza rynku, kramy, parcele, jatki handlowe stanowiła przyczynek i tło dla życia społecznego mieszkańców miasta. Usytuowanie rynku na osi kościół – zamek sprzyjało skupianiu się życia publicznego w tym miejscu. Ta przestrzeń w bliskości kościoła obfitowała w wydarzenia cykliczne organizowane w czasie świąt religijnych bądź sporadyczne wydarzenia organizowane doraźnie. Uczestnictwo mieszkańców miasta w nich dawało poczucia jedności, przeżywania podobnych wydarzeń, budowało poczucie wspólnoty. Na co dzień w przestrzeni okołorynkowej można było spotkać osoby znane, znamienite, np. przedstawicieli patrycjatu kupieckiego, rajców, zamożnych obywateli miasta bądź też ich żony wyróżniające się bogatym strojem wykonanych przez najlepszych ówczesnych krawców i ozdobionym przez mistrzów jubilerstwa. Dla mieszkańca miasta robiącego codzienne zakupy czy akurat przebywającego w tym miejscu, spotkanie znanych osób dostarczało powodu do obserwacji znamienitych obywateli, możliwości komentowania na bieżąco trendów w modzie. Zapewniało uczestnictwo się w „targowisku próżności" tamtego okresu. W czasach obecnych tzw. celebryci pełnią podobną rolę dla wielu współczesnych ludzi bacznie śledzących media społecznościowe i przekaz medialny. Zaspokajana jest potrzebę ciekawości, zainteresowania drugim człowiekiem choćby na poziomie powierzchownym, szukania sensacji. Współcześnie platforma stanowiąca materialne tło wydarzeń społecznych jest inna technicznie, na miarę naszych osiągnięć cywilizacyjnych, ale u podłoża zainteresowania pozostaje zaspokojenie tej samej potrzeby psychicznej: ciekawości, urozmaicenia, przerwania nudy, szukania nowości. W czasach średniowiecznych podobną rolę pełnili wędrowni grajkowie, sztukmistrze, gawędziarze, wędrowne trupy teatralne. Gromadzili wokół siebie ludzi, przyciągali uwagę, zadziwiali. Dostarczali rozrywki. Rynek ówczesny to również rodzaj gazety z wiadomościami z dalekiego świata ale też z lokalnymi. Tutaj wymieniano plotki, nowinki, omawiano skandale jak i decyzje władz. Rysuje się obraz rynku jako miejsca na którym toczy się różnorodne życie nasycone kolorami, zapachami, wielkim bogatym światem. Mające cechy pozwalające na zaspokojenie potrzeb społecznych i kulturalnych.

Przyszłość i kierunek form placów publicznych

Place publiczne tworzą trwały element wbudowany w strukturę architektoniczną miasta od czasów starożytnych do współczesnych. Wraz ze zmianami cywilizacyjnymi następującymi w kolejnych epokach zmieniał się wygląd placów publicznych jak i zakres form i sposobów zaspokajania przez te place potrzeb człowieka. Ustrój

2 *Wiesiołowski ((1997) w swoich analizach historycznych pisze, że wśród mieszkańców rynku przed rokiem 1500, co drugi mieszkaniec zajmował się handlem, a po 1500 roku 63 % mieszkańców rynku to byli kupcy i ludzie zajmujący się wymianą handlową. Ci ludzie zasiadali też we władzach miasta.*

polityczny, formy rządów (demokratyczne, absolutystyczne) i możliwości techniczne wpływały na kształt, formę konstruowania przestrzeni placów, w której mieszkańcy poprzez swoją obecność i aktywność mogli realizować i rozwijać potrzeby psychiczne, społeczne czy kulturalne. Zmieniająca się forma architektoniczna placu publicznego, w następujących kolejno okresach czasu, jest odpowiedzią na możliwości zaspokojenia potrzeb mieszkańców miasta w danym czasie. Trafne dopasowanie formuły placu i odczytanie potrzeb jego mieszkańców zapewnia sukces rozumiany jako atrakcyjność i popularność tej przestrzeni.

Współczesny czas stawia nowe wyzwania. W atrakcyjność placu wpisana jest możliwość zaspokojenia potrzeb współczesnego człowieka. Jedną z nich jest poszukiwanie sfery odpoczynku umożliwiającej również korzystanie z sieci Internet i mediów społecznościowych w obecności lub w współobecności innych ludzi w warunkach odczuwanych jako przyjazne. Oddzielenie od hałasu, odczucie spowolnionego tempa i odcięcie się od miejskiego pędu. Zieleń i woda – te dwa elementy wprowadzające w naturę sprzyjają oderwaniu od rutynowej codzienności z jej niedogodnościami. Dla twórców współczesnej przestrzeni publicznej wyzwaniem powinno być zapewnienie sfery wypoczynku rozumianego jako sposób spędzania czasu rozwijający zainteresowania. Propozycją wbudowaną w taką przestrzeń mogą być obiekty (np. galerie, muzea), lub inne dowolne miejsce, obszary wyzwalające i sprzyjający aktywności twórczej realizowanej w grupie bądź samodzielnie. Idealnie byłoby, gdyby taka forma odpoczynku połączona została z rozrywką.
Unikatowość i wyjątkowość danego miejsca, placu publicznego zawiera się też w jego bryle architektonicznej. Nowoczesne technologie budowlane ułatwiają wznoszenie najbardziej niespotykanych konstrukcji zadziwiających kształtem. Może to być obiekt, rzeźba, budynek, ściana budynku, dach. W przypadku placów publicznych taki spektakularny obiekt jest traktowany jako symbol danego miejsca.

Warto jeszcze wspomnieć, że mieszkaniec dużego miasta zamieszkuje w modernistycznej, rozbitej na monofunkcyjne strefy przestrzeni miasta. Skutkuje to między innymi długimi dojazdami z domu do pracy czy do centrum. Plac publiczny zlokalizowany w odległości umożliwiającej łatwe dotarcie (pieszo lub komunikacją publiczną) jest dla mieszkańców przestrzenią budowania więzi i wspólnoty lokalnej. W kontekście przyszłości placów publicznych, zwłaszcza w dużych ośrodkach miejskich powstanie wielu placów powinno być korzystniejszym rozwiązaniem dla mieszkańców miast niż jednego placu. Uwzględnianie obszarów do publicznego wykorzystania w założeniach urbanistycznych niesie w sobie również aspekt ekonomiczny. Atrakcyjne dla mieszkańców miejsce publiczne, odwiedzane i popularne ma istotny walor ekonomiczny dla zlokalizowanych w pobliżu, sąsiedztwie obiektów handlowych *i usługowych*. Ujawnia się praktyczna, wymierna i policzalna w pieniądzach strona placów publicznych dla inwestorów wznoszących budynki w pobliżu placu.

Ilość placów rozrzuconych w różnych częściach miasta to jeden z aspektów. Kolejnym jest forma, która różni się do tradycyjnie pojmowanego placu jako obszaru otoczonego budynkami. Współcześnie, wraz z wznoszeniem budynków wysokich i bardzo wysokich, coraz częściej wykorzystuje się ich dachy jako powierzchnię użytkową. Dach zostaje przeznaczony oraz zagospodarowany jako obszar wypoczynkowo-rozrywkowy. Zieleń, miejsca do posiedzenia czy inne obiekty realizujące pomysły architektów wypełniają tą przestrzeń. Nadają jej charakter wypoczynkowy bądź rozrywkowy, sprzyjając spotykaniu się ludzi, budowaniu więzi i wzmacnianiu wzajemnych kontaktów.

Podsumowanie

W artykule zaprezentowano przestrzeń Potsdamer Platz i jego otoczenia. W tym przedstawieniu zaprezentowano nowoczesne rozwiązania z uwzględnieniem aspektów historycznych związanych z tym miejscem. Architektoniczne bryły i wyposażenie placu przedstawiono jako tło dla możliwości realizacji potrzeb współczesnego człowieka. W przestrzeni placu rozwija się swoisty dialog pomiędzy człowiekiem i oferowanymi mu rozwiązaniami architektonicznymi. Wzbogaceniem dwutorowości i współdziałania tych dwóch bytów jest analiza historyczna miejsc publicznych, wspólnie dzielonych przez społeczność w okresie Starożytnej Grecji i średniowiecza. Pierwsza z nich Agora w Grecji ma szczególne miejsce w historii jako kolebka demokracji. Drugie miejsce – rynek średniowieczny zyskuje swoje szczególne miejsce ze względu na początek funkcji jakie w późniejszym okresie zostały w pełni rozwinięte i uzyskały samodzielność w wyodrębnianych przestrzeniach publicznych miast. Obecna forma Potsdamer Platz i jego otoczenia jest przykładem przestrzeni publicznej która oferuje współczesnemu człowiekowi możliwość zaspokajania potrzeb zarówno indywidualnych jak i społecznych, kulturalnych i rekreacyjnych.

Istnienie człowieka na poziomie psychologicznym wiąże z realizacją potencjału intelektualnego i estetycznego i Maslow nazywa je potrzebą samorealizacji, najwyższej umieszczoną w hierarchii (Maslow (2004, 2018). Szeroka oferta zawarta w formie architektonicznej skierowana jest do różnorodnych pod względem zainteresowań i wieku bywalców tej przestrzeni. Przedstawione w artykule odniesienia historyczne pokazują, że część funkcji placów publicznych nie uległa zmianie. Realizowane są te same potrzeby psychiczne człowieka jednak przy wykorzystaniu zupełnie innych środków uwarunkowanych nowymi możliwościami technicznymi. Następuje wyraźne przesunięcie potrzeb zaspokajanych przestrzeniach publicznych w kierunku kultury, rozgrywki i rekreacji.

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Architectural and urban development of the Romny Midtown in 12th – 19th centuries

Oleh Rybchynskyi
https://orcid.org/0000-0001-9936-6122
zoroleh@gmail.com

Kateryna Matiiva
https://orcid.org/0000-0003-4335-9382
kat.mat.vov@gmail.com

Department of Architecture and Conservation, Lviv Polytechnic National University

Abstract: Based on the cartographic sources of the 17th – 19th centuries, the previous researches of historical and scientific literature, the historical development materials of the city of Romny have been analyzed and systematized. Based on the investigated material, the main stages of architectural and urban planning of Romny have been determined.

Keywords: fortress, midtown, architectural-urban development, Romny

Problem statement

The city of Romny is a unique city planning monument on the premises of the left-bank Ukraine, that requires a complex midtown research with the aim of historical and cultural revival of the central part of the town.

Analysis of recent research and publications

The analysis of some aspects of the Romain midtown architectural and planning development of the 18th–19th centuries is found in the historical Kurilov O. "The Romen's antiquity» and also in V. Vechersky publications. Archeological researches, in particular Arandarenko M. and Makarenko M. [Vechersky V.V. 2003, 2005, 2007; Makarenko 1917].

Objective of the article

The aim of the research is to analyze the previous authors' researches of the historical literature and the existing cartographic data, and to determine the main stages of midtown formation.

Results and discussions

Stages of architectural-urban development of the midtown Romny

According to the scientific and literary data, the main three stages of the architectural- urban development of the Romny midtown based on the cartographic researches, the archival data studies, the historical material and literary sources are suggested below.

The first stage – 12th-17th centuries. (Fig. 1) The first fortifications on the premises of the modern city of Romny appeared at the end of 9th century – the beginning of the 10th century. That fortifications belonged to the northerners of the Slavic tribe, who lived in Posullya. The inhabitants of the North built two settlements in the 8 century where the river Romenka flows into the river Sula. The first settlement was located in the northern part of the town in The Monastery tract, the second- in the downtown in The Castle tract. In the time of Kievan Rus, the town Romain was located at the border with the Wild Field and played the main role in defending ancient lands from nomads.

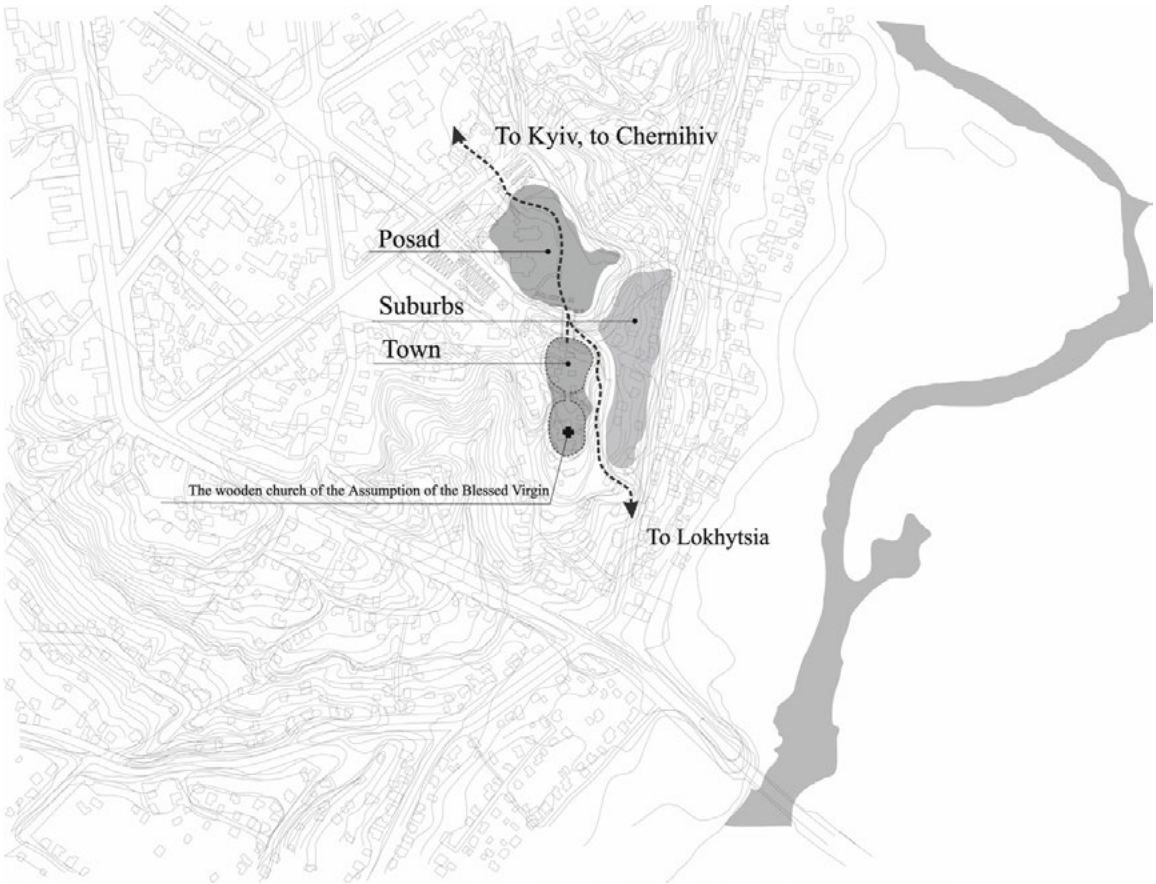

Fig. 1. Scheme of the first stage of architectural planning of the city of Romny in the 7th century.

It is known from the scientific literature that the city of Romny was inhabited in ancient times as a proof of that were the Scythian burial mound of the 5th century B.C. and the findings of old Roman coins of the 2th–3th centuries A.D. Till 988 by Volodymyr the Great's order the construction of Romny's fortress presented in the form of Detynets. The first mention of the city of Romny occurs in the book 'Teaching for children' Volodymyr Monomakh in 1096 and in 1113 year occurs to honor the memory of Volodymyr Monomakh. In 1185 the Polovtsian khan Konchak captured all the foertresses of the Posul line and the Posul territory belonged to the Mongolian

Tatars. In 1239 hordes of Batia totally destroyed the existing city and beginning from 1362 the Ukrainian-Lithuanian army liberated territories from invaders. At the end of 14th century the reconstruction of the city began with a new planning solution and fortresses.

At the end of the first stage of architectural planning development the city had the following structure City (Castle) – Suburbs – Posad and main directions to Kyiv, Chernihiv, The Moscow State, and because of constant military circumstances, the city began to acquire a new stage of development.

The second stage- the end of 16th – beginning the 18th centuries. (Fig. 2) Beginning with the 15th century the new defensive lines of the city appeared that were built almost on natural shafts, because the midtown was surrounded with big rivers from all sides. On the forth, western side a deep moat was cut behind of which was a solid wall of wooden logs. The bridges were laid to the city towers through the ditch in order to get out of town to the suburbs. That bridges existed almost till the end of the previous century and the ditch was noticeable till the 1860th years [Kurilov 1898: p. 7].

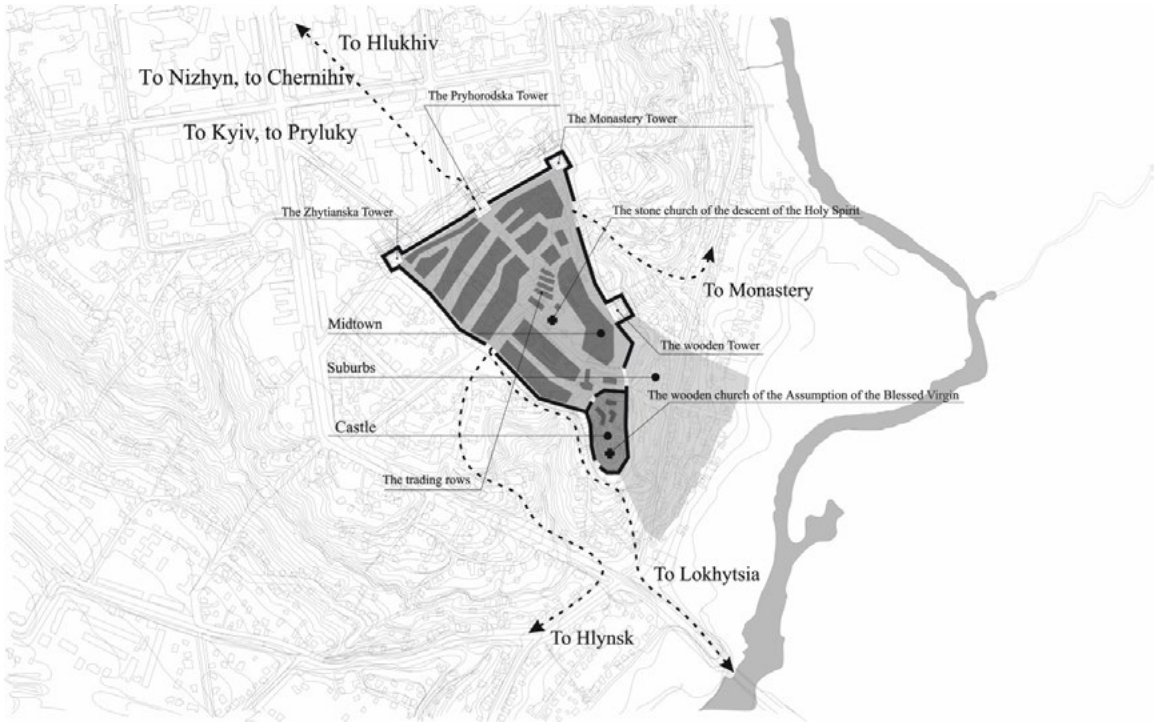

Fig. 2. Scheme of the second stage of architectural planning of the city of Romny in the 17th century.

The first mention of the city at the global level was in 1565 on the map of Venice named Romion. In the time of Michael Vyshnevetsky in 1604 a two-part fortress was built. It consisted of a small citadel, Castle(rectangular in plan with 4 corner towers) and city fortifications- 6 bastions [Vechersky 2005: p. 335–336]. In 1618 the Old and New Romans were mentioned in Polish acts. At the same time the construction of of sacral architecture has begun. One of the first wooden churches was erected in the first half of the 17th century, which was called the Church of St. Mykolas. Also, in 1630, the first Roman Catholic church was built at the expense of Yarema Vyshnevetsky, and in the same year the city of Romain became a significant fortified city on the border with the Moscow state. In 1632–1633 the events of the Moscowian-Polish war were unfolding. Boyar Mikhail Shein liberated Romain from the Poles and occupied the city with moscowian troops. 1644 – Yarema Vyshnevetsky captured the city. At the beginning of 1648, the city became the center of the Cossack Hundred Order, first of the Mirgorod Regiment, then the Lubensk Regiment. In 1652, the Romany fortress was transformed into a three-part fortress: a new building area-Prigorodok appeared, from the South to the North earth shafts with two wooden banks were erected. Romny became the center of the Cossack artillery attention in 1658. In 1663 the city was captured and destroyed by the polish detachment of Colonel Telezhinsky. In two years under the

regulations of Oleksiy Mihaylovich an artillery park with ammunition store was arranged in the northern part of the plateau behind the fortress and the Cossack cannon was installed in the city fortress. In 1700 the first wooden Ascension Church was founded with a bell tower by the muniment of Kyiv Metropolitan, Varlaam Yasinsky. During the northern war of 1700–1721 the Romen fortress suffered the greatest destruction

Therefore, by the end of the second stage, the Romen fortress gains new considerable changes in connection with the constant military events and the city acquires the status of a hundredth city. The first sacral wooden buildings have begun to be build. The midtown planning has a transitional stage: Castle – Suburbs – Posad.

The third stage – 18th – 19th centuries. (Fig. 3)The third stage of the formation of the midtown of Romny begins with the transformation of the defensive building from two-part to three-part that considerably influence the very formation of the decision of city planning. Thus, Suburb has been formed behind a defensive building in the East.

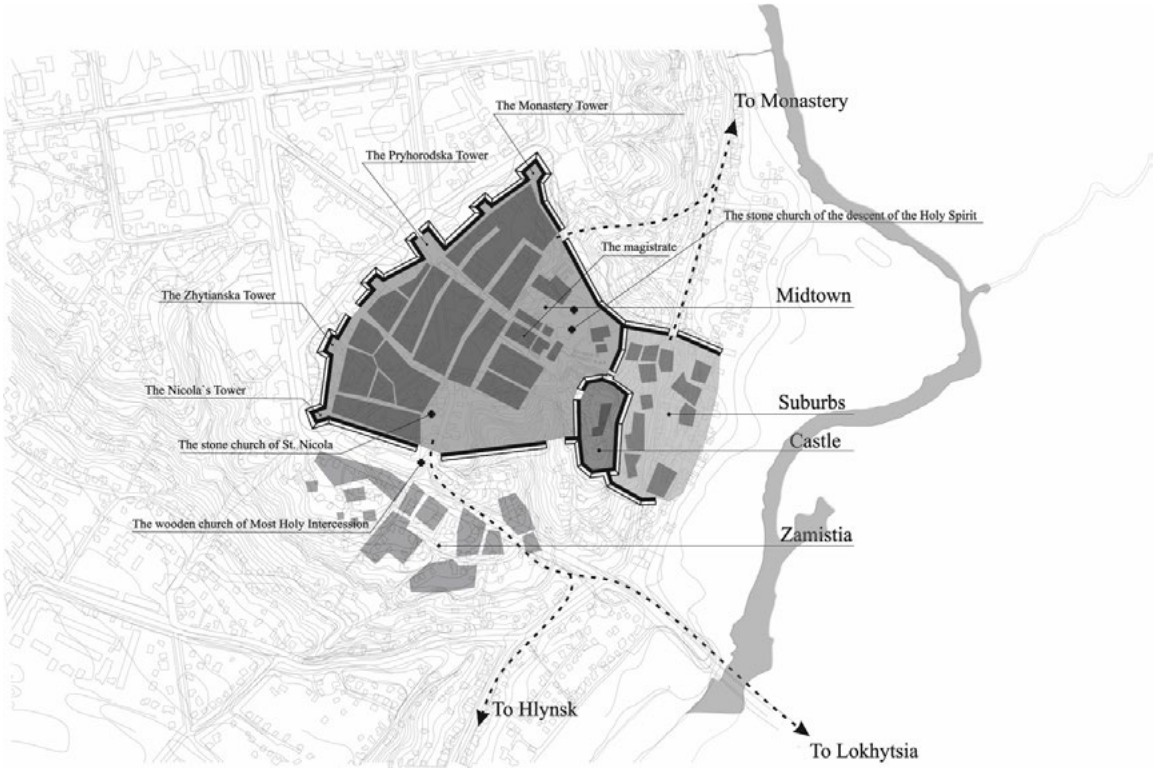

Fig. 3. Scheme of the second stage of architectural planning of the city of Romny in the 18th century.

In 1735, the laying of the wooden Holy Spirit Cathedral for 35 siazhen`s[1] from the Assumption Church, which was the first sacral structure in the city, began. During the years 1742–1746 Romanesque Cathedral of the Holy Spirit was built instead of the wooden one. The first coat of arms of the city was founded in 1743 under Prince Vyshnevetsky. In 1747, the existing St. Mykola wooden church was renovated, and in 1750 a new St. Mycholas church was built on the site of the wooden one. In 1749 the foundation of the wooden belfry of St. Basil's Cathedral and in 1751 the construction of the stone bell tower began. The same year, works on a warm church are being carried out instead of the old Church of the Assumption of the Blessed Virgin.

The second half of the 18th century the fortress is fortified in the form of an irregular hexagon with five pentagonal bastions and one quadrilateral. The fortress had four overhead towers with erected bridges: Prigorodsk, Monastyrsk, Mykolaiv and Zhityansk. The main entrances and exits were three, and the roads that went from them – 7. The first exit – Chernihiv, Nizhyn, Pryluck, Kyiv, Moscow. From it go three roads: the middle – to

1 **Siazh** (ancient Russian. Sum from the prime. * Sęgъ, * sężen, formed from * sęgati – "reach") – an ancient unit of measurement of distance, area and volume. The cubic fathom was also called *Shag. (1 sajzh = 7 English feet = 84 inches = 2,134 meters)*

Nizhyn and Chernihiv, to the right to Protsivka, to the left to Kyiv. The second entrance is Glinsky. He was separately through the Cemetery. The third – Lokhvitsky, through Sula [Kurylov 1898: p. 25–26]. Until 1758, there was still a wooden bridge at the Mykolaiv Gate. Since 1762, restoration work has been carried out on the stone church of the Descent of the Holy Spirit. During the years 1764–1770, the baptized, five-part, five-storeyed wooden Church of the Holy Intercession was built under the design of architect V. Krivoshiy, which would then be moved to Poltava and destroyed.

The first ruins of the fortress began at the end of the eighteenth century, when in 1770 the fortress towers were demolished. Excavations of the fortress shafts began in 1785, when Romny had already existed for three years as part of the Chernihiv governorship under the leadership of the Rossian Empire. In the same year, wooden bridges were repaired at the Mykolaiv and Zhitany gates across the moat to the Suburbs. Subsequently, this ditch was filled and a new street called the Big Romensk was laid. At the end of the century, in 1795, the foundation of the new stone church of the Ascension began, and ended in 1797. City planning looks like this: City and Suburbs, Monastery, Zamistya[2], Cemetery and Zapadinets under the river Sula.

But, the first half of the nineteenth century, all the fortification lines were demolished and new city streets were created that exist to this day. Thus, the basic structure of the modern Romain midtown was finally formed during the third phase of architectural and planning development.

Fig. 4. The Romny 19th. Photo

Conclusions

On the basis of the collected historical literature materials and the previous researches, the basic backgrounds and reasons for formation of the urban structure of the Romny midtown have been studied in detail and the three main stages of architectural and urban development during the 12th – 19th centuries have been identified.

2 **Zamístya** – Záhorodje, suburb. A typical name for the cities of Eastern Ukraine in the meaning of the Suburbs.

The main reasons for formation of the fortification city were military events, political interventions and the influences of local culture formation.

Comparing the available cartographic data of the 17th-19th centuries with modern topogeodetic foundations we can distinguish the following transformations of urban space of the city center, starting from the XII century for each of the proposed stages of architectural and planning development of Romny:

- The structure of the midtown of the first stage: City (Castle) – Suburbs – Posad. Such a structure is characteristic of cities of Ukrainian culture during the times of Kyivan Rus' of the 12th-13th centuries.
- The structure of the midtown of the second stage: City – Suburbs – Posad is preserved, but, unlike the first stage, the construction of a wooden fortress with rectangular towers begins in a plan characteristic of the Cossack-era culture of the 17th century.
- After the military events, the structure of the third stage of the the midtown formation changes significantly. The City (Citadel) is preserved and new parts of the City are being formed: Zapadinets, Cemeteries and Monastery. At the beginning of 18th century, the fortress is being transformed from a quandrangular to a pentagonal and a stone defensive building is being erected instead of a wooden one. In the first half of the 19th century all the defensive fortification lines were demolished and the main city' streets were formed that are preserved to this day.

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Features of the fortifications of the Bilsk settlement of the 7th and 4th centuries BC

Kostiantyn Trehubov
https://orcid.org/0000-0001-8231-9880
tregubov@i.ua

Poltava national technical Yuri Kondratyuk University

Oksana Trehubova
oksanatrehubova@gmail.com
https://orcid.org/0000-0002-9523-375X

Stanislav Zosim
plan_raionu@ukr.net
https://orcid.org/0000-0002-6392-9867

Planning and Building of Territories of the Poltava District and Implementing the Architectural Control

Abstract: The article deals with the defensive system of the Bilsk settlement of the 7th and 4th centuries BC. The peculiarities of the formation and development of the fortifications of the Western, Eastern, Kuzemyn and the Great Bilsk hillforts are investigated.

Keywords: fortifications, the Bilsk hillfort, settlement, rampart, moat, line of defense, construction period.

Formulation of the problem

Cultural heritage is a way of gaining knowledge and values. It is important to preserve cultural resources to ensure sustainability of a culture and natural environment.

The Bilsk settlement is the historical and cultural preserve with the historical heritage that needs to be properly used as a sender of values of national and international significance and the culture in general.

Today, the remains of the Bilsk hillfort are in a state of archaeological research. Complex system of the defensive fortifications has not been yet the subject of a research as an architectural object, although the problem of synergistic, architectural, archaeological, historical and historical researches is evident.

Analysis of recent researches

The Bilsk settlement is situated on the territory of the modern Poltava region in Ukraine between the Vorskla and Sukha Grun rivers. It is a unique landmark of the Scythian age of the early Iron Age. The length of the remains of the defensive structures is about 34 km.

The issue of studying Scythian fortification structures attracted the attention of archaeologists, historians and military. The Bilsk hillfort existed between the 7th and 3rd century BC and was a major political, trade, artisan and cultural center which is identified with the city of Gelon mentioned by Herodotus.

Herodotus mentions the city of Scythia describing the "country of Budins" that "Budins are a large and numerous tribe, all of them very light-eyed and red, in their region a wooden city is built, the name of this city is Gelon. The length of the wall on each side is 30 stages, it is high and they have wooden houses and temples, and there are temples of Hellenistic gods, decorated in Hellenic wooden statues, altars and nases. Are the Hellenes who left the harbor and settled at the Budins, and they speak the language in part Scythian, partly Hellenic" (Herodotus, 440 BC). The text of Herodotus about Budins and Gelons is not clear and based on various sources according to B.A. Shramko [Shramko 1987: p.18–19]. The name of "Budins" covers not only one tribe but also a large alliance of tribes living in a vast territory. This explains why Budins were confused with Gelons (a group of Iranian-speaking tribes in the south of Eastern Europe).

In the middle of the 17th century the Bilsk settlement was mapped by the French cartographer and military engineer G. de Boplan (1648).

The first solid data on the defensive structures of the Bilsk settlement was provided by the Ukrainian ethnographer A.F. Shafonsky in 1786 [Shafonsky 1951: p. 653–656]. He made measurements of the fortified structures and found the tips of arrows and spears on the territory of the Western fortification.

Later in the 18th century archaeologist O. Bobrinsky (1897, p. 125) conducted special archaeological exploration in the territory of the settlement. The scientist provided a detailed description of the appearance of the Western fortification and published a schematic plan of the structures where squares were marked. O. Bobrinsky mentions the ramparts of the Big Bilsk hillfort. But he refers only the Western hillfort as the Bilsk fortification.

V. Lyaskoronsky [Lyaskoronsky 1907: p. 158–198] published the schematic plans of the settlement in 1907. However, he mistakenly identified the ramparts of the Big Bilsk settlement with a part of the Zmiyiv ramparts (11th – 12th centuries).

Later archaeologist V. Gorodtsov carried out the first archaeological excavations on the site in 1906. V. Gorodtsov found that the Bilsk hillfort is a complex rampart which consists of three fortifications united by the ramparts of the Big Bilsk hillfort.

The greatest contribution to the study of the settlement belongs to an outstanding scientist B.A. Shramko. Thousands of square meters of the unique settlement have been excavated under the guidance of B.A. Shramko for almost 40 years. Many domestic, religious and burial objects of the ancient city were discovered and studied. The stages of the settlement development were traced during these explorations. B.A. Shramko came to the conclusion that the Bilsk fortified settlement is the remnants of the city of Gelon. Gelon is the capital of the association of the tribes of the Vorskla of the Scythian age. This statement was defended by the scientist throughout his life [Shramko 1987].

The explorations were started by an expedition under the direction of I.B. Shramko in 1987.

In 1992–2006 a joint Ukrainian-German expedition headed by V. Murzin, E.V. Chernenko, S.V. Mahortikh and R. Roll had been exploring the site. Expedition participants managed to study a considerable number of burial mounds within the district of the complex as well as areas in the tracts of the Lisovyi Kut and Tsarina Mohyla.

The purpose of the article

Bilsk settlement is undoubtedly of historical, scientific, cultural and tourist value. However, architectural studies of the settlement are practically absent despite of the great interest in archeological and historical studies of the Bilsk hillfort. But from the architectural point of view, the remains of the fortifications are of interest. There is a need for museumification and conservation of the explored sites of the settlement and a search for opportunities for universal accessibility to the site. It indicates the relevance of the topic and determines the direction of researches in scientific and practical aspects.

Main material

The Bilsk hillfort is located in the center of the East European forest steppe in the Kotelev district of the Poltava region in Ukraine. The old rampart and the local burial mounds are clearly visible today.

The Bilsk settlement is located on a high plateau between the Vorskla River and Sukha Grun rivers (Fig.1). The settlement emerged in the second half of the 8th to the beginning of the 7th century BC [Shramko, Buynov 2012]. A large artisanal, commercial, administrative and also an important strategic center of the forest-steppe Scythia [Kulatova, Shramko 2012: p. 9–20] emerged at the intersection of several important land and river trade routes in Bilsk settlement [Shramko 1987: p. 121–126].

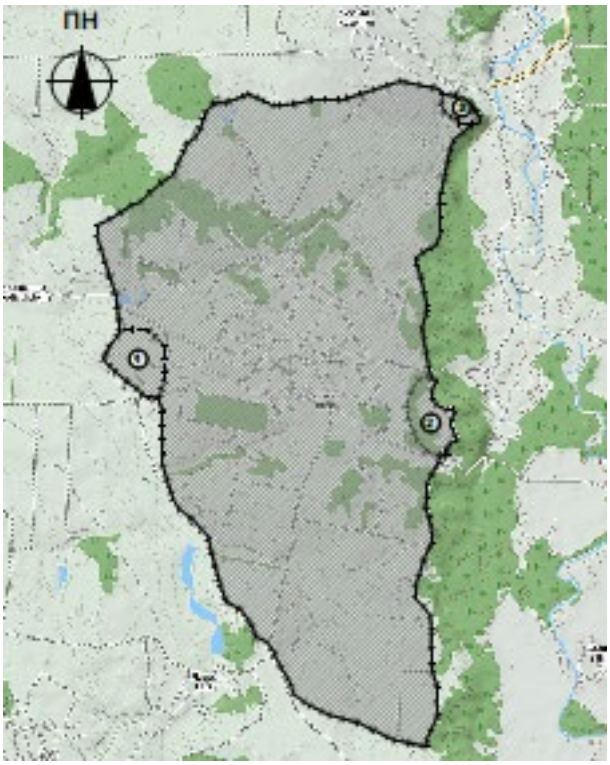

Fig. 1. Location of the Bilsk settlement

V.M. Hrytsiuk [Hrytsiuk 2007: p. 169–174] believed that a need for the construction of the fortification structures did not arise immediately. About for two centuries locals did not feel the need to surround a part of the developed territory with ramparts. It was an early period of the settlement development.

Military danger was caused by nomadic raids. The main purpose of the last was a quick raid to seize property and captives. For settled farmers it was important to prevent sudden attacks and to enable the population to hide preventing the enemy from penetrating into the territory [Shramko, 1987, p. 24–25].

The appearance of the settlements began to change in the middle of the third quarter of the 6th century BC. During this period a new settlement (Eastern) was appeared in four and a half kilometers east on the edge of the high plateau of the right bank of the Vorskla River. The most strategically important territories in the west and east of the plateau were protected with separate earth ramparts and moats with constructed wooden walls on them. Western and eastern fortifications had been developing parallelly with one another from the mid-6th to mid-5th century [Shramko 2010].

V.M. Hrytsiuk [Hrytsiuk 2007: p. 169–174] considered that a choice for a location of the Bilsk settlement was extremely successful in strategic and tactical terms. Bilsk's ramparts allow you to scan all approaches to the territory. The eastern side of the Bilsk fortifications is built on the high peaks of the Vorskla River at an altitude of about 100 m above the river level. Here the ramparts were driven by a lift of about 600–700 m at an angle of 15–20 degrees. The western and northern sides are planned with successful use of natural obstacles. Numerous old lakes, waterlogged plots as well as floodplain forests served as great obstacles.

The plan of the Bilsk hillfort has complex configuration reminiscent of a quadrangle. The fortifications of the Bilsk settlement are a complex that consists of the Eastern, Western and Kuzemyn fortifications united by the ramparts of the Great Bilsk settlement.

V.M. Hrytsiuk believed that the Great Bilsk settlement was designed for the circular defense. The Eastern and Western fortifications were also build for this purpose. The Kuzemyn fortification (length of the ramparts is 898 m) is located on a high and well protected plateau occupying a steep hill descending to the very coast of the Vorskla River. The fortification was a suburb area. It was intended to serve the needs of a river port [Hrytsiuk 2007: p. 169–174].

In general, the ancient settlements of the Scythian time had a rather complicated system of fortifications. Wooden structures transformed them into real fortresses.

Eastern fortification.

The eastern fortification of the Bilsk settlement has an advantageous natural location on the edge of a coastal plateau. It has good viewing position of floodplains. It made it possible to see signal signs or an approaching enemy from afar. The length of the defensive line is 3870 m.

The current rampart of the Eastern fortification consists of the remains of the dugout structures of several construction periods: two main and one remedial. A wall was constructed on an unoccupied site. A non-wide groove was dug along the outer edge of the settlement with a depth of 120 cm. The groove had a width of 20 cm in the lower part and 40–45 cm in the upper part. Lower parts of vertical logs with a diameter of 15–25 cm were fixed in it. The logs were the basis for the outer wooden wall of the fortification structure (Fig. 2, 3, 4).

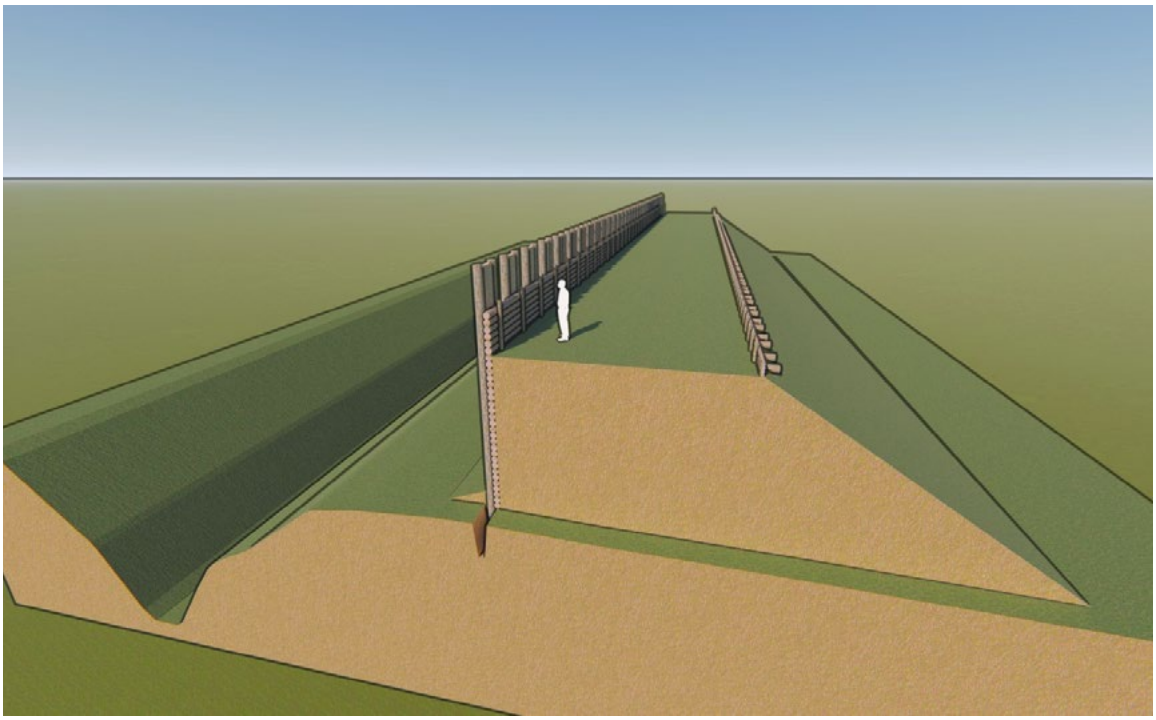

Fig. 2. Reconstruction of the Eastern fortification of Bielsk settlement

Vertical logs were not a solid wall. They were placed with intervals up to 1 m. These logs were installed in different building periods. The wall made of horizontal logs and an earth-clad rampart was leaning on the inside of the vertically-mounted logs.

Wooden screws were fixed up in the upper part of the embankment to provide the stiffness of the structure. That was made to fixate the upper ends of the vertical logs. The same ties fixed columns that were attached on the inside of the rampart. The width of the rampart was 7.2 m. Buildings of the first construction period were destroyed as a result of fire.

Fig. 3. Reconstruction of the Eastern fortification of Bielsk settlement

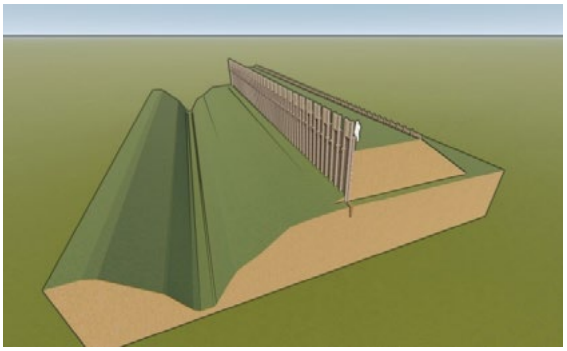

Fig. 4. Reconstruction of the Eastern fortification of Bielsk settlement

The original wall was restored with an additional embankment after the remedial period of construction. As a result, the width of the embankment's base reached 15.4 m.

The main construction period is characterized by the strengthening of defensive structures while maintaining the overall design scheme. The rampart's height increased to 4.8 m from the base. The embankment's width reached 18.2 m. According to the assumption of Shramko [Shramko 1987: pp. 25–28], the wall of the rampart reached a height of at least 7 m. Soil for filling up the rampart was taken from the outer part of the settlement.

The moat that was dug in front of the fortification wall had a trapezoidal shape with a width of 5.4 m in the upper part and 1.1 m at the bottom. The flat bottom facilitated movements of forces invisible for enemy.

There were three entrances to the Eastern fortification: the northern, western and southern.

The Eastern fortification is located on the edge of a plateau covering the area of three protruding capes which are bounded by very steep hill of the right bank of the Vorskla River. The hill height is about 50 m from the base. But the defensive structure could still be taken over by the enemy. Therefore, the rampart and the moat of the Eastern fortification have circular shape. Thus, they protect the settlement not only from the most vulnerable sides but also from the river [Shramko 1973: p. 84].

The line of defense was created taking into account the shape of the relief, the slope of its hills, the depths of ravines and the possible access to the sources of water.

Western fortification

The Western fortification of the Bilsk hillfort is located on the edge of the coastal plateau of the left bank of the Sukha Grun River. It appeared during the pre-Scythian period from the late 8th to the early 7th century BC.

The 3270 m long rampart covers the whole settlement. It is a circular defensive structure.

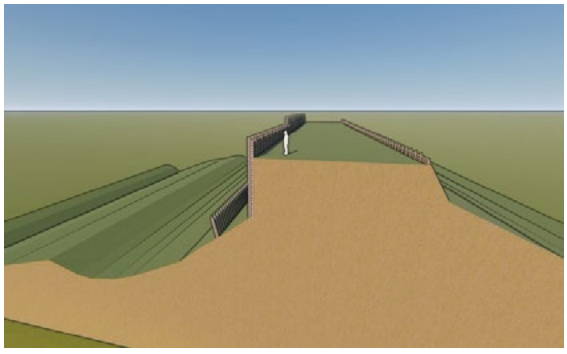

Fig. 5. Reconstruction of the Western fortification of Bielsk settlement

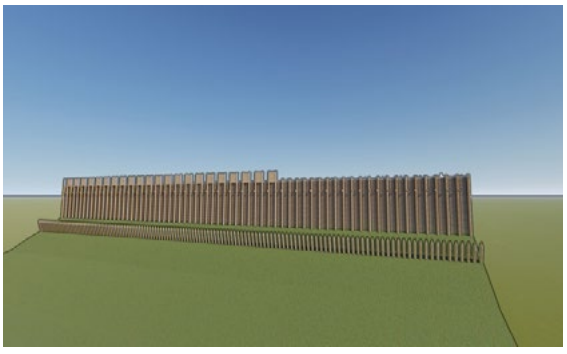

Fig. 6. Reconstruction of the Western fortification of Bielsk settlement

The defensive structures of the Western fortification are quite different compared with the Eastern fortification. Firstly, the ramparts are higher, and secondly, there are large pits and squares along the perimeter. The exits of the last are directed inside the settlement. There are narrow low embankments in front of the most of these structures (Fig. 5, 6).

The dimensions of the rampart of the Western fortification vary from place to place. Its current height is from 5 to 8 m. The width of the base is from 22 to 32 m. The depth of the moat was 6 m in the first construction period. The width of the moat in the upper part is 24 m and 5 m at the bottom. The bottom is flat. Obviously the great width and depth of the moat did not allow the enemy to quickly fill it with earth or brushwood to get closer to the wall during a siege.

The Western fortification was built in several stages. A wooden wall had been constructed before the construction of the main fortification. It was temporarily protecting the population. Pillars with a diameter of 20–30 cm were placed at the bottom of a groove with an interval of 15–18 cm at a depth of 95 cm. The width of the groove was 65 cm and its depth was 32 cm.

The rampart of the first construction period was built at a distance of 2.3–2.5 m from the protective wooden wall. The height of the rampart is 1.4 m, the width of the base is about 7 m. The upper rampart area was horizontal. There was a gentle descent on the inner side. The moat has a trapezoidal shape with a flat bottom and a depth of about 1.7 m.

In the second building period the fortification was restored and reinforced taking into account possible attacks and burning of the wall. The height reached 3.6 m with a width of the base 11.6 m. The rampart covered the groove and the remains of the original wall of the wooden fortification.

The top area of the rampart was flat. It ended up with a 1.2 m high ledge from the inside. The moat of the trapezoidal form had a depth of 1.9 m from the base of the rampart. It was located higher than the rampart of the first construction period. A row of fortification pillars was placed at the bottom of a new moat at a depth of 50 cm. The logs' diameter was about 12 cm.

The first and second construction periods are dated to the 7th century BC.

The third construction period dated to the first half of the 6th century BC. The rampart was increased to 4.4 m at a width of the base of 18 m. The embankment consisted of layers of clay and black earth. The moat was partially cut partially covered with new layers. The new moat of a trapezoidal shape had a depth of 2.7 m with a width of about 7.5 m in the upper part.

The fourth construction period dated to the second half of the 6th century BC. The current height of the rampart is 4.8 m. Its upper part has strongly shifted and hence its total height is unknown during the fourth construction period. The previous moat was used as the main moat at the defensive wall. In addition, another moat in the shape of triangle was dug at a distance of 6 m from another with a depth of 1.8 m and a width at the upper part of about 9 m [Shramko 1987: p. 28–31].

Kuzemyn fortification

The Kuzemyn fortification is significantly different from the East and the West fortifications. It has a small size of 15.4 hectares. It is located on a hill and has an exit facing the river. The total length of the ramparts is 898 m.

Defensive structures of the fortifications are attached to the already existing rampart of the Great Bilsk settlement. They descend down to the river where a pier probably was located. By the assumption of B.A. Shramko [Shramko 1987: p.31–32] the fortifications of the Kuzemyn settlement were built in the late 5th century BC. The fortifications served as a kind of cover of the pier and trading warehouses on the banks of the Vorskla River.

Fortifications of the Great Bilsk settlement

The defensive system of the Great Bilsk settlement was completed after the construction of the Western and the Eastern fortifications. The length of the Great Bilsk's ramparts is 25 995 m not counting the ramparts of separate fortifications.

The defensive structures of the Great Bilsk settlement were constructed in three stages and in some places in four stages.

The rampart had a height of 2.4 m with a base width of about 8.5 m and consisted of earth and clay during the first construction period. The rampart was strengthened with a wooden wall. The rampart was built in the early 7th century BC by the assumption of B.A. Shramko [Shramko 1987: p. 32–36]. From the north-western side of the Great Bilsk settlement the rampart overlapped the mouth of a large ravine which had a creek at the bottom. Thus, a dam was formed. A small pond was behind the dam. This pond could be used as a supply of water in a case of a siege.

In the second construction period the height of the rampart reached 4.3 m and the width of the base was about 16 m. The wooden wall of the first construction period was repaired and, in addition, a new wall was erected above.

In the third construction period the rampart's height was 5.4 m with a width of the base of about 23 m. The rampart's top was shifted eastward. The wooden wall was burnt. A new one was built instead of it.

In the fourth construction period the size of the rampart was significantly increased. But the exact size is unknown because the defensive structures were destroyed and ramparts were deformed after the cessation of the hillfort.

The moat that had a width of about 6.5 m in the upper part was dipped from the bottom of the rampart by 9.5 m. The bottom was flat with a width of at least 2.5 m. Gradually it was filled with soil. It was cleaned several times retaining its former profile but not reaching the initial depth.

The territory of the Great Bilsk settlement was inhabited but not so densely as the Western and the Eastern fortifications [Shramko 1987: p. 32–36].

Favorable geographical conditions and advantageous urban location at the intersection of important land and waterways of that time contributed to the formation and rapid development of the Bilsk settlement. It was probably an important point of transit trade.

The Bilsk hillfort was a strategically important center among the forest-steppe settlements of the Scythian times. Therefore a well thought out system of protective structures was needed. The prevention of sudden assaults of nomads was the main requirement for such structures. A successful selection of the location of the settlement is evidenced by further development of the settlement which still exists within the fortification of the Great Bilsk settlement.

Conclusion.

Architectural, functional, planning features of the construction of the Bilsk hillfort, its three-dimensional and engineering solutions as well as the preconditions of its formation have been established. Further researches need rational museumification of the remains of the fortified structures as well as a searh for possible forms of representation of a cultural heritage as a mediator of cultural values.

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Revisited the localization of fortifications of the 18th century on the surroundings of village of Braha in Khmelnytsky region

Oleksandr Harlan
https://orcid.org/0000-0003-1473-6417
harlan.aleksandr2018@gmail.com

Department of Design and Reconstruction of the Architectural Environment,
Prydniprovs'ka State Academy of Civil Engineering and Architecture

Abstract: the results of the survey of the territories of the village Braga in the Khmelnytsky region, which is in close proximity to Khotyn Fortress, are highlighted in this article. A general description of the sources that has thrown a great deal of light on the fortifications of the left bank of the Dnister River opposite the Khotyn Fortress according to the modern landscape, is presented.

Keywords: monument, fortification, village of Braga, Khotyn fortress, Dnister River

Relevance of research

Today there is a lack of architectural and urban studies in the context of studying the history of the unique monument – the Khotyn Fortress. Only a few published works can be cited that cover issues of origin, existence of fortifications and it's preservation.

To take into comprehensive account of the specific conservation needs of the Khotyn Fortress, it was necessary to carry out appropriate research works (bibliographic, archival, cartographic, iconographic), including on-site surveys. During 2014–2015, the research works had been carried out by the Research Institute of Conservation Research in the context of the implementation of the Plan for the organization of the territory of the State.

During the elaboration of historical sources from the history of the city of Khotyn and the Khotyn Fortress it was put a spotlight on a great number of iconographic materials, concerning the recording of the fortifications of the New Fortress of the 18th-19th centuries. They are different in content, amount of information and execution techniques. Analyzing with them the degree of development of the fortification structure of Khotyn fortification, it was concluded that the defining element of the fortress complex construction was the Castle (Citadel), where was built a number of objects of various purpose. In addition, the natural factors, administrative boundaries and the diverse exploration of the individual components of the fortification complex are proving the existence of gaps in the understanding of the multiple areas of strategic thought about the Khotyn Fortification. This also proves the relevance of the study of the historical events and environment of the Khotyn Fortress.

The purpose of the survey

The purpose of current exploration is to cover the results of full-scale studies of the outskirts of the Khotyn Fortress and to review little-known source maps from the history of it, that display the information about

fortification objects located on the bank opposite the river Dnister in the 18th century, on the outskirts of the modern village of Braga.

Outline of the main content of the study

From historical and cartographic sources it is well known about the erection of powerful fortifications of the New Fortress around Khotyn Castle and formation of a new fortification system in the beginning of 18th century. However, very little information about the fortifications is found around the New Fortress. Only a few sources bring to us some information about the idea of a grandiose fortification complex and the Khotyn Fortress, that was being it's part.

In the 18th century the art of fortification was continuing to evolve following the traditions of earlier eras. The sources pointing to the fortifications around the New Khotyn Fortress in the second part of 18th c. on the right bank of the Dnister, when Khotyn had been go into the area of Rossian-Turkish warfare, quite well known to researchers of military campaigns of that time. Among them it should be remembered the "Battle Plan near Khotyn on April 19, 1769" published by Captain A. Petrov in 1866 [Petrov 1866], by Captain V. Sudravsky in 1906 [Sudravsky 1906: p. 140], by Colonel Y. Bayev in 1909 [Bayev 1909]. But the sources that would provide information about the fortifications on the left (opposite Khotyn Fortress) bank of the Dnister, are still very little known.

Our attention was also drawn to the events that had been taking place after August 1, 1769, when the Rossian army left the camp near Khotyn and crossed to the left bank. Actually, this place is localized to the present-day territory of the village of Braga, Kamianets-Podilskyi district of Khmelnytsky region and its environs.

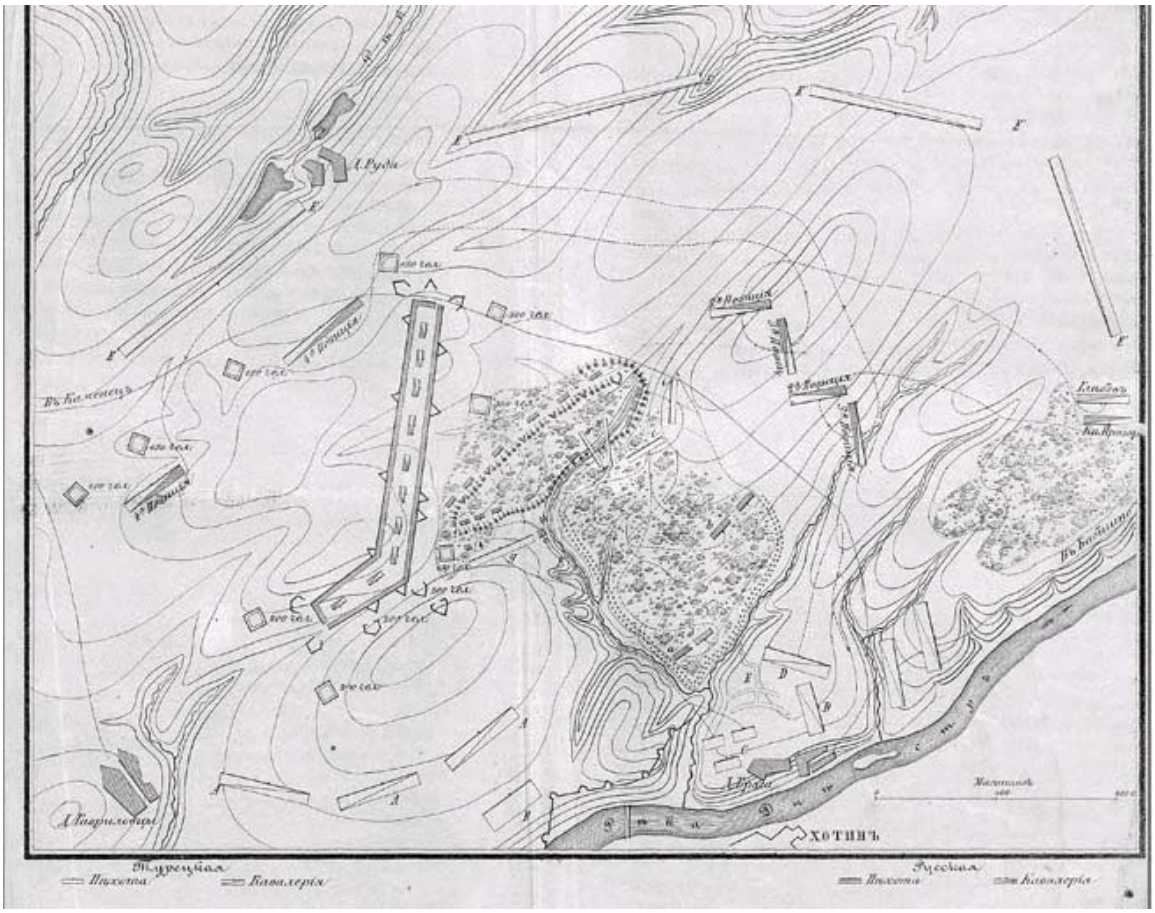

Fig. 1. Plan of the Battle of Khotyn on August 29, 1769" printed in 1866 by Captain A. Petrov

According to historical sources, after the retreat of the Rossian army on the left bank by the Turks, separate units were sent to prepare the crossing means. On August 20, the Turks launched a bridge across the Dnister and sent a reinforce of 4,000 soldiers to the left bank and built a powerful "Tete-de-Pont" [Petrov 1866: p. 228, 236, 237; Sudravsky 1906: p. 144]. To cover the bridge was built a redoubt, it housed 12 thousand soldiers. There are also reports that on August 22, Rossian troops detained a retransmission on the left bank.

The location of the fortifications' complex discussed above is given in the other two maps published in 1866 referred to as "Plan of battle near Khotynym August 29, 1769" (Fig. 1) [Petrov 1866: between p. 238 and 239] and "Attack on the enemy retransmission on September 6, 1769" (Fig. 2) [Petrov 1866: between p. 250 and 251], the last was also published in 1906 under the same name (Fig. 3) [Sudravsky 1906, p. 145]. It is clear that the earthen retransmission, that compared in size to the New Khotyn Fortress, was located on high strategic landmarks of a large hill formed at the interflowing of the Dnister River valley and the ancient draws (small flat-bottom valleys).

The base of military concentration around the perimeter was surrounded by a defensive man-made embankment with bastions of different configuration. A number of redoubts were scattered around it. An examination of the area where that fortification complex was graphically localized, did not achieve the desired results. The visible fortifications' remains were not found. Most of the survey plot study is a is a field plowed every year. Perhaps aerial survey of these sites will allow to fix the contours of the former fortifications.

The fortifications of the left-bank part of the Dnister in the outskirts of the Khotyn Fortress had existed before the events of 1769, as the cartographic sources of the 1st part of 18th century said and this makes total sense taking into account the strategic importance of the Khotyn Fortress. Cartography of the 1st part of 19th century also indicates the existence of redoubt on the left bank. However, such a range and scale as in 1769, the fortification works were never acquired again.

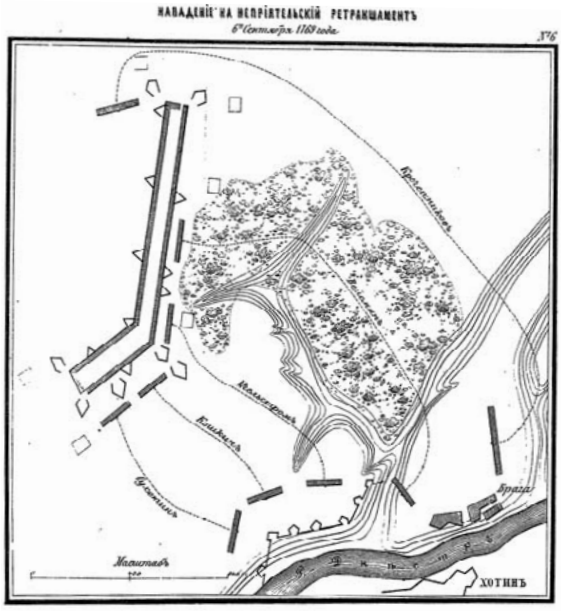

Fig. 2. Plan "Attack on the enemy retransmission on September 6, 1769" was published in 1866 by Captain A. Petrov

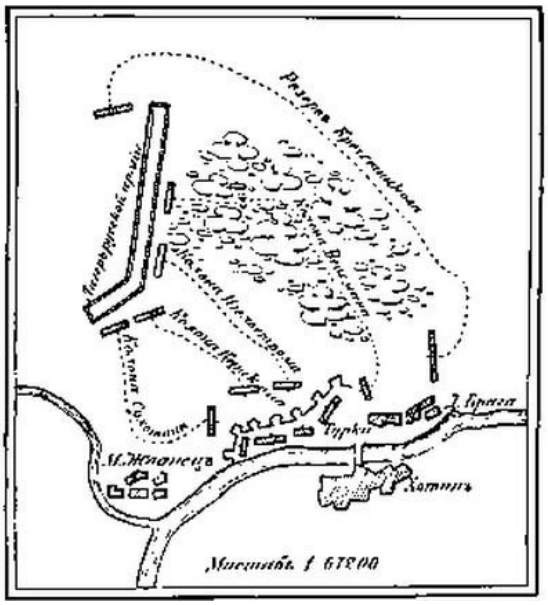

Fig. 3. The Plan "Attack On The Enemy Retransmission On September 6, 1769" was published in 1906 by Captain V. Sudravsky

Returning to the 2014 conservation studies, it would be desirable to focus on the left bank of the Dnister River, since Khotyn cannot be considered in isolation, only within its administrative boundaries, because in landscape, historical and urban boundaries, the city is one with the whole natural system, has been developed since ancient times along the both banks of the Dnister River.

The territory of the village of Braga, Kamianets-Podilskyi in the Khmelnytsky region is also part of the Dnister water area. The terrain of the village has a more gentle slope than the opposite bank and an extensive system

of draws and ravines. The territory has not been built until recently, but over the past 10 years a suburban settlement has appeared here. The planning of the newly built arrays is completely determined by the terrain and the main old roads that run along the river bed [Plan for the organization..., 2014: p. 75]. Strategically, there is also no regulation mechanism on the left bank, which has led to some loss of the traditional monument environment. The survey of the territory of the settlement and the adjacent territories confirmed only the existence of the redoubt remains (Fig. 4), while it was not possible to find other components of the majestic fortification complex on the left bank of the Dnister that mentioned above.

Using the mapping materials discussed above and computer technology, we managed to scale and collate historical sources and a contemporary satellite image of the village and its surroundings. The configuration of the retransmission and the nine redoubts around it are clearly visible (light color) in (Fig. 5), as well as the configuration of the old Dnister bed (disappeared after the dam had been built), where the fortifications now underwater are marked on the left bank.

The development of archival sources, aerial photography based on of the mentioned above scheme will allow to investigate archaeologically the sites of localization of the former fortifications, to refine the tracing of numerous fortifications of different times, that will also allow to have a new look at the specifics of the ancient fortifications of the Khotyn complex and understand the basic principles of its arrangement and landscape. At this stage, it is necessary to collect and accumulate all revealed information about the historical and cultural heritage of the settlement, about its historical sites (Fig. 6, 7), which will help to reproduce a more complete picture of the historical development of Braga village.

Conclusions

After the survey, it becomes clear that the complex of Khotyn Fortress is closely related to the environment. From the New Fortress, located below the main coastal terrace, opens a wide panorama of the Dnister and the vast expanses of the left bank. From the opposite bank, in turn, the panoramic views of the Khotyn fortress and the environment are greeted. These features of the landscape have been used in ancient times to arrange the fortifications.

As a whole, a very necessary task is a thorough study of the outlined areas, a study of the history of the settlement and some of the identified historical sites in the area and outskirts of the village of Braga. It is very important and necessary to preserve as much as possible the natural character of the Dnister floodplain and the floodplain terrace on both banks of the Dnister River in the vicinity of the Khotyn Fortress, since this territory is the most informative in the context of the visual perception of both banks of the Dnister River.

Fig. 4. Remnants of Redoubt in the Area of Braga On the North Side as of 2014. Photo by the author

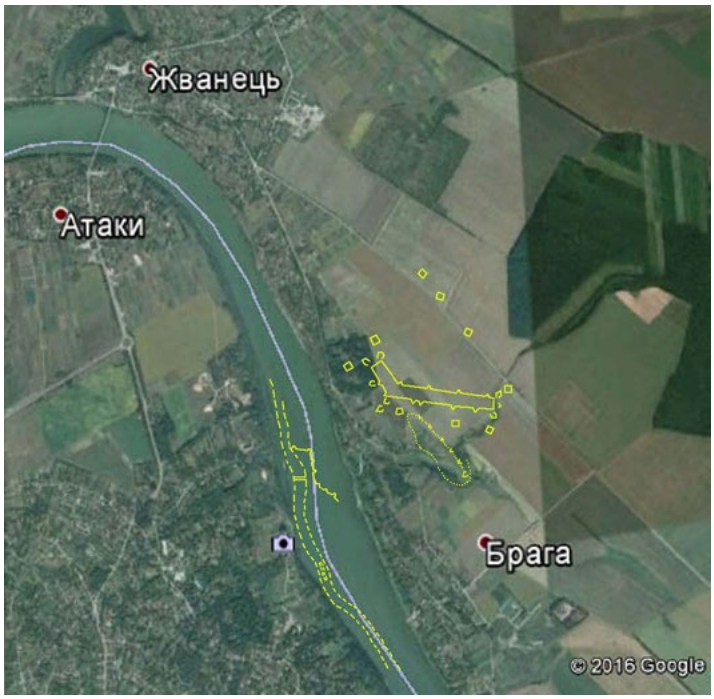

Fig. 5. The Layout of the Fortifications of the 18th century (1769) on the Outskirts of the Village. Made in 2016 by the author on the modern Google satellite photo

Fig. 6. Zebrowski's chapel and crypt in the Catholic cemetery. 2014 Google Photos

Fig. 7. Christian Temple of the 18th cent. on the territory of the village Grout. 2014. Photo by the author

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The use of 3D scanning for the inventory of historical buildings on the example of the palace in Snopków

Karol Krupa
https://orcid.org/0000-0002-7313-4080
k.krupa@pollub.pl

Piotr Gleń
https://orcid.org/0000-0002-2975-408X
p.glen@pollub.pl

Faculty of Civil Engineering and Architecture, Lublin University of Technology

Abstract: This paper discusses the use of modern technology of inventory measurements based on the inventory of the historical palace and park complex in Snopków. The inventory of the site was made using laser scanning measurements. The article draws attention to the specificity of the inventory of historical sites, their complexity and diversity of architectural details that are important for proper revitalisation and further preservation works.

Keywords: palace and park complex, Snopków, 3D scanning, inventory, point cloud, monument

Introduction

Architectural inventory concerning the protection of monuments requires mapping of the appearance of a historical structure in the most accurate way, both in the graphic and text form [Filipowski 2018]. The site covered by this study is located in the palace and park complex in Snopków near Lublin. The palace was built in the 1880s as a residential manor. It was entered into the register of monuments of the Lublin Province on 16 October 1971 [Decision 1971]. Content of the entry:

The palace and park complex in Snopków, the district of Lublin, within the borders marked on the map. The complex consists of: a brick one-storey palace, probably built before the 19th century, rebuilt at the turn of the 19th and 20th centuries with its full architectural decoration originating from the period of reconstruction, as well as a landscape park with a regular, readable part of the old baroque layout, connecting in terms of view and composition with the Dys river flowing on its edge, which originally was spreading into picturesque ponds. Justification for the entry: The palace and park complex in Snopków is an example of the representative architectural complexes dating back to the Baroque epoch; the park with a preserved tree stand of more than 300 years is of particular value. (Fig. 1.)

The works carried out at the above-mentioned facility included a detailed inventory of the palace building based on a point cloud obtained from measurements with a Leica C10 laser scanner. The inventory carried out in this technology consists of detailed measurement information, architectural detail, wall curvature, roof geometry, ceiling deflection and deformation of the wooden roof truss over the years. The model of the site created with specialised software may be useful in a number of later works planned by the conservator of the site [Kulig 2015].

Fig. 1. The annex to the decision on entry into the register of monuments of the Lublin Voivodeship No. KL-IV_7/3/71 of 16 October, 1971. Source: *Composition and Plan View of the garden in the Palace and Park Complex in Snopków.*

The characteristics of the site

The palace building has a basement under a part of its surface built on the plan of the letter "U" with a multi-sloped roof. The plan of the building is composed of segmented rectangles, with the two-storey central part with an unusable attic and one-storey side wings with usable attics. Outermost east two-storey wing has lowered ground floor level. The second floor of the east wing is not connected with the palace floor. On the south side, there is a semi-circular terrace with three-run concurrent stairs. The main body of the palace on the east side is crowned with a clock tower with a tented roof. (Fig. 2.)

Fig. 2. South façade. (author's own photograph)

The palace is situated on the main axis of the complex, about 80 m away from the border with a farmyard. It is established on the projection close to an elongated rectangle on the east-west axis. The front of the building faces north. On the south side, on the axis of the palace there is a large semi-circular terrace with three-way symmetrical stairs and a semi-circular landing in the main axis (Fig. 3.).

Fig. 3. Top view (author's own photograph)

Originally on a symmetrical plan: a body on a short rectangular plan, side wings on an L plan, a 3-storey tower on a square plan from the east and a more recent addition. The building is detached, brick, plastered and partially cellared. The façades show rustication at the level of the ground floor, cornices above each floor, topped with roof light flashing.

Above the main entrance, on the north side, there is a decorated steel roof and over it, the small balcony with a steel ornamented railing. Correspondingly, on the south side, there is the similar balcony over the terrace. From the south – on the side of the garden - above the entrances to the part with the basement, there are symmetrically decorated roofs with steel ornaments.

Multi-pitched roof is covered with steel sheet. Gutters and downpipes are visible on the façades. Rainwater from the roof slope is drained through gutters to drainage pipes hidden in the ground under the drainage band. Window carpentry is made of wood.

Inside the building, there are two staircases that connect the ground floor with the first floor, one staircase that provides access to the basement part and one staircase that leads to the first floor of the annex. The main staircase located at the main entrance is wooden with ornamentations on the railings and the well between the runs of the stairs. The second staircase is made of brick with a wooden railing and is located at the clock tower in the east part of the building. Staircase to the basement part is made of brick without visible decoration.

Rooms arranged in a row with aligned doors (in a system of enfilade) with a corridor on the axis of the west-east plan. There is a sewerage system in the building. Sanitary rooms are renovated and adapted to the current function of the building. Toilets are located on the ground floor level in the east wing (in the annex) and in the west wing of the building. Walls made of red brick are the basic structural element of the building. Window and door openings inside the building are decorated with cornices. In some rooms there are ornaments in the plaster by the upper lighting and in the wall and ceiling joints.

The use of a point cloud during inventory

One of the most important works performed during the inventory is measurements that need to be as accurate as possible. It is essential especially in the case of activities involving historical buildings. The inventory made in this way is both a detailed archival material as well as a contribution to subsequent activities aimed at the preservation of historical value of the building [Boroń 2007].

Measurements performed with the use of modern laser scanning technology can reduce the risk of measurement error to a minimum. The data obtained with the device in the form of a point cloud (Fig. 4.) are used to create very precise inventory note. Thanks to this technology, it is possible to reproduce the existing building geometry taking into account the accurate architectural detail (Fig. 5.) in a three-dimensional space. Additionally,

during the façade measurements, the measuring device performs a scan of the surrounding environment, such as an adjacent tree stand or area diversity. As a result, it gives current information on the development of the neighbouring area. The technology has been applied in the course of years and is becoming more and more widely used, e.g. for accurate measurement of afforestation [Liang 2016].

Fig. 4. Obtained point cloud with the Leica C10 (elaborated by the author)

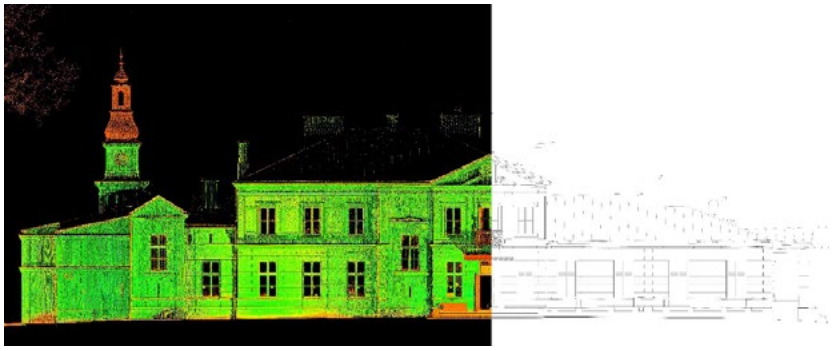

Fig. 5. Overview of the façade development with the completed drawing (elaborated by the author)

This method also gives the opportunity to conduct a comparative analysis based on archival materials and to develop a detailed assessment of the technical condition of the facility. After generating a point cloud obtained from scanning the palace building, some elements were noticed which could be omitted with the use of the traditional method, i.e. different thickness of walls on subsequent floors and reference of their location in relation to each other. This is illustrated by the cross-section of the object generated in *Leica Cyclone* program (Fig. 6.). All deformations in the building's geometry are clearly visible and clear. Then 2D documentation was prepared based on the generated image (Fig. 7.)

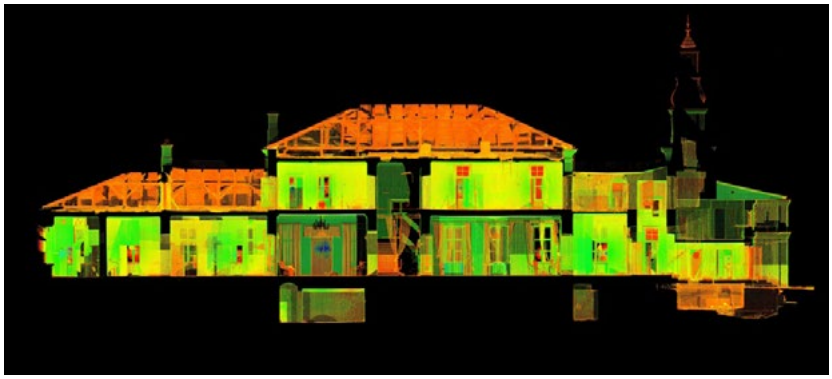

Fig. 6. Cross-section of an object generated from a cloud of points (elaborated by the author)

Fig. 7. Cross-section of the object based on a point cloud (elaborated by the author)

When working with the acquired point cloud, it was possible to transfer the actual state onto the paper version keeping the maximum accuracy of the building geometry. The following picture shows a comparison of a 3D scan generated in Leica Cyclone program with a drawing made on its basis representing the plan of the ground floor of the building (Fig. 8.).

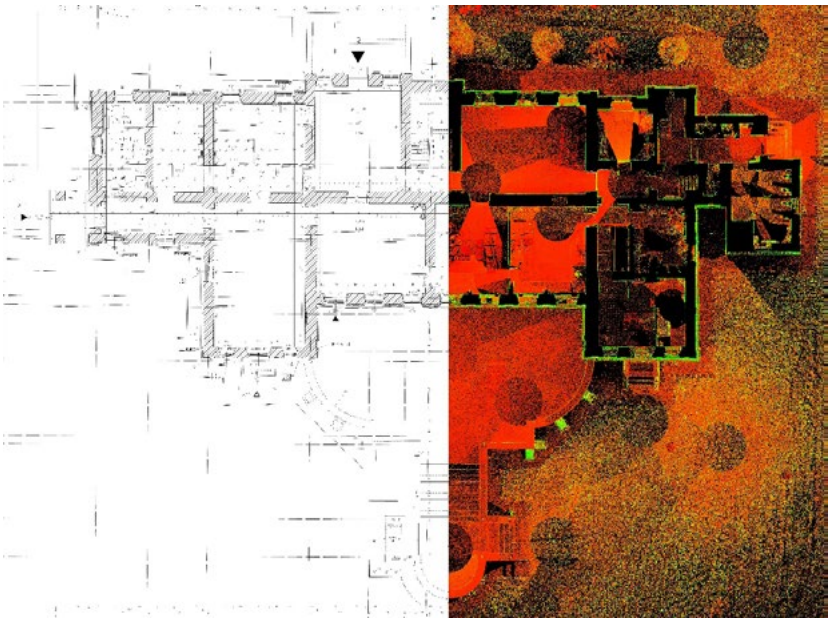

Fig. 8. Summary of the projection generated from the point cloud with the projection made on the basis of the cloud (elaborated by the author)

Conclusions

Measurement works using laser technology to scan objects into a 3-dimensional XYZ space are necessary for buildings that are complex in both spatial functional structure and façade composition. In these cases, laser scanning can be used to analyse building elements that are invisible or even impossible to catch by the traditional measurement methods. An important aspect here is also the analysis of materials from a point cloud in terms of the assessment of technical condition of a building. It enables to determine with a much greater accuracy stratification, cavities, cracks, corrosion or deflection of ceilings in each plane. The result of such works can then be precisely performed architectural inventory along with an assessment of the technical condition and, consequently, the course of actions aimed at the preservation of cultural assets.

A point cloud obtained with scanner measurements is in itself an important and valuable element in the architectural and preservation documentation. The obtained 2-dimensional inventory is the ultimate result

of these measurements. The 3D model has the most important value here and can be used for later studies or planned conservation activities of a historical building. The BIM technology used in scanning of historical structures may be an important aspect of the agreement between owners, designers and conservators. Laser scanning is an important tool for this purpose.

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Enlivening vast green spaces of Zamość. Spatial organization of key recreational areas of the Town. Planty

Katarzyna Kielin
https://orcid.org/0000-0001-5370-5686
k.kielin@pollub.pl

Department of Architecture and Urban Planning, Faculty of Civil Engineering and Architecture, Lublin University of Technology

Abstract: Today's city longs for air and green. Congestion, overflow of car traffic, the pace and randomness of contemporary living might serve as plights for the spaces around us since one might observe accruing amounts of waste produced by humans, pollution or disorganization/ inconsistency/ incongruity of public spaces. Quite threatening might that be, but there has been observed a 'trickling', continuous shift of a social life towards virtual reality of tempting, alluring social media, games, news on-and-on broadcasts, shopping websites. We engage in perversely intimate relation with our 'cuddle-to' electronic devices – phones, laptops, smartphones. Little Prince would not be happy with 'our establishing ties' with lifeless machines, would he? Getting children out of their computers to kick some ball or play hide-and-seek turns into changing the current of a river or tempering with a bee. It will definitely stab you. Can a historically charged, conservatory space be a no space?

Keywords: Planty, Zamość, public space, recreation, heritage

History

The area of today's Planty used to play a strategic role in the plans of the development of the centre prepared by an engineer Władysław Siennicki in 1880. When Prof. Jan Zachwatowicz, together with a group of students, came to Zamość in 1933 he was amazed at its attractiveness as a town of great historical significance. The visit was an incentive to carry out research on restoring the Zamość original architectural splendor. His work resulted in the preparation of a master plan for the Town which included probably the first delimitation of a preserved area in terms of its historical substance.[1] Earlier, the terrains around the northern part of the fortress served as a military training area (The Borodiński Square) which was visible on the 1916 Plan of Zamość[2]. The plan from 1939 proposed vast green areas around the fortress in order to expose architectural structure of the town.[3] The plan stressed clearly defined historical centre which ought to undergo thorough revalorization process as well as delimiting directions for its wide development. 'The Zamość Old Town were supposed to perform a role of a prestige centre with unobtrusive, minor services and venues for administrative purposes.'[4] The plans were to restore the overall outline of fortifications and supplement the most immediate surroundings with designed/ arranged greenery that would follow the line of the walls. Park-like green areas were planned whereas, to the

1 Zamość miasto idealne, Studia z dziejów rozwoju przestrzennego i architektury pod redakcją Jerzego Kowalczyka, Wydawnictwo Lubelskie, 1980 edit. Jadwiga Kaliszuk, ISBN 83–222–0125–7, p.

2 Situazionsskizze der Stadt Zamość samt Lubliner Vorstadt und Nowa Osada (1916)Österreichsches Staatsarchiv Wien, Kriegsarchiv, GIk 161–10.

3 Szkicowy projekt planu zabudowania, skala oryginału 1:10000, wyk. Jan Zachwatowicz, Władysław Wieczorkie-wicz, 1939 r. Źródło ilustracji Archiwum Państwowe w Zamościu, Biuro Planowania Przestrzennego w Zamościu, spis zdawczo-odbiorczy nr 5, l.p. 54

4 Przegon W., Żygawski J., "Kartograficzne Zamostiana", Kraków – Zamość 2018, W stulecie odzyskania przez Polskę niepodległości

north of Planty, up to three-storey development with a maximum of 45% of built-up area was proposed as well as the area called 'użyteczności publiczne' (public services area).[5] The Planty area is incorporated within the Zamość military landscape which is also referred to as a military park[6].

The Planty residential district was placed along the southern part of Róża Luxemburg Street (today's Peowiaków Street) stretching across the previous terrain of historical fortifications. Its construction was divided into stages and continued between 1956–1972. The development was designed by two architects – Stanisław Król and Zofia Haman. The ongoing process of a continuous development of the area was supervised by the Waleriana Łukasińskiego Cooperative Housing Association and resulted, among others, from a constant steady growth in the number of Zamość residents from 1960 till 1975 (average 3 to 4 thousand per a 5-year – period). The year 1956 brought a remarkable growth in the development of single-family, two-storey and apartment buildings which differed significantly from a more traditional landscape of low-rise, wooden developments accompanied by little gardens. In 1965, the Łukasińskiego Association cooperated with PSS (a Polish Consumers' Co-operative), Ruch and TPD (Children's Friends Association) in the preparation of recreational and educational offer for the residents of the Planty district: a recreational halls for youth/ rooms, do-it-yourself corner/ nook, groceries store, children's playgrounds during spring-summer season, klubokawiarnia (cultural club), music section, tv set and record player in the children's recreational room, nutrition, sewing courses for adults, beauty cosmetics shows. They arranged occasional social meetings such as 'Andrzejki' (St. Andrev's Eve parties) 'Sylwester' (New Year's Eve parties), 'Ostatki' (Shroave Tuesday parties), introduced chess – and – bridge nooks and lectures prepared by Common Knowledge Committee).[7]

Fig. 1. Plan miasta Zamościa (1939 [1945]) Archiwum Państwowe w Zamościu, Akta miasta Zamościa 1915–1944, sygn. 216, s. 26.

5 Szkicowy projekt zabudowania Zamościa (1939)Archiwum Państwowe w Zamościu, Biuro Planowania Przestrzennego w Zamościu, spis zdawczo-odbiorczy nr 5, l.p. 54.

6 http://infomaty.zamosc.pl/pl/page/87/; website access: 28. 11. 2019

7 I want to express my gratitude to the Waleriana Łukasińskiego Association for sharing archival information about the history and functioning of the Association and the Planty district

The Zamość historical centre together with fortifications was enlisted into the Register of Monuments in 1936.[8] While it was included into the UNESCO Cultural Heritage in 1992.

The Planty District was among three most problematic terrains out of a total of 16 districts in Zamość. They were qualified as degraded areas which demand immediate attention and Planty, together with Stare Miasto, required revitalization measures. The Local Revitalization Program for the Town of Zamość was planned for the years between 2017 – 2023. Significantly a big number of people (39/ 100 people) experiencing various social problems such as a chronic disease, alcohol addiction, single- parent or multi-children families, disability, underprivileged circumstances.

The implementation of a cornerstone into a future amphitheatre was carried out in 1969. The whole construction was built by the citizens of Zamość, as the Polish authorities had expected at those times. Even though the shape of the audience part was reversed with regard to the original outline of the ravelin, the place was frequented by the Zamość residents for entertainment events such as concerts, dancing performances.

The map shows delimitation of the Planty area from the north and the remnants of the fortress walls.

Examples of using green spaces of a city

> *Planty form a city garden, destined for walking, widely accessible from their beginning, being a natural ornament for the historic core of Cracow.*[9]
>
> *Prof. Janusz Bogdanowski*

The Cracow Planty area spans across 20ha and circles historical centre for about 4km. The history of the formation of the Cracow Planty dates back to first quarter of the 19th century. They form a series of 8 gardens which take their names from characteristic objects and places situated in the consequent areas. Unlike the Zamość Planty, they were planned (after 1820) to become city gardens after the decision to demolish the city defense walls and level the moats. They perform aesthetical, recreational and symbolic function as they serve as an open – air gallery with sculptures commemorating very important events for the Polish nation. The spiritus movens of a plan for the arrangement of Planty was prof. Janusz Bogdanowski[9]. The complex was divided into 8 parts in 1972 during conceptual design managed by prof. Bogdanowski in the Institute of Landscape Architecture, at the Cracow University of Technology. Revitalization works began in 1985 while, throughout the 1990', the decision was made to expose the layout of previous fortification walls and mark the location of historical towers and gates by means of masonry tablets designed by prof. Stefan/ Stanisław Dousa.

Playground 'Plantuś' in The Cracow Planty area takes some inspiration from historical, archeological discoveries near Archeological Museum. Throughout 50 years the space used to function as a masonry facility. In 2015, the Municipality of Cracow leased the terrain from the Archeological Museum. The design was prepared by Pracownia K., and built by GAJDA Architektura Krajobrazu (GAJDA Landscape Architecture Studio). The terrain offers playground facilities which refer to certain objects and places present in the old times. A child can experience a wonderful adventure of travelling in history and learning about ways and places people used to live in. Some parts of the playground resemble a cave, simple huts, cottages, traditional tenement houses. There are some toys and little boards on the walls referring to certain archeological objects. The greenery planted in the area, in their colours, has a symbolic reference to the colours of the City Of Cracow – white and blue as well as it is grown with the species typical to the aforementioned historical places of residence (placed next to the facilities). The playground is divided into 5 stripped zones with a central 'market-like' space devoted to the organization of various types of workshops, theatrical performances, family events. The authors of the space introduced multisensory, universal solutions which target a variety of users, including those with different

8 Jawor A., Kultura w mieście idealnym. Kultura – Zamość – Uczestnictwo w kulturze. Korporacja Polonia Warszawa 2009, https://books.google.pl/books?id=4qqDQvla4QEC&pg=PA82&dq=Zamo%C5%9B%C4%87&hl=es&sa=X&ved=0ahUKEwipj92foo3mAhWDs4sKHbH-6DDYQ6AEIKDAA#v=onepage&q=Zamo%C5%9B%C4%87&f=false; webpage access: 28.11.2019

9 Renowacje i Zabytki, No4 2006, Kwartalnik Ogólnopolski, index 36956X, ISSN 1643–2029

disabilities. At the entrance to the playground, apart from a regular information board, there is a tyflographic tablet for people with eyesight impairments which explains the organization of the space.

Chart No 1

Fig. 2. A view towards the "Plantuś" playground, the Cracow Planty, premises of the Archeological Museum in Cracow, Source: K. Kielin, Widok w stronę wnętrza placu zabaw 'Plantuś', Planty, Kraków; źródło: K. Kielin

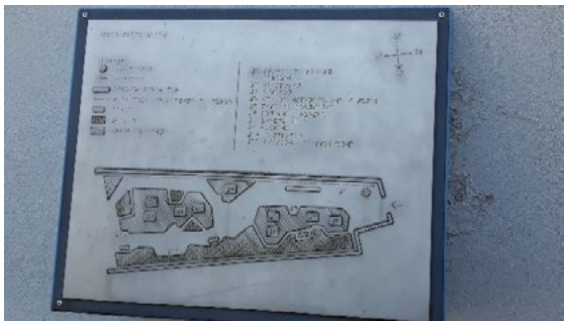

Fig. 3. A tyflographic tablet at the entrance to the 'Plantuś' playground, the Cracow Planty, premises of the Archeological Museum in Cracow, Source: K. Kielin, Tablica tyflograficzna przy wejściu na teren placu zabaw 'Plantuś', Planty, Kraków, źródło: K. Kielin

Fig. 4. Educational tablet presenting various models of habitation: the cave, hut, cottage house, tenement house, the Cracow Planty, 'Plantuś' Playground, Cracow, Source: K. Kielin, Tablica edukacyjna prezentująca różne formy schronienia: jaskinia, szałas, chata, kamienica, Planty, Kraków, źródło: K. Kielin

Fig. 5. Swings on the 'Plantuś' Playground arranged in a form of tenement houses, Planty, Archeological Museum in Cracow, Source: K. Kielin, Huśtawki na placu zabaw 'Plantuś' zaaranżowane w formie kamienic, Planty, Kraków, źródło: K. Kielin

Playground area 'Dzikie Planty'

'Dziekie Planty' children's playground ('Wild Planty') is located along Świętej Gertrudy St., close to the Royal Hotel and is thematically connected with a wildlife fauna. The objects present on the playground resemble worms, mushrooms, snakes, owls. The place is universally accessible as there are sitting places positioned at different levels, the playground objects provide multisensory experience. The elements are made of wood. One might see the world through a magnifying glass.

Chart No 2

Fig. 6. 'Dzikie Planty' children's playground, Św. Gertrudy St, Cracow Planty, Source: K. Kielin; Plac zabaw 'Dziekie Planty', ul. Św. Gertrudy, Planty, Kraków, źródło: K. Kielin

Fig. 7. Playground surface, 'Dzikie Planty', Cracow Planty, Source: K. Kielin, Nawierzchnia placu zabaw, 'Dzikie Planty', Kraków, źródło: K. Kielin

Fig. 8. Playground surface, an example of a piece of playground furninshing, 'Dzikie Planty', Cracow Planty, Source: K. Kielin, Nawierzchnia placu zabaw, przykład urządzenia zabawowego, 'Dzikie Planty', Kraków, źródło: K. Kielin

Fig. 9. Playground surface, 'Dzikie Planty', Cracow Planty, Source: K. Kielin

'Galeria pod Gołym Niebem' is an initiative instigated by the Anna Dymna Foundation 'Mimo Wszystko' about thirteen years ago and held on the Cracow Planty during spring/ summer season. The event, animated and prepared by volunteers, encompasses workshops, an open – air gallery of works of art (paintings, sculptures, toys, clothes, graphics, ceramic objects, jewellery and many more) handed in by different artist, friends to the Foundation, generous donors. This year's edition (15–16th June) was aimed at gathering funds for adults with intellectual disabilities.

Current organization of the Planty District

The terrain in question consists of two major parts: residential and recreational. The development is composed of three – to five- storey buildings which were built between 1950–1970. Spatial organization of the place is very clear. Green areas around the fortification walls serve as a buffer zone. As far as z type of development is concerned, there is no gradual transition from the historical substance and a modern style of residential buildings. Most of the buildings are aligned along the north-south direction, positioned at a right angle towards Peowiaków Street, therefore, having east – west sun exposure. Structurally, it is a comb – like arrangement with a visual closure, in the south, given by a line of blocks facing the Planty area. The connection between residential neighbourhood spaces and the forefront of the fortress is distorted. Core layout of main pedestrian paths follows the line of fortifications. The walkways circumscribing the walls allow for a broad view of different elements of the fortress: curtain walls with cordon cornice and embrasures for firearms, bastions No VI and VII (reconstructed in 1970' and 80'), the New Lubelska Gate, retrenchments, counterguards, ravelins, remnants of the caponier. The exposition has a strong educational value since one can admire the monumental splendor of the fortress from the distance as well as spot key towers forming the Zamość skyline. Therefore, restrictions concerning the implementation of volumes of significant height should be strictly kept. The area of Planty is predominantly grassy terrain with randomly growing trees in the north -east side. North west side acquires some characteristics of a park with orthogonally led pathways and a handful of trees. Contemporary outlook of Planty is a result of consequent conservation process happening from the 1930' when some inventory works began. In 1976, the Zamość defensive facilities undertook noticeable transformations for the upcoming 400th anniversary of the foundation of the Town. But it was not until 2011 that the Fortress landscape underwent vast renovation co – funded, to a great extent, by the European Union. The European Union input came from the project: "Zamość – a UNESCO Town, Historic Monument of Poland – Tourist Product of Polish Economy" under Activity 6.4 of Operational Programme Innovative Economy "Investment in Tourist Products of supraregional significance." The municipalities of Zamość filed the project in May 2008. Out of a total of 175 projects submitted for verification and financing under the Activity 6.4, only 13 were chosen, among which the Zamość project being the only one selected from the lubelskie voivodeship. The project begins a Zamość fascinating journey towards becoming one of the most important centres of historical and military education. Such distribution enables to form cameral green spaces but without proper street furniture facilities. The interiors are insufficiently equipped with playground and street furnishing facilities. In the majority of cases, the places to rest are located in the vicinity of building entrances, the courtyards remain covered with green which has no compositional predominant rule. One of the characteristic features of the areas around residential buildings are flower gardens along the ground floors. A specific aura of quiet could be felt within the courtyards.

Chart No 3

Fig. 10. Plateau of a current amphitheatrical stage, Planty, Zamość, Source: K. Kielin, Scena obecnej przestrzeni amfiteatralnej, 'Przestrzeń fortyfikacji i sztuki', Planty, Zamość, źródło: K. Kielin

Fig. 11. Source: K. Kielin,

Fig. 12. Source: K. Kielin

Fig. 13. Source: K. Kielin

Fig. 14. Source: K. Kielin

Fig. 15. Source: K. Kielin

Fig. 16. Source: K. Kielin

Current recreational offer in the analysed area

'Wandering Stage' is a regularly held group of open-air events happening in several districts of Zamość like, for example, Karolówka, Partyzantów, Kilińskiego, Zamczysko and Planty. The meetings are designed to integrate families, people of different ages like seniors, children by participating/ engaging in interactive games, artistic actions such as:

Theatrical performances, theatre-based games and play, kids' play zones, beauty and wellness zones, arts – and – crafts zones, face painting, circus workshops, family music corner, sports games, medical prevention spots (e. g. measuring blood pressure), educating/ educative stands, meetings with managerial board members, under-the-stars disco, concerts.

The event is organized by the Zamość Cultural Centre together with the managerial boards of the residential districts taking part in the events as well as it is held under the patronage of the President of Zamość. It takes a form of a casual, on – blanket picnic gathering/ The participants of the 'Wandering Stage' are invited to bring blankets, picnic baskets and spend some fruitful time with their families in the open/ out of doors. Some initiatives tackle serious social issues such as today's problem of the lack of time among parents for their children which is presented in the form of an interactive theatrical performance entitled 'Tata bez krawata.' ('A Dad without a Tie').[10]

There was also some tradition of inviting amusement park to the area as well as a circus. In the 1950', fairs were organised

Historical reconstructions of important battles held in the Zamość fortress. One of them is the Swedish siege of 1656 as a part of the Deluge, held by the Swedes under the leadership of Charles X Gustaw. Another event entails the commemoration of the defence of the Zamość fortress against the Bohdan Chmielnicki's troops. The two shows are also occasions to display skills and specificity of knightly brotherhoods, admire archers' abilities, horse-riding tactics, watch birds'-of-prey shows, historical art of dancing and historical pieces of clothing and armour.

Theatrical Summer in Zamość most often holds its place in the Great Market Square or the Zamość Cultural Centre. The amphitheatre located on the ravelin is rarely used as a stage space for plays while the skyline of the northern part of the Fortress could be a picturesque background for historical theatrical performances.

The Łukasiński Cooperative Association in Zamość holds rubber driven Flying Models Shows which take place at the Planty area.

10 https://www.kurierzamojski.pl/dzisiaj-ostatnia-wedrujaca-estrada-na-osiedlu-planty-wato-byc/; website access: 22.11.2019

Guidelines for the enlivening

Comparing the Zamość Planty area with the Cracow one both have a very significant potential for cultural and educational development. Close vicinity to the city centre and an immediate, walking and visual, approach increase the chance of visiting those spaces by a great number of people.

- Increase in cultural events which promote architectural and urban values of the Town
- Increase in the organization of sports events (Plaża Open, AquaWave, engaging more people in sport)
- Activating the residents of the district
- Artistic workshops, students' workshops
- Engaging school kids in outdoor activities

Conclusion

'The problem of merging urban and architectural legacy with current needs of a contemporary city is of a distinguished importance for the establishment of contemporary conditions of its development.'[11] Plans for the incorporation of more recreational, educational and cultural events at the Planty area should be taken into consideration by the Zamość authorities insofar as they include serious, clever ideas based on studious materials of the Zamość architectural and urban value. The introduction of different festivities remains influential for people's cultural and educational growth as well as correlates with the Town's overall touristic image. The events and actions, the Town promotes, matter and has a strategic significance for the economic development and the levels of prominent investment. Inner parts of the town, quite understandably, attribute the greatest attention from both the residents and in-comers. A shift in that paradigm would have a refreshing effect on both the residents and municipalities. Reevaluation of a prime function of the space, which is mainly pedestrian, might be useful. Strategic goals for the development of the Town should base on an in-depth cultural and educational strengths in the historical context of Poland and Europe.

11 Pawlicki M., B. "Kamienice mieszczańskie Zamościa: problemy ochrony; Kraków 1999

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Walory architektoniczno-krajobrazowe zamków w trwałej ruinie na przykładzie zamku w Czersku

Katarzyna Drobek
https://orcid.org/0000-0003-3599-1169
k.drobek@pollub.pl

Katedra Konserwacji Zabytków, Wydział Budownictwa i Architektury, Politechnika Lubelska

Streszczenie: Poniższy artykuł ma na celu przedstawienie walorów architektoniczno-krajobrazowe ruin zamku w Czersku. Są one przykładem zamków należących niegdyś do dynastii książąt mazowieckich. Ich ciekawa historia, malownicze położenie oraz duże wartości architektoniczne przyciągają wielu turystów. Dlatego też opisane zostały rozważania dotyczące zarówno walorów krajobrazowych jak i architektonicznych obiektu. Artykuł ten zawiera również opis historii warowni oraz zmian jego formy na przestrzeni wieków.

Słowa kluczowe: zamek, trwała ruina, krajobraz, Czersk

Wstęp

Ruiny zamkowe stanowią nieodzowny element polskiego krajobrazu kulturowego. Tworzą wartościowe uzupełnienie krajobrazu, wzbogacając je o znaczenie symboliczne, ukazując historię oraz uatrakcyjniając turystycznie okolicę. Niepowtarzalna architektura zamków stanowi o ich ogromnych walorach estetycznych, pomimo różnego stanu ich zachowania. Integralność z terenem stanowi o oryginalności i unikatowości każdej warowni.[1] Elementami charakterystycznymi dla większości ruin zamkowych jest ich dominacja w otoczeniu. Współistnienie takich czynników jak wzgórza, rzeki, bagna decydowały o warowności założenia[2], dlatego też obecnie razem z tymi elementami ruiny zamków tworzą niezwykłe krajobrazy.

Zamek w Czersku należał niegdyś do dynastii książąt mazowieckich. Przez ponad 300 lat Mazowsze było państwem niezależnym, książęta mazowieccy rządzili nim bowiem od 1200 do 1526 roku. W trakcie ich panowania nastąpił dynamiczny rozwój tych ziem, ufundowali oni bowiem ponad 100 miast. Powstało również wiele zamków i kościołów, które obecnie posiadają ogromną wartość historyczną i w dzisiejszych czasach uznawane są za jedne z najważniejszych zabytków na Mazowszu.[3]

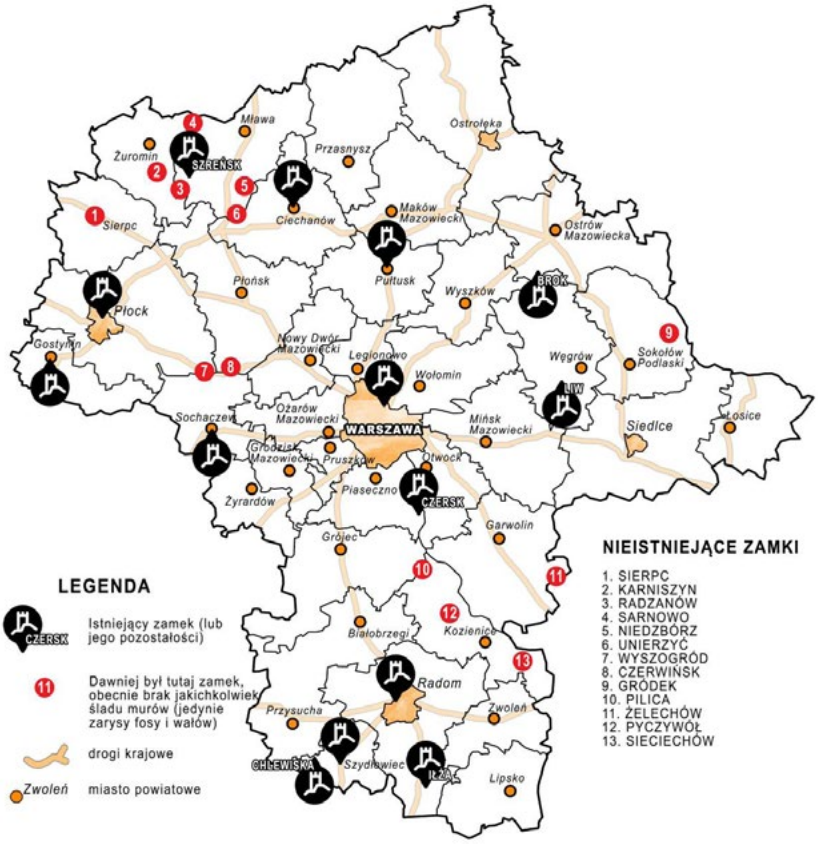
Teren Mazowsza posiadał jeden zasadniczy problem, jakim był jego nizinny charakter. Położony na obszarze Nizinie Środkowopolskiej, który charakteryzuje spora ilość rzek oraz ogrom wysoczyzn, które ograniczone są pradolinami rzek. To też warunkowało, że zamki sytuowane były w miejscach naturalnych wzniesień na stromym brzegu rzeki, tj. Warszawa, Czersk i Płock na brzegu Wisły czy Sochaczew położony nad Bzurą. Obiekty te powstawały niezależenie od siebie, dlatego też ciężko wyróżnić cechy stylowe dla zamków książąt mazowieckich.

1 Kosiński W., Byrski P., Architektura zamków – dominanta krajobrazowa i turystyczna, [w:] Ruiny żywe: adaptacja zabytków architektury do celów muzealnych: nowe inspiracje i funkcje dla Zamku w Janowcu: materiały z sympozjum naukowego z okazji 30-lecia Muzeum Zamek w Janowcu, Kazimierz Dolny – Janowiec, 2007, s. 51–59,

2 Bogdanowski J., Architektura obronna w krajobrazie Polski. Od Biskupina do Westerplatte, Warszawa–Kraków, 2002

3 https://szlakksiazat.pl/ [data odczytu: 28.09.2019]

Niewątpliwie jednak wspólnym elementem jest posadowienie na fundamencie z kamieni polnych oraz użycie czerwonej cegły jako budulca.[4]



Ryc. 1. Mapa z zaznaczeniem zamków w woj. mazowieckim., Źródło: Opracowanie własne

Ruiny zamku w Czersku

Zamek w Czersku położony jest 35 km na południe od Warszawy oraz w odległości około 5 km od centrum Góry Kalwarii. Teren na jakim została usytuowana warownia posiada cechy położenia skarpowego. Obiekt został ulokowany na nadrzecznej skarpie; wysokim cyplu górującym nad pradoliną Wisły. Wzgórze zamkowe od strony dawnej doliny rzecznej posiada strome zbocze, które jest zupełnie wydzielone fosą ze skarpy. Od strony miasta teren, na którym usytuowano zamek nosi cechy nizinne.[5] Budowla oddzielona fosą od strony zachodniej, jaką stanowią zabudowania Czerska.

Pierwotnie, w miejscu murowanego gotyckiego zamku, w XI w. znajdował się gród obronny, następnie drewniano-ziemna budowla pochodząca z przełomu XIII i XIV w. Obiekt ten zajmował podobny teren do obecnych ruin zamku, a przebieg jego murów dopasowany był do naturalnego ukształtowania wzgórza. Pod koniec XIV w. książę mazowiecki Janusz I rozpoczął budowę zamku murowanego, który stanowił jedną z jego najważniejszych rezydencji. Wieże, były elementami, które powstały jako pierwsze; wieża wschodnia – bramna, południowa – więzienna oraz zachodnia. W 1526 roku zamek staje się własnością królewską z powodu przyłączenia Mazowsza do Królestwa Polskiego.

4 https://zabytek.pl/ [data odczytu: 28.09.2019]

5 Guerquin B., Zamki w Polsce, Warszawa, 1984, s. 132–134,

Ryc. 2. Ruiny zamku na tle Czerska i widok na jezioro Czerskie. Autor: Bartosz Szostak

W momencie wejścia warowni w 1547 roku w skład dóbr królowej Bony zabudowa drewniana dziedzińca zastępowana jest budowlami murowanymi. Na okres ten przypada budowa domu południowego oraz pałacu będącego rezydencją Bony. W roku 1656 zamek zdobywają Szwedzi pod wodzą Fryderyka margrabiego Badeńskiego, którzy opuszczając zamek dokonali licznych zniszczeń, zarówno zabudowań zamkowych jak i samego Czerska. W latach 1762–1766 przeprowadzona była częściowa restauracja zamku przez Marszałka Wielkiego Koronnego, starostę czerskiego Franciszka Bielińskiego w celu umieszczenia w nim sądu grodzkiego i ziemskiego. W tym czasie w miejsce mostu zwodzonego został wzniesiony most murowany, który istnieje do dnia dzisiejszego.

W latach 1907–1913 Kazimierz Skórewicz w ramach pracy Towarzystwa Opieki nad Zabytkami Przeszłości prowadził prace badawcze na zamku w Czersku. W ich trakcie wykonywano także prace wykopaliskowe. Działalność ta wznowiona była w 1927 – 1930 przez Skórewicza wraz z architektem Antonim Karczewskim. Odsłonięto wtedy fundamenty kościoła Św. Piotra. Z ich badań wynikało, że zamek powstał w XIII wieku. Wykonane przez nich opracowanie opisowe ma ogromną wartość jako ówczesna analiza obiektu.[6]

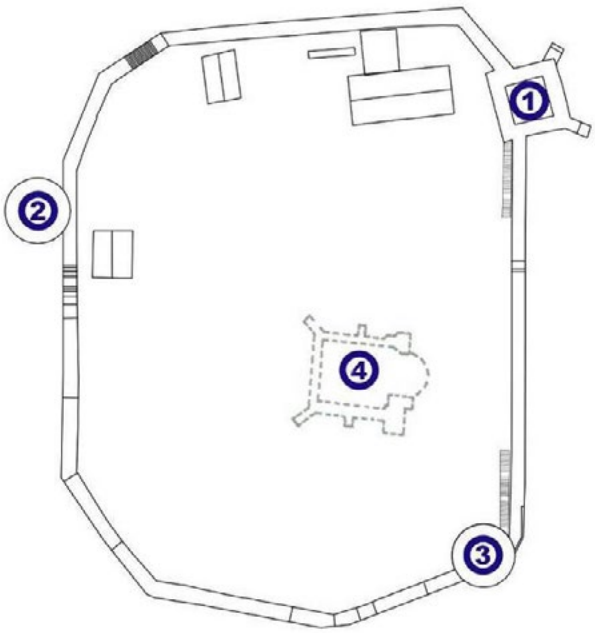
Kolejne opisy, uznawane za jedne z najwybitniejszych, wykonane zostały przez Adolfa Szyszko – Bohusza w 1912 roku. Według jego opracowania zamek czerski powstał w XIV w. Opublikowany przez niego artykuł zawierał analizę architektoniczno-funkcjonalną połączoną z inwentaryzacją oraz studium rekonstrukcji.

Forma architektoniczna obiektu

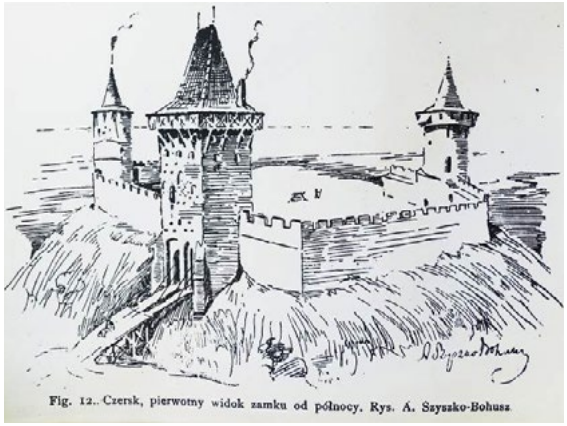
Zamek założony został na planie nieregularnego wieloboku, na który składa się 10 odcinków murów. Układ zamku częściowo został dostosowany do przebiegu wzgórza. Warownia została posadowiona na fundamentach kamiennych. Mury kurtynowe o średniej szerokości 1,8 metra oraz wysokości 8 metrów wykonano z cegły. Założenie to powstało w systemie wielowieżowym w odmianie wież zwielokrotnionych[7]. W jego skład wchodziły dwie okrągłe wieże, wieża bramna oraz mury kurtynowe otaczające ogromny dziedziniec ze znajdującym się na nim kościołem św. Pawła i dwoma budynkami mieszkalnymi, które pierwotnie były zabudową drewnianą i w późniejszym czasie zamieniono je na murowane. Początkowo wysokość wszystkich wież była takiej samej wysokości jak murów.

6 http://www.gorakalwaria.pl/ [data odczytu: 28.09.2019]

7 Bogdanowski J., Architektura obronna w krajobrazie Polski. Od Biskupina do Westerplatte., Warszawa – Kraków, 1996, s. 72



Ryc. 3. Plan zamku w czersku 1. Wieża bramna, 2. Wieża zachodnia, 3. Wieża więzienna, 4. Relikty kolegiaty św. Piotra

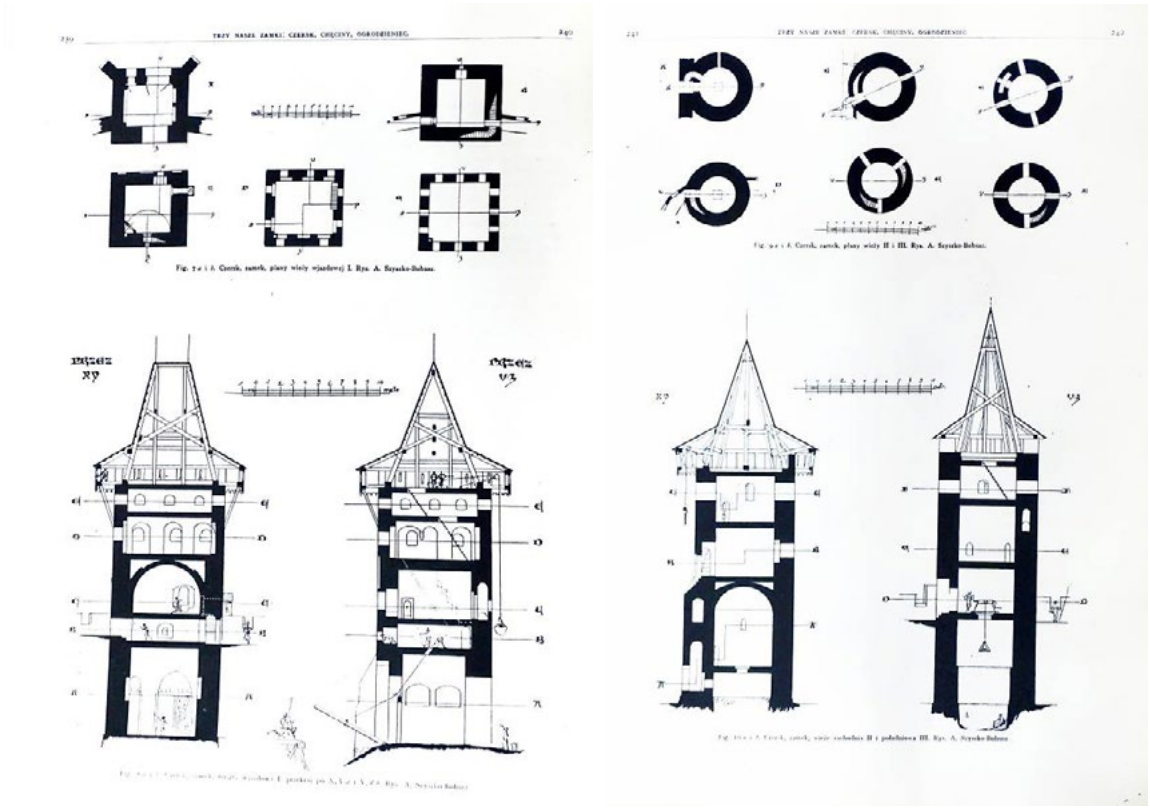


Ryc. 4. Rekonstrukcja zamku, 1912 r., Autor: A. Szyszko-Bohusz

Ryc. 5. Widok od strony północno-wschodniej, Autor: K. Stronczyński, 1961 r.

Źródło: oprac. I. Galicka, fot. R. Kazimierski, red A. Grzybkowski, Dokumentacja architektoniczno-konserwatorska, Archiwum MWKZ

Pięciokondygnacyjna wieża bramna znajdująca się we wschodniej części warowni, przed linią murów kurtynowych założona została na planie kwadratu o boku 8,5 metra. Narożniki budowli stanowią siedmiometrowe wspierające szkarpy, między nimi znajdują się dwa otwory zakończone łukami odcinkowymi. Mniejszy otwór stanowił przejście piesze, większy był bramą wjazdową. Z początku dojazd do zamku odbywał się dwoma drewnianymi i unoszonymi zwodzonymi mostami, następnie w 1762 roku zastąpiono je jednym, murowanym mostem o dwóch półokrągłych arkadach. Wejście do wieży prowadziło przez drewniane schody ulokowane wzdłuż wschodniego muru. Piątą kondygnację wieży dobudowano najprawdopodobniej za czasów panowania królowej Bony i w tym czasie zwieńczona była drewnianymi hurdycjami.



Ryc. 6. Czersk, wieża bramna – rzuty i przekroje (lewa strona); wieża zachodnia i południowa – rzuty i przekroje (prawa strona), Autor: A. Szyszko-Bohusz, Źródło: oprac. I. Galicka, fot. R. Kazimierski, red A. Grzybkowski, Dokumentacja architektoniczno-konserwatorska, Archiwum MWKZ

Wieża południowa prawie w całości znajdowała się wewnątrz obwodu murów. Osiągnęła wysokość 24 metrów i założona została na planie koła. Prawdopodobnie posiadała znikome znaczenie obronne. Nazywana była również wieżą więzienną, ponieważ we wnętrzu, na jej dnie znajdowało się więzienie. Schody prowadzące na górę wieży znajdowały się w grubości muru. W czasach współczesnych powstała kładka przechodząca przez jej wnętrze. Druga wieża okrągła – zachodnia, w całości została usytuowana wewnątrz obwodu murów. Z niej odbywała się obrona przed atakiem z przedpola od strony zachodniej.

Obecnie zamek jest malowniczą ruiną znajdującą się na wiślanej skarpie. Z całej warowni zachowały się trzy wieże, mury obronne północne i wschodnie osiągające wysokość 6 metrów oraz XVIII-wieczny most ceglany. Mur obronny znajdujący się w południowej części został najprawdopodobniej rozebrany podczas I wojny światowej. Odtworzony został w formie niskiego muru z opoki podczas prac remontowych w 2013 roku. Nie zachowały się również drewniane konstrukcje stropów oraz dachów. Na terenie dziedzińca znajdują się odkopane fundamenty kolegiaty św. Piotra, natomiast zabudowa mieszkalna nie została zachowana. Mury warowni zostały częściowo przemurowane cegłą, która odróżnia się od historycznej fakturą i barwą od historycznej cegły gotyckiej.

Na licu wież znajdują się charakterystyczne elementy dekoracyjne ułożone w fryzy romboidalne wykonane z cegły zendrówki o kolorze brązowo-czarnym. W murach widoczne są również gniazda po miejscach, w których osadzone były drewniane belki oraz otwory maculcowe, charakterystyczne dla budownictwa średniowiecznego, będące pozostałościami po montażu drewnianych rusztowań.

Ryc. 7. Widok na dziedziniec od strony południowej. Autor: Katarzyna Drobek

Ryc. 8. Widok na dziedziniec od strony południowej. Autor: Katarzyna Drobek

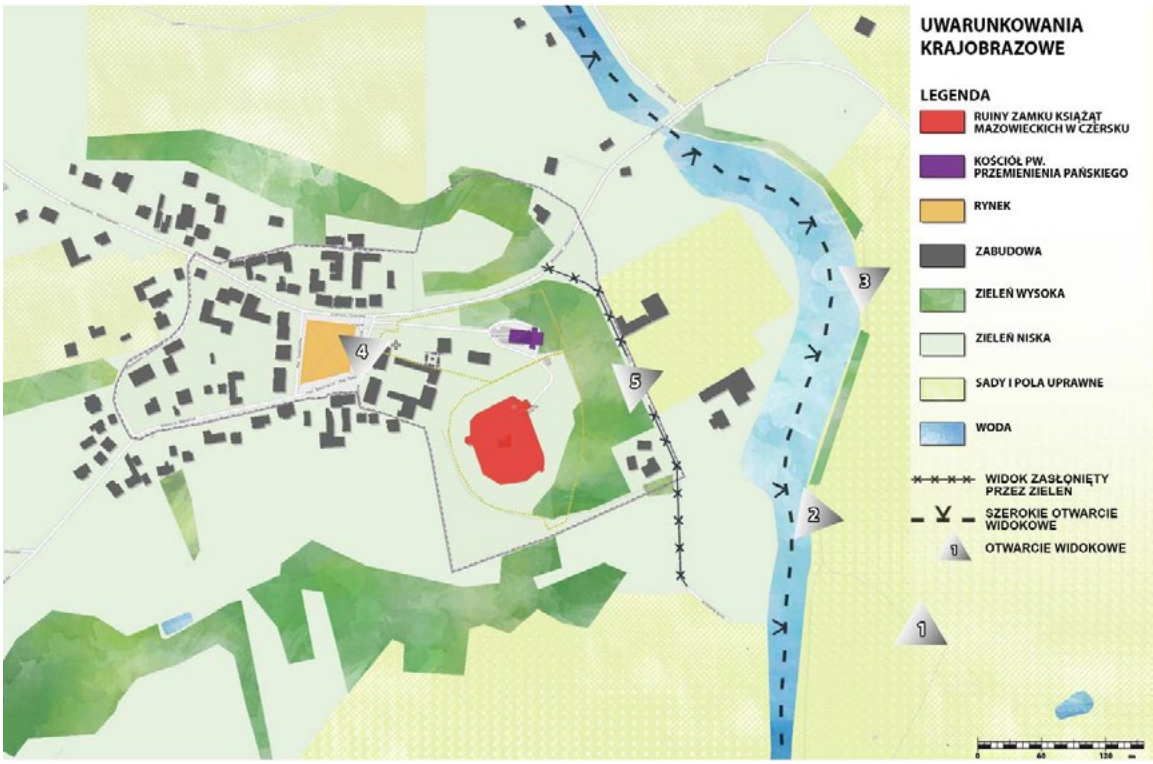
Ryc. 9. Widok na dziedziniec od strony południowej. Autor: Katarzyna Drobek

Uwarunkowania krajobrazowe

Czersk jest to jedno z najstarszych miast Mazowsza, które dawniej było stolicą księstwa dzielnicowego. Obecnie jest to wieś znajdująca się w gminie Góra Kalwaria, powiecie piaseczyńskim i województwie mazowieckim. Prawa miejskie uzyskało w 1350 roku. Jego średniowieczny układ urbanistyczny wraz z rynkiem, siatką ulic oraz cmentarzem kościelnym wpisany został do rejestru zabytków (nr rej. 1010/690/62 z 12.04.1962). Położony jest na obszarze makro-regionu, który nazywany jest Niziną-Środkowo-Mazowiecką. W jego obrębie znajdują się dwa mezoregiony, z czego Czersk znajduje się na terenie Doliny Środkowej Wisły – odcinek od Warszawy po Puławy. W jego skład wchodzi wydmowy taras piaszczysty oraz niższy łąkowy teras zalewowy, który na wysokości Czerska ma szerokość około 10 km i utworzony jest z szerokich terasów Wisły zbudowanych z mad.[8] Zabudowania w Czersku stanowią przeważnie domy jednorodzinne wraz budynkami gospodarczymi. Z czerskiego rynku, zza niskiej zabudowy można dostrzec wyłaniające się wieże zamku. Dojście na zamek odbywa się bezpośrednio przez teren kościoła parafialnego.

Ruiny Zamku Książąt Mazowieckich w Czersku są elementem dominującym w krajobrazie miejscowości. Ulokowane są na skarpie wiślanej, która zakończona jest trzema wzgórzami. Środkowe zajmuje obecnie kościół parafialny pw. Przemienienia Pańskiego, południowe zaś zamek. Na wschód od wzgórza zamkowego znajduje się wąskie jezioro, uznane za pomnik przyrody – jezioro Czerskie, które zajmuje miejsce w starorzeczu Wisły. Bagniste brzegi jego dopływu, czyli rzeki Czarnej stanowiły naturalne i niezwykłe korzystne warunki obrony przed natarciami ze strony północnej i wschodniej.

8 http://www.gorakalwaria.pl/ [dostęp 28.09.2019]



Ryc. 10. Uwarunkowania krajobrazowe zamku w Czersku. Źródło: opracowanie własne na podkładzie https://mapy.zabytek.gov.pl/nid/

Przedpole ekspozycji stanowią rozległe pola, łąki i sady. Jezioro Czerskie jest natomiast lustrem, w której tafli odbija się urokliwa okolica. Wzdłuż osi zbiornika wodnego rozciąga się szerokie otwarcie widokowe na wzgórze zamkowe. Ulica Królowej Bony, biegnąca u podnóża skarpy nadwiślańskiej, która również jest położona niemalże równolegle względem jeziora Czerskiego, ma zasłonięty widok na zamek ze względu na wysoką zieleń porastającą zbocza skarpy. Zaledwie w dwóch miejscach można dostrzec fragmenty wież zamku.
Niegdyś, ze względów obronnych wzgórza zamkowe porastała jedynie roślinność niska. Obecnie skarpa wschodnia, południowa i zachodnia pokryta jest sporej wysokości drzewami. Powoduje to przesłanianie widoku na zamek czerski. W panoramie jest on widoczny jedynie z kilku punktów. Przykładowo od strony jeziora Czerskiego jest jedynie kilka miejsc, z których warownia widoczna jest w pełnej okazałości.

Ryc. 11. Zdjęcie lotnicze, widok od strony poł.-wsch., Autor: por. Wasilewski, Źródło: oprac. I. Galicka, fot. R. Kazimierski, red A. Grzybkowski, Dokumentacja architektoniczno-konserwatorska, Archiwum MWKZ

Ryc. 12. Widok od strony poł.-wsch., 1966 r., Autor: R. Kazimierski, Źródło: oprac. I. Galicka, fot. R. Kazimierski, red A. Grzybkowski, Dokumentacja architektoniczno-konserwatorska, Archiwum MWKZ

Ryc. 13. Widok na zamek od ul. Królowej Bony, Autor: Katarzyna Drobek

Ryc. 14. Widok na zamek od strony jeziora Czerskiego. Autor: Katarzyna Drobek

Wzgórze zamkowe, oddalone obecnie o około 2 kilometry od koryta Wisły. Wspominana wcześniej obecność terasów oraz starorzecza pozostawiła na tym terenie bardzo żyzne warstwy mad. Już od czasów panowania królowej Bony, na okolice te stanowią ogrody, sady i winnice, na które rozpościera się widok z tarasów widokowych wież zamkowych[9].

Ryc. 15. Widok na zamek od strony sadów, ul. Pólko. Autor: Katarzyna Drobek

Ryc. 16. Widok na zamek od strony jeziora Czerskiego. Autor: Katarzyna Drobek

Wnioski

Ruiny Zamku Książąt Mazowieckich w Czersku posiadają ogromną wartość architektoniczno-krajobrazową. Jeżeli chodzi o architekturę obiektu, można stwierdzić iż jego forma, która bezpośrednio wynika z funkcji, jaką dawniej pełnił zamek jest podstawową i najważniejszą jego wartością. Przede wszystkim budowla ta jest dokumentem przeszłości, jest nośnikiem historii oraz stanowi jej materialne odzwierciedlenie. Dlatego też jego znaczna wartość naukowa oraz ogromne walory historyczne niewątpliwie powinny być przedmiotem ochrony. Jak już wcześniej wspomniano, zamek posiada malownicze położenie na wzgórzu, u którego podłoża rozciąga się pradolina Wisły. Duża ekspozycja obiektu w krajobrazie sprawia, że obiekt jest tak interesujący. Ze względu na to należy więc zwrócić uwagę na ochronę integralności przedpola ekspozycji. Niewątpliwe walory krajobrazowe tychże ruin zamkowych są kolejnym czynnikiem, po ogromnych wartościach historycznych obiektu, jakie przyciągają wielu turystów. Pomimo niezbyt wielkiej ilości atrakcji, rocznie zamek odwiedza aż około 44 tysięcy turystów. Ma na to również wpływ doskonała lokalizacja względem pobliskiej Warszawy oraz obecność kilku

9 http://www.czersk.org/ [dostęp 28.09.2019]

tras rowerowych przebiegających przez Czersk. Dodatkowo olbrzymie dziedzictwo kulturowe zamku oraz samej miejscowości pozytywnie wpływają na ożywienie tego miejsca.

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Concept of sensory garden in the revitalization project of a housing estate in Krasnystaw

Margot Dudkiewicz
https://orcid.org/0000-0002-3762-6192
margotdudkiewicz@o2.pl

Patryk Krupiński
patrykrupinski@gmail.com

Sylwia Czapla
czapelka539@gmail.com
Department of Landscape Architecture, Department of Horticulture and Landscape Architecture, University of Life Sciences in Lublin

Cyprian Moryc
kursikony@gmail.com
The Sacred Art Workshop St. Bernardine and Bl. Nicholas at the Passion-Mary Sanctuary in Kalwaria Zebrzydowska

Abstract: Sensory gardens are places designed to stimulate the senses. Most often they are designed near hospitals and schools, where due to availability of the garden, people suffering from sensory processing disorders (autism, dementia, depression) can enjoy new experiences in a safe and comfortable environment. The purpose of the study was to show the possibility of introducing a sensory garden also to the housing estate. The city of Krasnystaw is located 50 km south of Lublin. By carrying out an inventory of existing vegetation and study work, project guidelines were developed. One of the social aspects of the work was to create a garden, that is to integrate the residents. The plant material was selected having in mind senses specification, including hearing, smell and sight. Architectural elements (lighting, benches, gazebo) that were missing so far have been designed, using mainly natural materials – stone and wood. The project selected decorative species of trees and shrubs in terms of colors and forms of leaves, flowers, fruits and an interesting conformation.

Keywords: revitalization, sensory garden, Krasnystaw

Introduction

Revitalization is a procedure aiming at removing degraded areas that have lost their original functions from the crisis state, taking into account their natural conditions and potential of a given place (Dz.U. 2015 pos. 1777, Krupiński and Pudelska 2018). This process involves reviving an object or space by giving it new usable features and increasing visual values. Revitalization of urban areas may concern both the protection of historical forms and modern landscapes (Przesmycka 2005). Social participation plays a very important role in the revitalization process. Participation involves residents in the activities and decisions taken in local communities. It is a process, in which the residents' requirements and remarks regarding changes in the area, they will use in the future, are taken into account (Hausner 1999, Pawłowska 2010).

Residential estate makes the largest share in the urban space. Quality of the housing space should be considered in the context of the city, including the processes taking place in it. Many factors determine the nature of environment and quality of residents' life. High quality of housing space is very important from the perspective of people who live in a given place of residence on a daily basis (Wojtkun 2004, Lorens 2005, Pawłowska 2008a). When designing complexes of multi-family buildings, at least 30% of the area should be a biologically active area (Regulation of the Minister of Infrastructure of April 12, 2002). The estate greenery has protective, relaxing and aesthetic functions. The project of estate greenery in block building should include areas for quiet rest, play areas for children and youth, sports grounds and greenery associated with economic devices. According to the norms concerning green areas in Poland, there is 15 m^2 per one inhabitant, meanwhile in Western Europe it is 40 m^2 (Kasińska and Sieniawska-Kuras 2009). The areas of estate greenery are biologically active areas surrounded by residential buildings, roads and public facilities. The presence of greenery between blocks is necessary, because it introduces a color accent, warms the rawness of buildings and improves the overall image of the place (Malczyk 2012).

When designing the space next to a residential building, one should focus on preserving the elements that connect a given community, leaving space for social initiatives and predicting the needs of residents, that land development not only does not limit people, but also gives them the opportunity to shape their space. Due to this, one can break the impersonal use of space in a residential complex inhabited by strangers. This is related to the term "taming" of a space, consisting in the transformation of environment, giving or restoring the functional, social, cultural and aesthetic order, and ensuring a sense of security and belonging (Ossowska 2014).

Forms and functions of estate greenery

Public space is available to all users – it is under general social control. These include: street areas, parks, sports grounds, gardens. Private space is the enlargement of the flat with adjacent backyard greenery. These are mini-gardens used by residents, but also terraces, gardens on the roofs and balconies. The semi-public space connects small groups of acquainted people (neighbours), a small community characterized by a common system of values, similar lifestyle, and a sense of proximity. There are such development elements as: partially closed courtyards, areas of common use (playgrounds, rest gardens), technical areas, car parks (Kimic 2011, Chmielewski 2012).

Green interiors are limited by residential buildings, public facilities (shops, schools), housing roads, parking lots, etc. Housing development is often accompanied by unfavourable conditions for vegetation such as strong shading, air pollution, sterilized soils and potential risks of mechanical damage. Compact housing estate and dense network of underground technical installations are an obstacle mainly for the root system of trees. Despite many unfavourable factors, the presence of greenery in interiors is most desirable. The trees soften the harshness of buildings, hide the uninteresting neighbourhood, and shadow the car parks. In the case of small interiors, low and medium greenery is introduced with single accents of high greenery, usually evergreen. The selection of vegetation that accompanies housing development should fulfill a specific function. Species should be attractive for most of the year, due to which residents will be more willing to identify with the surrounding space. Plants should have interesting properties, i.e. habit, leaf texture, bark or fruits. The basic recommended species for planting in a housing estate are: decorative apple tree, red oak, rowan, birch, linden, larch and fir. The project should also include shrubs such as dogwood, forsythia, jasmine, sumac, spiraea and juniper (Pokorski and Siwiec 1999, Zaber and Urbański 2005).

Plants are an important factor in improving the quality of environment. They purify the air by absorbing carbon dioxide and oxygen production in the process of photosynthesis. Due to the ability of phytoremediation or absorbing harmful substances from the environment by accumulating them in leaves or shoots, greenery is a barrier that isolates residential buildings from dust and exhaust from streets. Many plants extract bacteria and fungi by isolating the phytoncides (Zaber and Urbański 2005). Greenery negatively ionizes and moisturizes the air, which has a beneficial effect on the process of breathing and blood circulation. It lowers stress and positively affects the nervous system (Szulc 2013, Dudkiewicz et al. 2018). Studies have shown that people living close to open green spaces are more physically active, healthier and less prone to lifestyle diseases caused

by stress. Being surrounded by nature affects positively both the physical and mental condition of a person (Nowak 1997, Lohr and Relf 2000, Nowak 2005, Di Nardo et al. 2010).

In a sense, every garden can be called a sensory garden, because it stimulates all human senses in part. Most people focus their attention only on the visual aspect, ignoring the smell or texture of plants. A sensory garden is a composition designed in such a way that the non-visual stimuli are maximally stimulated. This treatment is especially important for people affected by vision diseases, but not only. The remaining users can therefore look at the garden from a different point of view than before (Pawłowska 2008b). The main assumption of sensory gardens is the impact on human senses: smell, sight, touch, hearing and taste. Gardens of senses have a relaxing effect, improve the psycho-physical condition of users, and allow to recharge with positive energy, so valuable to our well-being.

Introducing sensory gardens to housing estate has a positive impact on residents. It calms and makes time for people, who rest in the garden (e.g. after returning from work). In addition, location of aromatic plants near the windows allows residents to enjoy a pleasant smell in the apartment. Even when going out for a walk, passing by a fragrant rebate, one can relax and calm down. Using sensory gardens, the estate area can be more functional, diverse in terms of color and nature, friendly for resting people or playing children. In the spring, when nature comes to life, man after the winter is more sensitive to smell and color stimuli, more willingly spends time in the open air. To make this time pleasant, fragrant plants can be planted along pedestrian routes, benches or arbors, so that a nice fragrance can be found where the person most often lives. In the case of monotonous, gray buildings, the space can be enlivened by introducing vivid, warm colors (red, orange, yellow). However, in places saturated with colors (e.g. with numerous banners, signs), subdued, cool colors are proposed, soothing the character of the surroundings (green, blue, purple, gray). Especially in the case of children, the ability to touch soft sand, refreshing water or rough bark shapes their senses, encourages learning new things, stimulates the imagination.

The aim of the work was to show the possibility of introducing a sensory garden to the housing estate of Krasnystaw city in Lublin region.

Material and methods

This study is of a review and design nature. Field studies, questionnaire surveys and design works were used. The research was carried out in 2016–17. Field work consisted of creating a detailed dendrological inventory and photographic documentation. Determination of tree and shrub species was made in accordance with Seneta and Dolatowski (2012). The local vision was to define a group of users using the site, functional, spatial and viewing analysis. Due to an interview with residents of the surrounding buildings – an analysis of the users' needs was made. Study work allowed for development of design guidelines.

Results

The site of the study is located in Krasnystaw at Szkolna Street, and its area is 9 500 m^2. The block of flats in the center of the plot is a five-story building of the 1990s, consisting of nine repetitive segments.

A detailed dendrological inventory showed that all 64 specimens of trees and shrubs growing in the area are in good health and require only minor care treatments. Tree stand is represented by 12 species of trees, mainly common rowan *Sorbus aucuparia* (8 pcs.), northern white-cedar *Thuja occidentalis* (1 pc. and 2 hedges), common fir *Picea abies* (8 pcs.). There are also particularly decorative trees in the spring and autumn, i.e. wild apple *Malus sylvestris* (2 pcs.), apple tree *Malus* (3 pcs.), mirabelle plum *Prunus domestica* (2 pcs.) and bird cherry *Cerasus avium* (5 pcs.). Noteworthy is also very decorative sessile oak *Quercus petraea* (1 pc.). Other species are: silver birch *Betula pendula* (3 pcs.), common ash *Fraxinus excelsior* (3 pcs.), European larch *Larix europaea* (2 pcs.) and blue spruce *Picea pungens* (1 pc.).

Along the main communication routes, there are short viewing axes. There are no compositional axes in the field created from plant systems or surfaces. Scenic openings from the block windows cover a large part

of the area, but they are disturbed by accidentally placed devices in the playground. On a small elevation, two potentially interesting viewing points in the south-eastern part of the area were specified.

Fig. 1. Concept design of revitalization of the development area (developed by S. Czapla)

The project assumes division of land into individual zones and introduction of new plants recommended for sensory gardens (Fig. 1). In the northern part, the communication zone has been left (carriageways and parking spaces). Existing lighting with the surface has been preserved. The area has been extended with additional space for bicycles. Parking spaces are covered with a pergola that is overgrown with a five-leaf chervil. The main entrances to the buildings were decorated with decorative shrubs. Aromatic lawns are planned near the balconies (Fig. 2). In the southern part, the main arrangement of communication paths has been preserved, which has been extended to include existing ones. In the southern part, a slope with a wall for sitting was formed using grassy terraces. A large gazebo and two fireplaces have been planned nearby (Figs. 3 and 4). The composition is completed by planting ornamental grasses and trees with great aesthetic qualities, including birches and plane trees with decorative bark. The playgrounds have been divided, taking into account the age of users. Older people were given larger equipment, while for the youngest, a place was laid out on the sodden turf among decorative plants. The ecological zone in the southern part of the plot serves as a refuge for insects and birds. There are many useful plants there, such as narrow-leaved lavender, coneflower, and butterfly bush. The whole area is to be open to users and act as social gardens. Such a procedure is aimed at encouraging people to get in touch with nature and to improve contacts between residents. The project uses plants that are resistant to urban conditions and do not require complex care treatments.

Despite various forms of land use, plant material is an element connecting all zones. The characteristic elements for the whole assumption are plantings of ornamental grasses. In addition to its natural, gentle nature, the grass has a soothing effect on humans through the sound of leaves in the wind. Distribution of grasses focuses on the most important landscape points, such as the lonely tree or decorative cherry plantings. In the recreation and landscape part, new plantings from higher trees were proposed in order to introduce shading of the area and as natural elements shaping the landscape. Trees of various species were used, decorative in various aspects: plane-tree (decorative bark, leaves, fruits), lime (decorative flowers, fruits), oak (decorative leaves, habit), chestnut (decorative leaves, flowers, fruits), birch (decorative bark, conformation). In addition to decorative values, the fruits of lime, chestnut and plane tree can be used by children to play. On the southern side, the area is partly surrounded by hedge plantings: western thistle, early spurge, scarlet fire. The proposed plants, in accordance with the assumption of sensory gardens, enjoy due to their fragrance (lavender, echinacea, sage, mugwort, lilac), color (geranium, tritium, coneflower, crinoids, hydrangea), soothe with their leaves with murmuring (cress, millet). Plants were collected in several groups, complementing each other. The whole project is characterized by the selection of suitable species for urban conditions, well-composed in the group and with similar requirements.

Fig. 2. Visualizations of the new vision of the estate – flowerbed under balconies (developed by S. Czapla)

Fig. 3. Visualizations of the new vision of the estate – gazebo and chess tables (developed by S. Czapla)

Fig. 4. Visualizations of the new vision of the estate – fireplaces and terraces on a slope (developed by S. Czapla)

Summary

The project of housing estate revitalization at Szkolna Street in Krasnystaw is aimed at improving the comfort of residents. The new layout and division of environment into individual zones will allow the use of the area in accordance with the requirements of residents. Currently, surrounding of the apartment block is developed solely with a view to basic needs. Lack of division into functions in the southern part of the site limits the rational use of land by users. Lack of basic elements of small architecture of lighting and planting with ornamental plants allow for only small social activities in the area of the square. Despite the occurrence of greenery (mainly at the borders of the plot), the area appears empty and undeveloped, creating an atmosphere of anonymity in the urban space. Development plan, in accordance with the above assumptions, will favourably improve the functionality of the area. By designating the appropriate zones, spatial order will prevail. The introduction of new plantings (sensory flowerbeds, grassy terraces, creepers, trees) will benefit the enrichment of the area in terms of nature, aesthetics and society.

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